
Draft

***Old Mill Vesting
Tentative Tract Map***

***Environmental Impact
Report***

Prepared for:

***The City Of Solvang
Community Development Department***

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Environmental Impact Report

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I. Project Description

A. PURPOSE OF THE EIR

This environmental impact report (EIR) assesses the environmental impacts of the proposed Vesting Tentative Tract known as the Old Mill Road Project, a project under consideration by the City of Solvang (City). This EIR was prepared in accordance with the requirements of the California Environmental Quality Act (CEQA) of 1970 (Public Resources Code §21000 et seq.) and the State CEQA Guidelines (14 California Code Regulations, §15000 et seq.) as amended in 1997 and the City's *Local Guidelines for Implementing the California Environmental Quality Act (2001)*.

The project is a request of the applicant, Old Mill LLC, to consider the approval of a residential subdivision of nine parcels.

The purposes of this EIR are:

- To serve as an informational document which examines the likely environmental impacts of this project,
- To identify those environmental impacts that could be potentially significant if the project is approved,
- To develop mitigation measures to reduce significant impacts to the extent feasible,
- To identify feasible alternatives to the project that could avoid or reduce significant impacts,
- To provide a means for citizens to participate in the decision-making process.

A significant environmental effect is defined in CEQA as a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the proposed development. CEQA further states that if any aspects of the project, either individually or cumulatively, may cause a significant effect on the environment, then an EIR must be prepared.

The EIR identifies the following levels of impact:

- **Significant and Unavoidable Impact (Class 1 Impact)**
A significant and unavoidable impact is a significant adverse effect on the physical environment that cannot be reduced to less than significant even if reasonable mitigation measures are incorporated into the project.
- **Significant Impact (Class 2 Impact)**
A significant impact will have a substantial adverse impact on the physical environment. Typically, this level of impact occurs when a community-based standard or a state or federal regulation or requirement has been exceeded. These standards, regulations or requirements act as "thresholds of significance".
- **Less than Significant Impact (Class 3 Impact)**
A less than significant impact is an effect that is determined not to have a substantial adverse impact on the physical environment.

Impact evaluation criteria are presented for each issue examined in the EIR. The purpose of the criteria is to establish the thresholds required to make a determination if a significant impact will result. This enables those reviewing this document to understand how determinations about impacts were made. In establishing these criteria, the EIR relies to the greatest degree possible on local standards, existing laws, and government regulations.

In this report, information is organized to clearly address, analyze and communicate potentially significant impacts. Each study area includes a section in which the significance of the impacts and the probable effectiveness of proposed mitigation measures are discussed. Where a significant impact appears to be unavoidable or not mitigable to a level of insignificance, a statement of overriding considerations would be required if the City decides to proceed with the project. Section 15093(b) of the State CEQA Guidelines states that "where the decision of the public agency allows the occurrence of significant effects which are identified in the final EIR, but are not avoided or substantially lessened, the agency shall state in writing the specific reasons to support its action based on the final EIR and/or other information in the record."

The purpose of the publication of the draft EIR is to allow the public and applicable agencies to review and comment on the findings of the report.

The draft EIR will be circulated for agency and public review during a 45-day public review period. Comments received by the City on the Draft EIR will be reviewed by the City, and responses to comments will be included in the Final EIR. Copies of the Draft EIR will be available at the office of the City of Solvang Community Development Department located at 411 Second Street in Solvang.

The Final EIR will be prepared and forwarded to the City Planning Commission for consideration under the provisions of CEQA and a recommendation to the City Council. If the EIR is certified and adopted by the City Council, it may then proceed to make decisions on the discretionary actions required for approval. The mitigation measures identified in the EIR would be included as conditions of project approval and implemented and monitored under a Mitigation Monitoring Program.

It is not the purpose of an EIR to recommend either approval or denial of a project. CEQA requires the decision-makers to make a decision with knowledge of the potential environmental impacts of the project, and to balance the benefits of the proposed project against its potential environmental impacts. Although the EIR does not dictate the ultimate decision on the project, the decision-makers must consider the information in the EIR and address each significant effect identified in the EIR. If significant adverse environmental effects are identified in the EIR, approval of the project must be accompanied by written findings, including the following possible findings:

- Changes or alterations in the project have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effects as identified in the final EIR,
- Changes or alterations are within the responsibility and jurisdiction of another public agency and not the City. Such changes have been adopted by such other agency or can and should be adopted by such other agency.
- Specific economic, legal, social, technological or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the Final EIR.

B. INITIAL STUDY AND NOTICE OF PREPARATION

The City is the lead agency for the proposed project. Section 15367 of the State CEQA guidelines defines the lead agency as "the public agency which has the principal responsibility for carrying out or approving a project". As the lead agency, the City is responsible for the preparation of the EIR.

The issues examined in this EIR were identified by the City through preparation of an Initial Study (see Appendix A of this EIR). Once a determination was made to prepare an EIR, a Notice of Preparation (NOP) was distributed on or about August 2005 as required by CEQA, to inform other public agencies, interest groups and the public in general of the City's intent to prepare an EIR. A public meeting to solicit public comment was also conducted in August 2005. The public scoping meeting and NOP provide an opportunity for those interested in the proposed project to comment on the EIR's contents. Additionally, the NOP was sent to the State Clearinghouse, which is responsible for forwarding it to state agencies that might be affected by this project. The NOP / Initial Study is reproduced in Appendix A of this EIR.

Based on the Initial Study and responses to the NOP, the following EIR topics were confirmed as potentially significant and, therefore, necessary for detailed study:

- Flooding
- Biological resources
- Traffic
- Cultural Resources
- Construction phase air quality
- Cumulative and growth inducing impacts

In this case, based on the Initial Study, the EIR focuses only on those effects determined to be significant as defined in the CEQA Guidelines section 15143. The Initial Study evaluated the proposed project and determined some mitigation measures reflecting typical, mandatory City standards and policies adequately addressed potential impacts for visual resources, soils and geology, noise and drainage infrastructure. These measures are reproduced in this EIR in Section II Table S. Effects identified in the Initial Study as clearly insignificant or unlikely to occur are only briefly summarized in Section IV-G of this document.

In addition, CEQA requires that an EIR include, among other things, all other impact study areas covered in the Initial Study, an analysis of project alternatives, cumulative effects, and growth inducing effects.

C. SITE LOCATION AND PHYSICAL SETTING

The proposed project site is located at the southern terminus of Alamo Pintado Road, at the intersection of Old Mill Road and Alamo Pintado Road, addressed as 1945 Old Mill Road. (see **Map 1-Regional Location and Map 2- Vicinity Map** at the end of this section). The Project involves Assessor's Parcel Number 139-540-020.

The site is located along the eastern boundary of the City. Alamo Pintado Creek traverses north to south, along the entire length of the property. On the western side of Alamo Pintado Creek, existing structures consist of a single-family residence, garage and appurtenant accessory uses. There are no structures located on the eastern side of the creek. The acreage on the eastern side of the creek has historically been farmed periodically in the past. Table P-1 below summarizes surrounding land uses.

Table P-1 Surrounding Zoning and Land Use		
	Zoning	Use
North:	C-2, Retail Commercial	Highway 246, and commercial development areas
East:	County of Santa Barbara agriculturally zoned land	Agricultural Use
South:	County of Santa Barbara agriculturally zoned land	Agricultural Use
West:	20-R-1, Residential, 20,000 square foot minimum parcel size	Mission Meadows Residential Development; Old Mill Road single family residences.

D. PROJECT SCOPE AND PHYSICAL FEATURES

The request of the applicant, Old Mill Road LLC, is for consideration of a Vesting Tentative Tract Map to divide a 9.24-acre parcel into nine (9) single-family residential lots in the 20-R-1 Zone District.

The majority of the parcel lies on the eastern side of Alamo Pintado creek, where eight (8) new single-family residential parcels are proposed (within the City of Solvang municipal boundary), ranging in size from 21,981 square feet to 40,645 square feet. Currently one (1) single-family residence exists on the western side of Alamo Pintado Creek (within County of Santa Barbara unincorporated area). The existing residence within the proposed tract would remain on a 3.23-acre lot. No new development is proposed on the western side of Alamo Pintado Creek. Access to the development would be provided from High Meadow Road through a privately held easement on and across the High Meadow Development and the property owned by The Santa Barbara Trust for Historic Preservation.

Proposed Tract Improvements:

A new 24-ft wide road will be constructed with a cul-de-sac end, as required to provide adequate turnaround for fire equipment, and solid waste collection vehicles. The majority of the road will be placed in a private easement located within the County of Santa Barbara, and secured by the Applicant. The new road will obtain the necessary construction permits from both the City of Solvang and the County of Santa Barbara according to the corresponding jurisdiction.

To construct the development, approximately 20,000 yards of fill material will be required to establish building pad elevations up out of the 100-year floodplain in accordance with FEMA, County Flood Control and City requirements. The pads will be constructed at a minimum of 1.5-ft above the 100-year water surface elevation, and the finished floor of each structure should be 2.0-ft above the 100-year water surface elevation. The development proposes to construct a retaining wall approximately 1-ft off the regulatory floodway line, varying in height from zero (0) to ten (10) feet. The retaining wall would be approximately 1,250-feet in length. An application to FEMA for a CLOMR (Conditional Letter of Map Revision) is currently being developed and has been provided to the Public Works Director for consideration. The residential structures will be restricted to a defined building envelope and setback from the wall in case of a catastrophic failure of the wall during 100-year flood conditions. The foundation systems for each structure and retaining walls will be further refined prior to Final Map approval, and during final design and are subject to mandatory Uniform Building Code standards.

The development will be served by City of Solvang water and wastewater facilities. The extension of the water and sewer will be bored under Alamo Pintado Creek, and appropriate California Department of Fish and Game and City permits will be obtained prior to construction. Other utilities will be provided by the corresponding agencies, and further coordination will occur during the Final Map stage. The floodway will be maintained under an existing conservation easement held by the City of Solvang to preserve this area. All drainage runoff for the improved areas will be directed to the street and collected within a drainage inlet and pipe system at the end of the turnaround in compliance with the City's Storm Water Management Program. Due to the development's close proximity to Alamo Pintado Creek, drainage structures will be sized for the 100-year post developed condition.

Maps 3 and 4–Proposed Project show the proposed Tract Map and Improvements. **Figure P-1** illustrates the proposed site wall along the floodway in cross section. The wall will have concrete ramps from the residential pad area for resident access to the western portion of each lot.

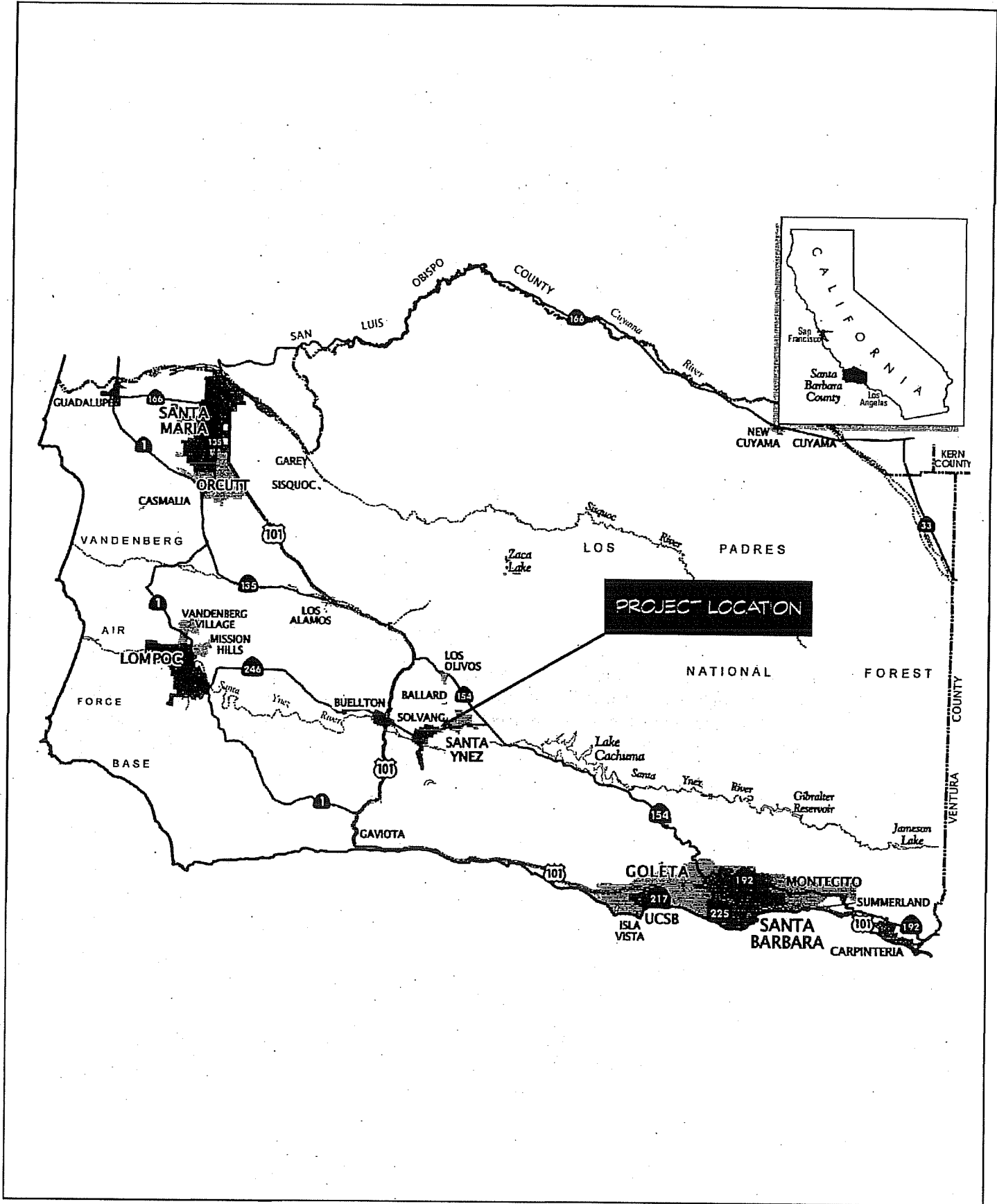
The Applicant's objectives for the Proposed Project are to:

- Create a single family residential project lots in the one acre range.
- Create a subdivision that meets the density requirements of the underlying zoning district.
- Protect development from flooding.
- Project riparian resources.

E. DISCRETIONARY ACTIONS COVERED BY THE EIR

As discussed above, the purpose of the environmental review process is to provide a comprehensive, factual analysis of the environmental setting for the proposed project, the probable environmental consequences of development of the proposed project, and various alternatives to the project, as described in this EIR. This environmental information then provides the basis for the City to consider and take discretionary action. The discretionary actions involved with the proposed project include, but may not be limited to:

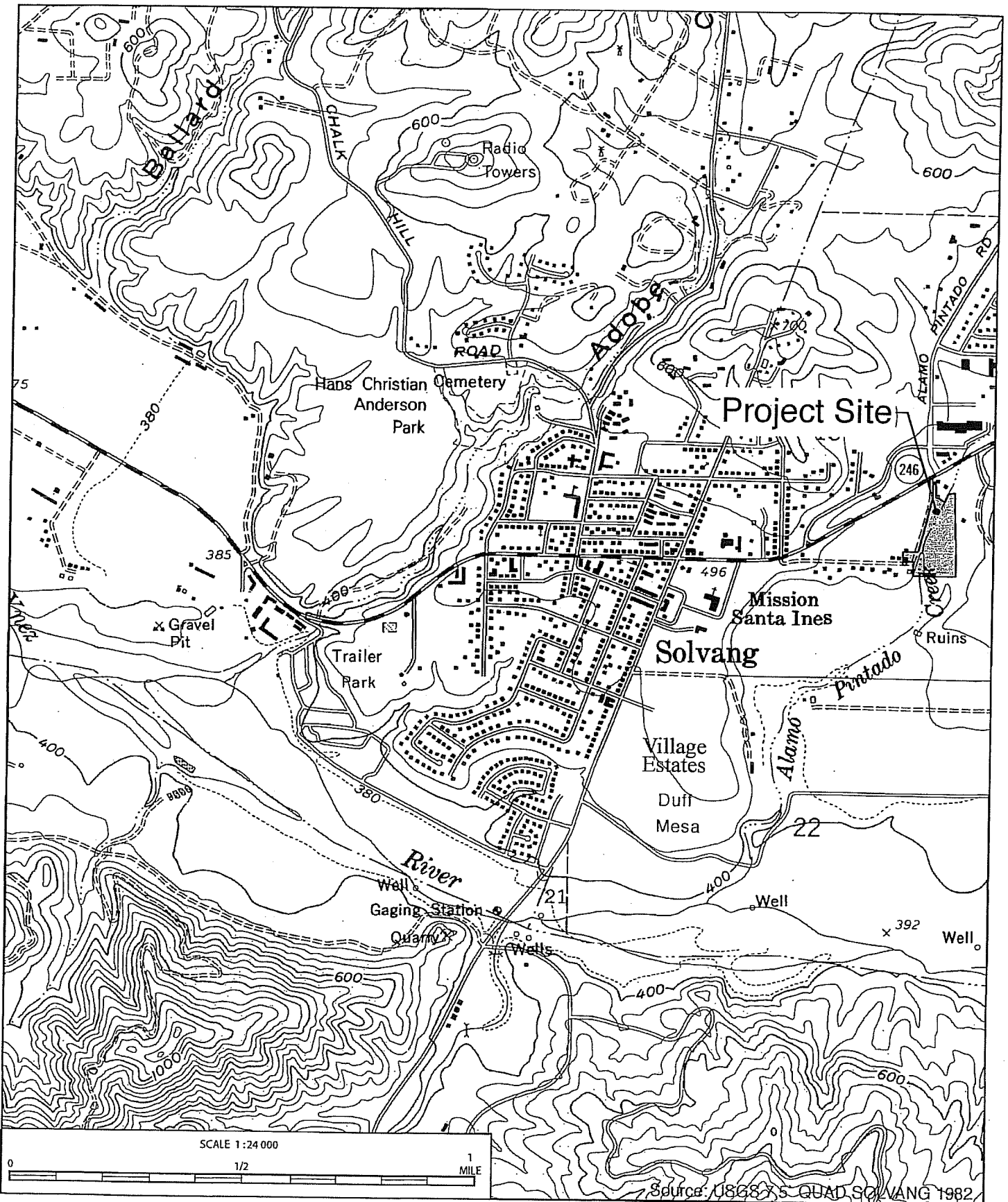
- Approval by the City of the Vesting Tentative Tract Map.
- Approval from California Department of Fish and Game for a Stream Alteration Agreement.
- FEMA (Federal Emergency Management Agency) approval for the C-LOMR in order to remove the requirement for flood insurance by the homeowners.
- Approval by the County of Santa Barbara will be required for grading and construction of the proposed access road.



Regional Location



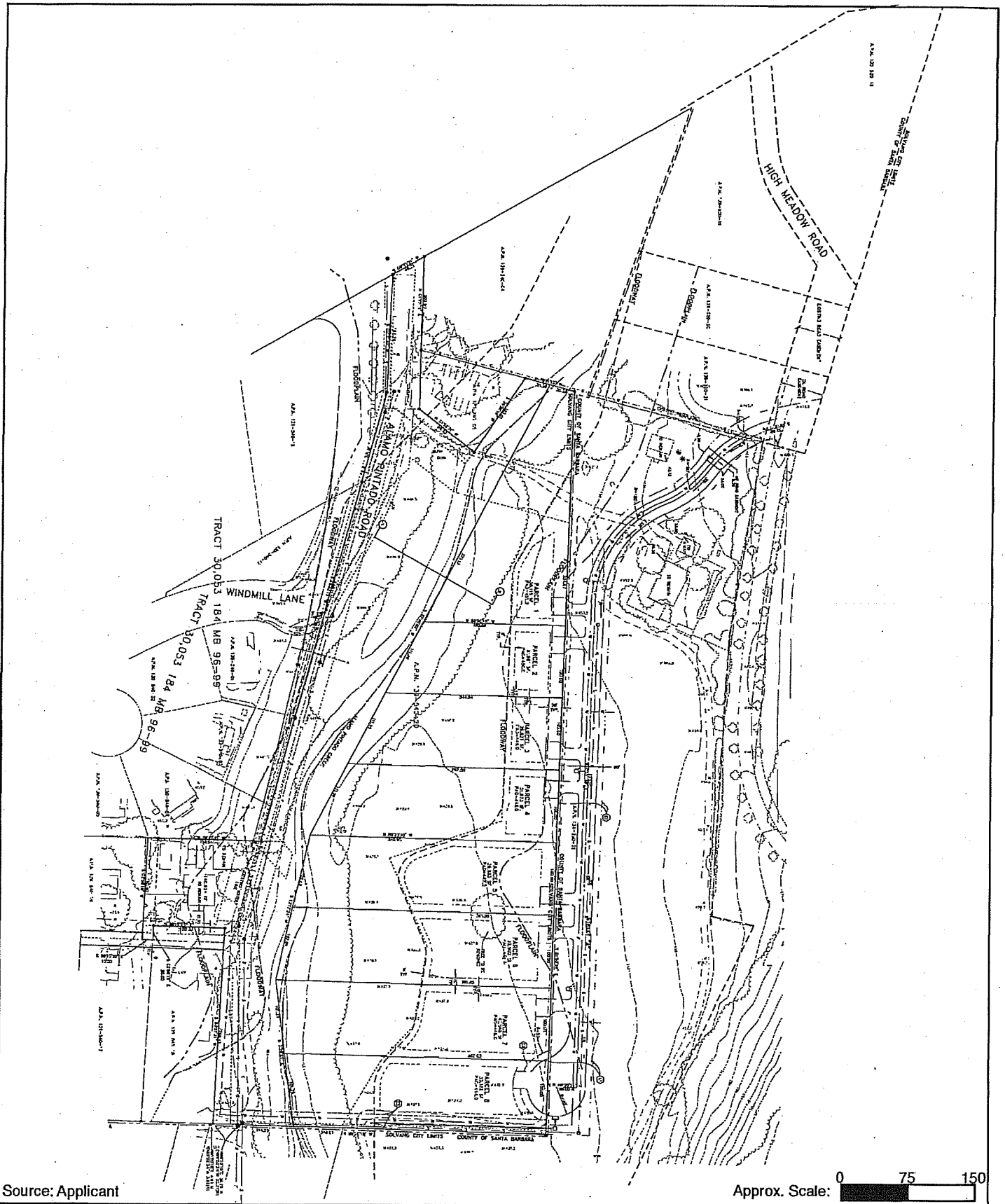
Map
1



Project Vicinity



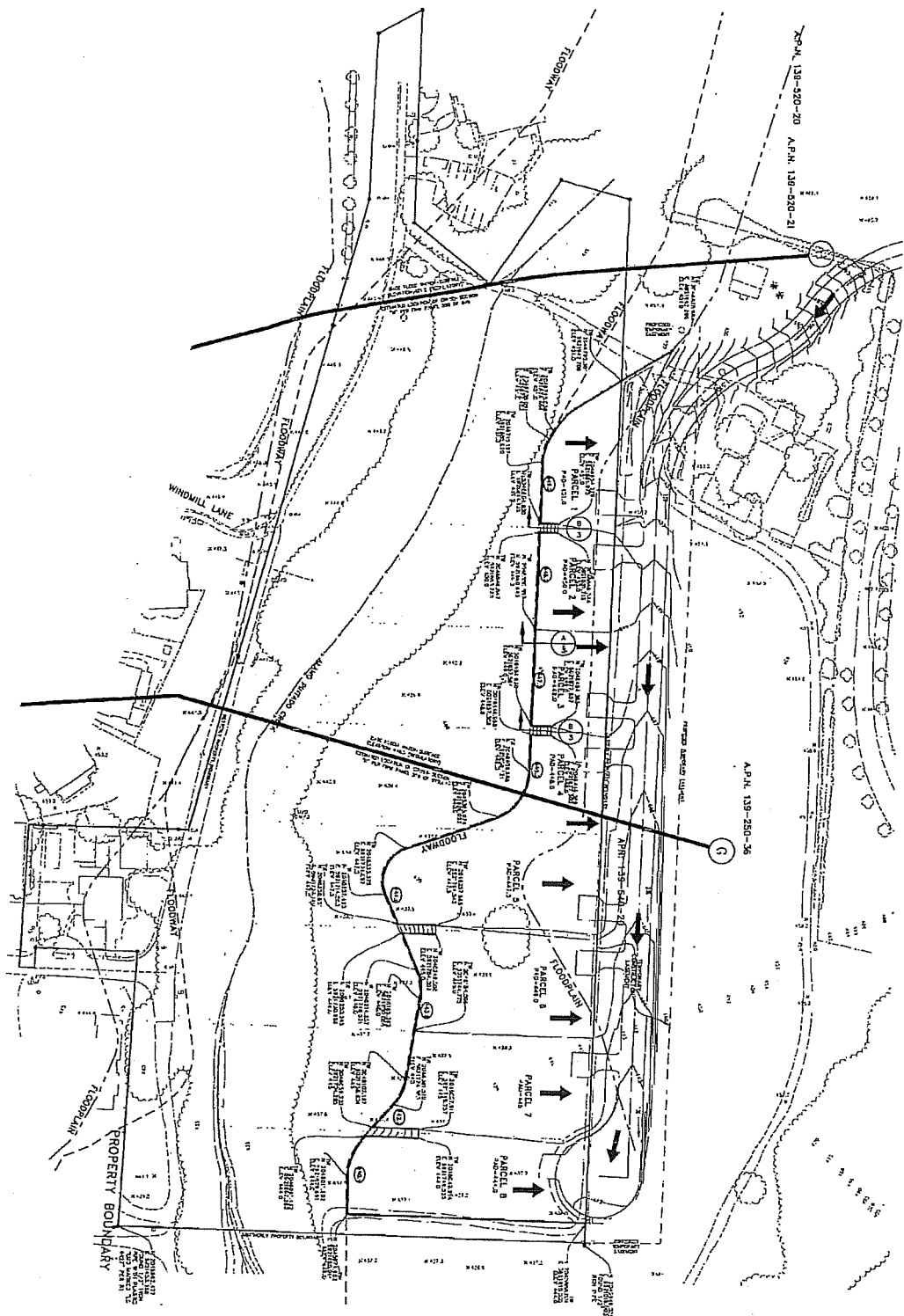
Map
2



Proposed Tract Map



Map
3



Source: Applicant

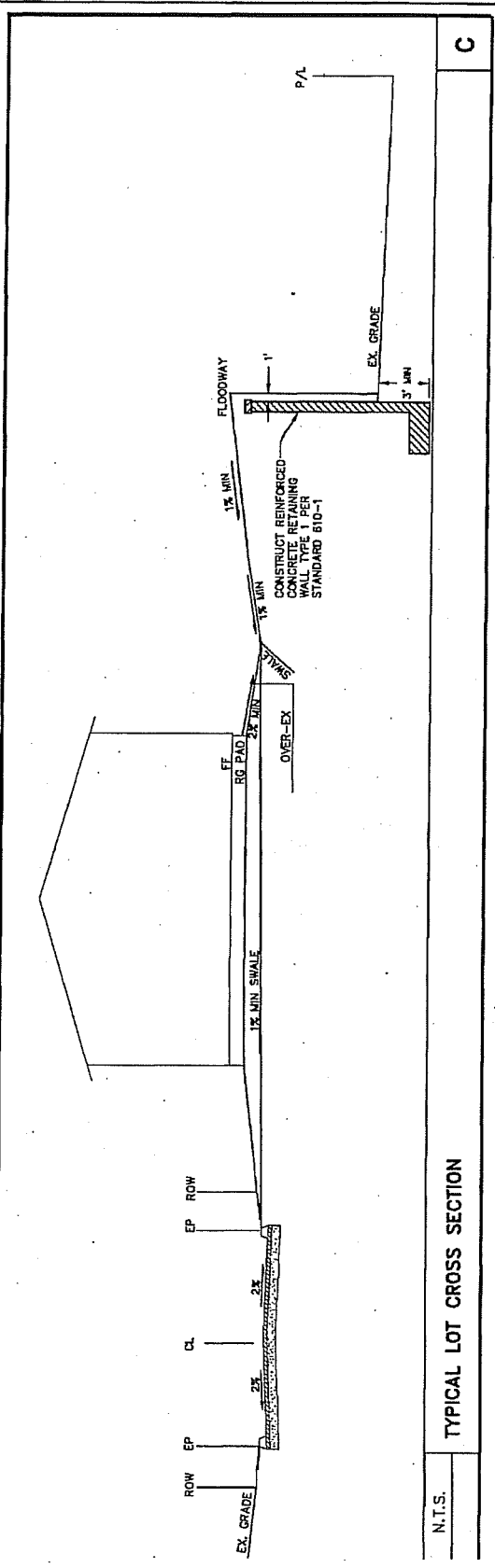
Approx. Scale: 0 75 150

Proposed Grading Plan



Map
4

Source: Applicant



Proposed Cross Section



Figure P-1

II. Executive Summary

A. SUMMARY OF IMPACTS

The City of Solvang determined that the proposed project could potentially result in significant environmental effects and required the preparation of this Environmental Impact Report (EIR). Pursuant to CEQA, this EIR focused primarily on those subjects identified as potentially significant by the City during preparation of its Initial Study on the project (Appendix A). The study areas below comprise the topics primarily analyzed in this EIR:

- Agricultural Resources
- Traffic
- Cultural Resources
- Biological Resources
- Flooding and Water Quality
- Growth Inducing Effects
- Air Quality

The environmental impacts and suggested mitigation measures are presented in Table S. This table is organized in terms of the level of project impact after mitigation. Class I impacts are unavoidable adverse significant impacts. If the County certifies the EIR and proceeds with the project, Section 15093(b) of the State *CEQA Guidelines* requires the County to make findings of overriding consideration when Class I impacts are present indicating that specific economic, legal, social, technological or other benefits of the proposed project outweigh the unavoidable adverse environmental effects.

Class II impacts are significant impacts which can be mitigated to a level of insignificance. Section 15091(a)(1) of the State *CEQA Guidelines* requires that findings be made indicating that changes or alterations have been required in the project to avoid or substantially lessen Class II impacts. Class III impacts are adverse, but not significant impacts that do not require mitigation. Class IV impacts are beneficial impacts resulting from implementing the project.

The project would have no significant, unavoidable impacts. Impacts are potentially significant but can be mitigated to less than significant levels by implementing the mitigation measures presented on **Table S** and discussed in the EIR.

**Table S: SUMMARY OF ENVIRONMENTAL IMPACTS
AND MITIGATION MEASURES**

CLASS II. SIGNIFICANT ENVIRONMENTAL IMPACTS THAT CAN BE MITIGATED OR AVOIDED

Impact	Mitigation Measure	Level of Impact After Mitigation
<p>Impact A1</p> <p>Grading and excavation for utilities in the proposed access road could disturb artifacts both historic and prehistoric that have been covered by alluvium and / or human activities in the past. This impact is potentially significant.</p>	<p>Mitigation A1</p> <p>To reduce potentially significant impacts to cultural resources on the site, a pre-construction limited phase 2 subsurface survey shall be conducted:</p> <ul style="list-style-type: none"> • The program for subsurface investigation shall be developed by an archaeologist. • The program shall include additional archival research. • The program shall determine the significance of any recovered resources and identify appropriate mitigation measures to ensure the effects on these resources are less than significant. 	<p>Less than significant</p>
<p>Impact A2</p> <p>Excavation within the project site has some potential to disturb prehistoric artifacts that could be significant resources.</p>	<p>Mitigation A2</p> <p>To avoid or reduce potential impacts to resources that could be significant, a qualified archaeologist shall monitor all excavation into natural grade within the alluvial plain portion of the site.</p>	<p>Less than significant</p>

Table S: SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

CLASS II. SIGNIFICANT ENVIRONMENTAL IMPACTS THAT CAN BE MITIGATED OR AVOIDED

Impact	Mitigation Measure	Level of Impact After Mitigation
<p>Impact B2</p> <p>The potential for the project to impact existing or future agricultural activities on adjoining land to the south along proposed Lot 8 lands is adverse and potentially significant due to the removal of up to one acre of farmable land from production.</p>	<p>Mitigation B2-a</p> <p>In order to minimize the potential need for an agricultural buffer (setback) on farmland that could take that land out of agricultural production, the project shall incorporate a solid fence, subject to City BAR approval on final height and materials, along the south boundary of lot 8 and across the end of street stubs contiguous to agricultural land unless a waiver to the satisfaction of the City is obtained from the adjacent property owner(s). The fencing shall be designed and installed to protect farmland from intrusion by residents for the life of the project. In addition to the installation of a landscape screen as part of the project description, the minimum residence setback from the south property line of lot 8 shall be 30 feet.</p> <p>Mitigation B2-b</p> <p>The following "Buyer Notification" applicable to lot 8 shall be recorded on a separate information sheet on the Final Map:</p> <p>"Important Buyer Notification: This property is located adjacent to property in the County of Santa Barbara that is zoned for agriculture and is located in an area that has been planned for agricultural use. The County Board of Supervisors has determined that is in the public interest to preserve agricultural lands and operations within the County of Santa Barbara and to specifically protect these lands for exclusive agricultural use. Through enactment of an ordinance adding section 3-23, Article V to Chapter 3 of the County Code, any inconvenience or discomfort from properly conducted agricultural operations, including noise, odors, dust and chemicals will not be deemed a nuisance."</p>	

Impact C1

Discharge into surface waters or alteration of water quality, including but not limited to temperature, dissolved oxygen, turbidity, or thermal water pollution are potentially significant.

Mitigation C1 a-c

- a. Install Best Management Practices (BMP) to prevent metals and/or hydrocarbons from entering the creek from the proposed development.
- b. Submit proof of exemption or a copy of the Notice of Intent to obtain coverage under the Construction General Permit of the National Pollutant Discharge Elimination System issued by the California Regional Water Quality Control Board.
- c. Provide for an onsite private drainage system to convey storm flows to Alamo Pintado Creek.

Less than significant

Impact C2

The risk of retaining wall failure due to scour and undermining leading to wall failure though remote is a potentially significant impact.

Mitigation C2

To ensure public safety in the event of a major flood, the final engineering design of the proposed retaining wall along the floodway shall be signed by the project geotechnical, civil and structural engineers certifying that the wall design accounts for maximum stream velocities, scour potential and other relevant forces acting upon the wall.

Impact D2

The project contribution to the cumulative traffic condition is a significant impact because the intersection operation at State Highway 246 and High Mountain Road will fall to LOS E.

Mitigation D2

To mitigate the project's contribution to cumulatively significant impacts to the Highway 246 / High Meadow Road intersection, the project shall contribute a pro rata share of the projected (and yet to be determined) cost of the planned roadway improvement project which is anticipated to include a center left turn lane to bring the intersection operation to LOS C. The resulting impact would be less than significant.

Less than significant

**Table S: SUMMARY OF ENVIRONMENTAL IMPACTS
AND MITIGATION MEASURES**

CLASS II. SIGNIFICANT ENVIRONMENTAL IMPACTS THAT CAN BE MITIGATED OR AVOIDED

Impact	Mitigation Measure	Level of Impact After Mitigation
<p>Impact F2</p> <p>Implementation of the proposed project would result in the establishment of residential lots within the Alamo Pintado Creek riparian corridor that could have direct and indirect adverse effects on the riparian habitat. This is considered to be a potentially significant impact</p>	<p>Mitigation F2</p> <p>a. The proposed project shall be modified to establish a 20-foot wide riparian habitat setback and restoration area measured from the outside edge of the existing riparian habitat. The developer shall record an open space agreement and / or deed restriction with the City of Solvang establishing the 20-foot setback. No development or vegetation removal (except non-native invasive plant species removal per F-2b below) shall occur within the riparian area habitat or setback area.</p> <p>b. A riparian habitat restoration / buffer zone mitigation and monitoring plan shall be prepared by a City approved biologist and funded by the applicant, for the dedicated riparian habitat setback area. The restoration plan shall include at a minimum a detailed planting plan for the setback area, specific plant species palette that includes only native riparian species indigenous to the region, a non-native species removal plan, success criteria to achieve a minimum survival of 75 percent of all plantings after five years, a five-year monitoring and maintenance program and contingency measures to ensure meeting the success criteria. The outside edge of the riparian habitat setback area shall be fenced with a split rail or similar open style fence, approved by the Board of Architectural Review, to delineate the restoration area and no development zone.</p>	<p>Less than significant</p>

Impact	Mitigation Measure	Level of Impact After Mitigation
<p>Impact E2</p> <p>The proposed project has potential to generate substantial localized increases in PM concentrations during construction. The existing adjacent residence most likely to be exposed to such impacts is east of proposed Parcel 1. Without proper controls on fugitive dust emissions during site preparation activities, PM₁₀ and/or PM_{2.5} concentrations at that location could temporarily exceed applicable AAQS a potentially significant impact.</p>	<p>Mitigation E2</p> <p>To mitigate potentially significant short-term construction impacts related to PM concentrations, project construction measures shall control fugitive-dust-generated PM impacts at the nearest off-site receivers as follows:</p> <p>During construction, use water trucks or sprinkler systems to keep all areas of vehicle movement damp enough to prevent dust from leaving the site. At a minimum, this should include wetting down areas of exposed (un-vegetated) soil in the late morning and after work is completed for the day. Increased watering frequency should be required whenever the wind speed exceeds 15 mph. Reclaimed water should be used whenever possible.</p> <p>Minimize the amount of disturbed area (e.g., associated with underground placement of utility lines) and reduce on site vehicle speeds to 15 miles per hour or less.</p> <p>Install gravel pads at all vehicular access points to prevent tracking of mud on to public roads.</p> <p>Soil stockpiled for more than two days shall be covered, kept moist, or treated with soil binders to prevent dust generation. Trucks transporting fill material to and from the site shall be tarped from the point of origin.</p> <p>All unloading and stockpiling of fill materials shall be performed in the southeastern portion of the project, as far from the nearest existing off-site homes as possible, except where to do so would necessitate substantial additional disturbance/movement of such materials beyond that which would be required if the activity were to be performed elsewhere.</p> <p>Avoid dust-generating site preparation activities on Parcels 1 through 3 when local winds exceed 15 miles per hour oriented in a direction generally towards the adjacent off-site home (i.e., generally from the south-southwest).</p> <p>After clearing and earth moving is completed, treat the disturbed area by watering, or revegetating, or by spreading soil binders until the area is paved or otherwise developed so that dust generation will not occur.</p>	<p>Less Than Significant</p>

Table S1: SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

CLASS II. SIGNIFICANT ENVIRONMENTAL IMPACTS THAT CAN BE MITIGATED OR AVOIDED

Impact	Mitigation Measure	Level of Impact After Mitigation
<p>Impact H1: The extension of road and infrastructure easements and improvements within the County to serve the Proposed Project is growth-inducing because the parcel adjoining the Proposed Project on the south and east can be reasonably foreseen to have potential for annexation and / or subdivision as a result of these infrastructure easements and road extension.</p>	<p>Mitigation H1: To reduce the potentially significant growth inducing effects of the proposed infrastructure easements and road located in the County, the Final Tract Map shall record a five foot "denied access" easement in favor of the City on the southern boundary of the tract and extending along the east side of the proposed access road on the adjoining property. The easement shall be stipulated to allow for recreational and agricultural access only.</p>	<p>Less than significant</p>

CLASS III. OTHER ENVIRONMENTAL IMPACTS WHICH ARE ADVERSE BUT NOT SIGNIFICANT

Impact	Mitigation Measure	Level of Impact After Mitigation
<p>Impact B1 Conversion of prime agricultural soils was found in the General Plan Land Use CEQA document to have a significant and unavoidable impact on agricultural resources because this site, among others, have prime agricultural soils that would be irreversibly converted to other use. Due to this previous finding and adoption of related statements of overriding considerations related to the conversion of prime agricultural soils to urban use and the fact that the proposed project land use is consistent with the adopted Land Use Plan for which such findings were made, the development of the site for residential uses is considered an adverse but less than significant impact on agricultural resources.</p>	<p>Mitigation B1 None required.</p>	<p>Less than significant</p>
<p>Impact B3 The conversion of the proposed project site's 3.8 acres of prime agricultural land combined with the potential loss of agricultural viability for the adjoining 3.2 acres of Class III farm land is less than significant based on the state farmland conversion rating system criteria.</p>	<p>Mitigation None required.</p>	<p>Less than significant</p>

Table S1: SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

CLASS III. OTHER ENVIRONMENTAL IMPACTS WHICH ARE ADVERSE BUT NOT SIGNIFICANT

Impact B4

Evidence of a trend toward agricultural land conversion in the Santa Ynez valley notwithstanding, the Project would not contribute to a cumulatively significant impact on agricultural resources due to its location within the urban boundary and consistency with previously adopted land use plans.

Mitigation

None required.

Less than significant

Impact D1

At an addition of 8 peak hour trips, the project does not exceed the City impact threshold for a significant intersection impact even though the contribution of added trips is to an intersection operating at LOS D.

Mitigation C1

None Required

Less than significant

Impact D3

The construction traffic associated with the project would result in similar impacts to the roadway system as the project, but for a shorter and limited time frame. This temporary impact would also be less than significant based on City impact significance thresholds.

Mitigation D3

To reduce less than significant impacts to the existing road system associated with construction traffic, project heavy truck traffic involved in the fill import process shall be limited to the hours of 8:30 AM to 2 PM.

Impact F1

Implementation of the proposed project would result in the loss of cropland habitat. This is considered to be a less than significant impact.

Mitigation F1

None required.

Less than significant

Impact E1

Criteria Air pollutant emissions would remain well below the APCD-derived significance thresholds applied in this analysis, resulting in a less than significant impact.

Mitigation E1

None required.

Less than significant

Table S: SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

CLASS III. OTHER ENVIRONMENTAL IMPACTS WHICH ARE ADVERSE BUT NOT SIGNIFICANT

Impact	Mitigation Measure	Level of Impact After Mitigation
<p>Impact G1</p> <p>Due to the geologic and soils setting, and the relatively minor types of land disturbance required to implement development of the site, the Project would not contribute to any cumulatively significant effect on geology or soils.</p>	<p>Mitigation G1</p> <p>The project plans shall incorporate and implement all the recommendations outlined in the project Soils Engineering Report prepared by Earth Systems Pacific, dated November 29, 2004, including but not limited to site preparation, grading, utility trenches, foundations, slab-on-grade and exterior flatwork, retaining walls, pavement sections and drainage around improvements. Additional conditions may be imposed by the City Engineer.</p>	<p>Less than significant</p>
<p>Impact G2</p> <p>Impacts related to visual resources are limited to the potential for limited glare, color and material compatibility with surrounding features.</p>	<p>Mitigation G2</p> <p>Prior to approval of any Land Use and/or Building Permits, the Board of Architectural Review shall approve the architectural design, materials, and colors, of all new residential and accessory structures subject to the specific standards set forth in the EIR to ensure neighborhood compatibility, as follows:</p> <ul style="list-style-type: none"> • All exterior night lighting installed on the project site shall be of low intensity, low glare design, and shall be hooded to direct light downward onto the subject parcel and prevent spill-over onto adjacent parcels. All proposed lighting shall be reviewed and approved by the Board of Architectural Review. • The retaining walls shall be in tones compatible with surrounding terrain using textured materials or construction methods, which create a textured effect. The wall shall be designed to include pilasters, capping and proper architectural transitioning due to the varying grade heights. Native vegetation to screen retaining walls shall be planted and maintained by the homeowner. 	<p>Less than significant</p>

**Table S: SUMMARY OF ENVIRONMENTAL IMPACTS
AND MITIGATION MEASURES**

CLASS III. OTHER ENVIRONMENTAL IMPACTS WHICH ARE ADVERSE BUT NOT SIGNIFICANT

Impact	Mitigation Measure	Level of Impact After Mitigation
<p>Impact G3</p> <p>Future development of the single-family residences and access road could create some temporary noise conditions within 800 feet of construction equipment that may exceed State Model Noise Ordinance noise thresholds for construction noise.</p>	<p>Mitigation G3</p> <p>Hours of construction shall be limited to 7:30 am to 5:30 pm weekdays. No construction shall be allowed on Saturday, Sunday, State or National holidays except as approved in writing by the Public Works Director, or designee, or in the case of an emergency for the immediate preservation of life, health, or property. Notwithstanding the foregoing, an individual property owner or tenant solely, (not including any volunteer or paid construction crew) in addition to the above permissible hours of construction may also construct, repair, or remodel his or her real property or any structure on such property, pursuant to obtaining the required permits, during the hours 5:30 p.m. to 8:00 p.m. on weekdays and 8:00 a.m. to 8:00 p.m. on Saturday, Sunday and National legal holidays. All noise or sounds associated with the construction, gardening and/or maintenance activities of said property shall not create any inconvenience or annoyance to the general public beyond the boundary lines of the property.</p>	

B. IRREVERSIBLE ENVIRONMENTAL CHANGES

Section 15126.2(c) of the State CEQA Guidelines states that for the preparation of EIRs, a discussion of any significant irreversible environmental changes which would be involved in the proposed action be provided. These irreversible environmental changes include: uses of non-renewable resources during the construction and operation phases of the Project, the commitment of future generations to the proposed uses, and any irreversible alterations that would occur from development of the Project site.

In the short term, site preparation, including grading, road construction and infrastructure would create traffic, noise and dust impacts on the area around the site that are temporary.

In the long term, the following effects would occur throughout the life of the Project:

- Increased surface street traffic.
- Increased demand for water.
- Increased stormwater runoff.
- Loss of soils suited for agriculture and natural visual character
- Increase in ambient light levels.
- Increased noise

C. GROWTH INDUCING IMPACTS

The State CEQA Guidelines (Section 15126.2(d)) requires an EIR to discuss how a proposed project could directly or indirectly lead to economic, population, or housing growth. A project may be growth-inducing if it removes obstacles to growth, extends community service facilities or infrastructure, or encourages other activities or precedents which cause significant growth or impacts to the environment. The potential growth-inducing impacts of the Proposed Project are discussed in terms of these factors in Section IV-H of the EIR. The project was determined to not be growth-inducing.

D. SUMMARY OF ALTERNATIVES TO THE PROPOSED PROJECT

Section V of the EIR examined the following alternatives to the Proposed Project:

- No Project
- Alternative site access from Alamo Pintado Road
- Reduced Scale Alternative
- Alternative Sites

Under CEQA, the purpose for examining alternatives is to provide decision-makers with a basis for a reasoned choice in ways to reduce or eliminate significant environmental impacts. However, it is shown in Section V that there are no feasible options that avoid or substantially reduce the impacts identified in Section IV as significant but mitigable to less than significant levels. The environmentally superior project would be the proposed project because both a reduced scale alternative project and alternate sites were deemed infeasible for all or some of the following reasons, and were rejected accordingly: failing to meet the basic project objectives, economic limitations (applicant does not own a comparable alternative site), lack of a substantial environmental benefit to provide a nexus for reduced density, and unsuitable site conditions such as parcel size and potential to increase flooding.

E. SUMMARY OF CUMULATIVE IMPACTS

Cumulative impacts are two or more individual effects that, when considered together are considerable or compound to increase other environmental impacts. The individual effects may be changes resulting from a single project or several projects. Not all aspects of the project would lead to cumulative effects. Specifically, geologic and hazard impacts are site specific and not cumulative.

Each study topic in Section IV of the EIR included discussion of cumulative impacts. The projections of future conditions were based on community projections and a list of near-term projects that satisfy the state CEQA Guidelines Section 15130 dealing with cumulative impacts and are contained in Table D5 of the EIR.

The following **Table S-2** tabulates the types of cumulative impacts for each study topic in the EIR. The designation 'N/A' means not applicable because no significant cumulative impacts were identified. LTS means "less than significant".

Table S-2. Summary of Cumulative Impacts

Topic	Significant Impact?	Impact after Mitigation
Flooding/Water Quality	no	N/A
Traffic	yes	LTS
Public Services	no	N/A
Cultural Resources	no	N/A
Visual Resources	no	N/A
Biological Resources	no	N/A
Noise	no	N/A
Air Quality	no	N/A
Agriculture and Land Use	no	N/A

III. General Environmental Setting

A. REGIONAL AND LOCAL SETTING

The proposed Project site is located along Alamo Pintado Creek south of the State Highway 246 at the eastern edge of Solvang, as depicted on **Map 5- Local Setting**. A portion of the project site has been in agricultural production in the past but is currently fallow. The existing parcel being proposed for subdivision includes a residence on Old Mill Road which will remain. The subject site is bounded on the west by residential uses along Alamo Pintado Road and Old Mill Road. To the north the lands are retail commercial and residential land uses. On the east side lands in the County are developed with single family homes within agriculture land use designations. A large field is located to the east of the site that is used for crops. A single family residential exists on this easterly parcel. Lands to the south are large, agriculturally zoned parcels.

Slopes on the site range from 2% to 5% on the floodplain with steeper slopes within the creek channel dividing the site. Clusters of trees exist along the creek corridor. The remainder of the site that is proposed for development is currently covered with annual weeds and grasses.

B. APPLICABLE REGIONAL PLANS AND POLICIES

The County of Santa Barbara has adopted a Clean Air Plan administered by the Santa Barbara County Air Pollution Control District (APCD). The APCD has the role of a responsible agency under CEQA, reviewing and commenting on projects which have the potential to cause adverse impacts to air quality (see Section IV-E of this EIR for additional discussion).

The Santa Barbara County Association of Governments (SBCAG) has developed a set of traffic impact guidelines to assess impacts of land use decisions made by local jurisdictions on regional transportation facilities located within the Congestion Management Program (CMP) roadway system. This project does not involve a substantial change in traffic volumes and would not affect regional transportation facilities (see Section IV-D of this EIR).

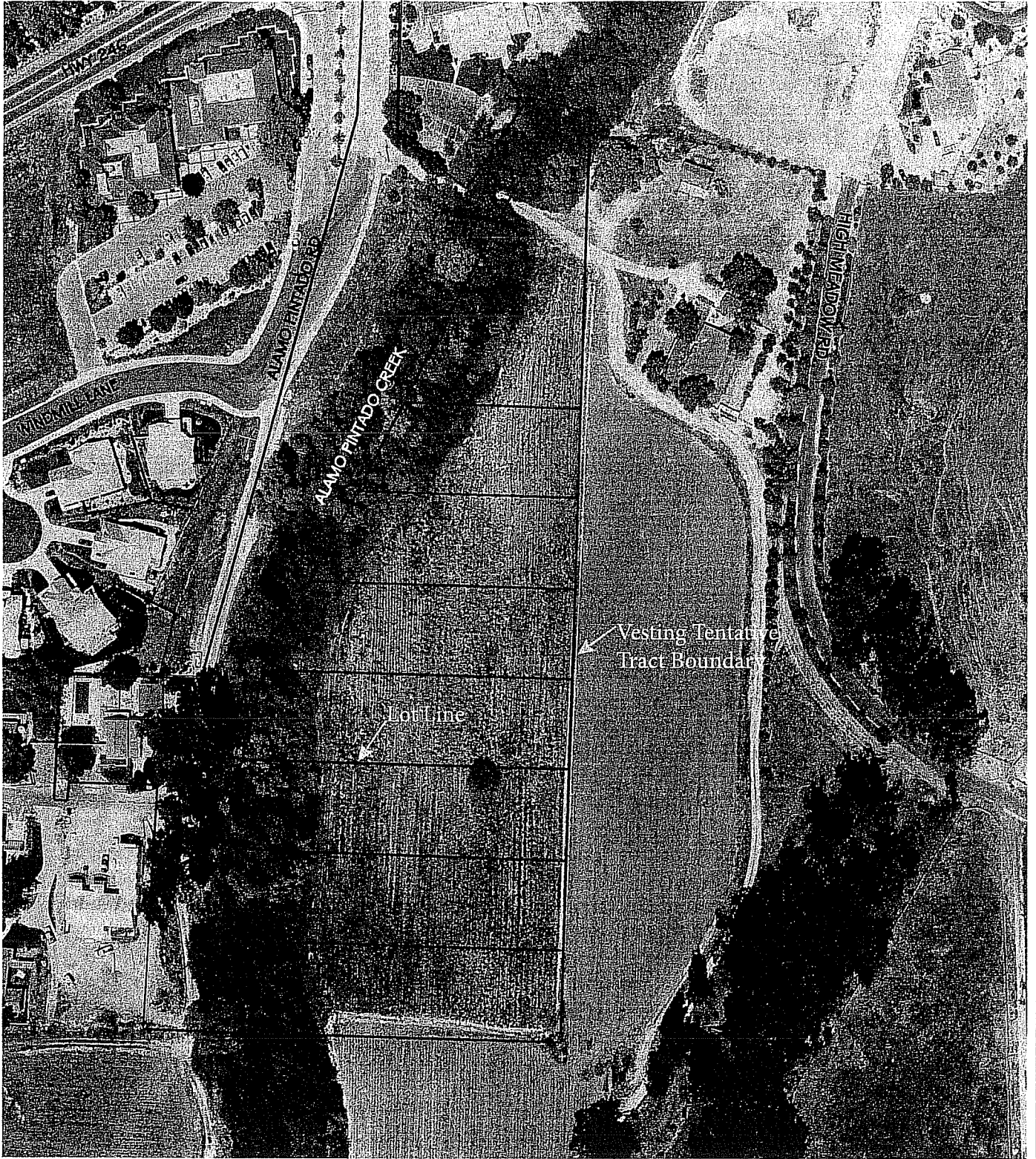
C. APPLICABLE LOCAL PLANS AND POLICIES

Consistency with Local Plans and Policies

According to State CEQA Guidelines Appendix G, a project impact may be deemed significant if it would, among other things, conflict with adopted General Plan designations or policies; create a land use incompatibility with existing land uses; convert prime agricultural land to non-agricultural use; or impair the agricultural productivity of prime agricultural land.

The identification of a significant effect in Appendix G of the State *CEQA Guidelines* is used typically to aid in determining whether an EIR should be prepared for a project or in setting threshold levels of significance. An apparent impact due to general plan inconsistency is not presumed to be a significant effect on the environment unless specific study in the EIR identifies a significant impact.

The following discussion details the consistency of the proposed project with City of Solvang policies.



Local Setting



Map
5

City of Solvang Land Use Element / Zoning Consistency

The proposed project site is designated Low-Medium Residential (2 dwellings per acre) in the City General Plan Land Use Element, and 20-R-1 zoning (minimum lot size 20,000 square feet). The proposed project is a single family residential project with a gross density of about one dwelling per acre. The majority of the parcel lies on the eastern side of Alamo Pintado creek, where eight (8) new single-family residential parcels are proposed, ranging in size from 21,981 square feet to 40,645 square feet. Currently one single-family residence exists on the western side of Alamo Pintado Creek. The existing residence would remain on a 3.23-acre lot. The project appears to be generally consistent with the land use and zoning requirements. Lands to the west are 20,000 square foot minimum lot sizes and lands to the east are larger rural parcels in the County. The proposed density is less than lands to the west and greater than lands to the east, therefore the project appears to be a reasonable density transition at the City's edge.

City of Solvang Housing Element

Housing Element policy 4.b and 4.c

These policies require new housing to be in locations conforming to the General Plan and Zoning maps. As detailed above under Land Use and Zoning the project is consistent with this policy. Policy 4.c requires the City to not permit development of projects found to be incompatible with existing neighborhoods around the project. EIR section analyzing air quality, traffic, agriculture and flooding address some aspects of the issue of compatibility, and with mitigation the project is generally consistent with this policy insofar as CEQA issues are concerned.

City of Solvang Safety Element

Safety Element policy 2.a and Policy 3.c

These policies require that structures are located above the 100 year flood elevation and that the project does not impact flood control facilities. As detailed in Section IV-C of this EIR the project as designed is consistent with this policy and would not create significant impacts, individually or cumulatively, on flooding.

Safety Policy 3.a

This policy requires implementation of adequate erosion control measures. The project would be subject to a NPDES permit and approval of a Storm Water Pollution Prevention Plan which would ensure consistency with this policy. This Plan would also satisfy state and federal water quality laws.

Safety Policy 5.c

This policy requires that development pace does not exceed the City's ability to provide fire service. Due to the low intensity of development in this subdivision, the project does not involve a substantial fire service commitment. The project is consistent with this policy.

City of Solvang Noise Element

Noise Policies 1.a, .1c, 2.a and 3.b require that properties are protected from noise exceeding the standards established in the Noise Element.

City of Solvang Community Design Element

Community Design Objective 7.0

This policy objective requires that new development is compatible with the existing fabric of the community. The proposed project involves residential land uses on lots similar in size to surrounding residential lots on Old Mill Road and is in character with it's surroundings within the City of Solvang. The project is consistent with this Objective.

Community Design Policy 7.a

This policy requires that new development incorporate buffers and landscape areas to avoid or reduce conflicts between two differing land uses. The proposed project is not a different land use from it's residential surroundings, therefore this policy is only applicable on the east and south where the project adjoins agricultural lands. EIR section IV-B Agriculture address land use buffers. The proposed project incorporates a setback and buffer from the creek corridor. EIR section IV-C Biological Resources addresses this issue.

City of Solvang Conservation and Open Space Element

Conservation and Open Space (COS) Policy 3.2

This policy requires that new structures and improvements be integrated into the surrounding environment to the greatest extent possible. The scale and density of the proposed project is not substantially different from its surroundings and will be subject to the same zoning regulations governing, setbacks, building height, building coverage, etc as adjoining residential areas. This will ensure the project is consistent with this policy.

COS Policy 1.b

Like Safety Element policy 3.a, this policy requires implementation of adequate erosion control measures. The project would be subject to a NPDES permit and approval of a Storm Water Pollution Prevention Plan which would ensure consistency with this policy. This Plan would also satisfy state and federal water quality laws.

COS Policy 2.a

This policy requires all new development projects to incorporate water-conserving measures into the development including low flow plumbing fixtures and drought tolerant landscape. The policy indicates the City "shall require" these as non-discretionary measures, and as such, they are applied to all projects as standard conditions of approval and/or building permits. These will ensure project consistency with this policy.

COS Policy 4.a

This policy requires all development proposals to provide adequate mitigation for effects to biological resources. Section IV-F Biological Resources addresses this policy issue and measures found in that section will make the project consistent with this policy.

COS Policy 5.b

This policy requires that all new development projects be evaluated for potential to impact cultural and paleontological resources. Consistency with this policy is addressed in Sections IV-A Cultural Resources and IV-G Effects Found to be Less than Significant.

COS policy 7.a

This policy obligates the City to strive to maintain and encourage preservation of existing prime and unique agricultural zoning within the City's General Plan study area and/ or sphere of influence. This issue is addressed in sections IV-B Agricultural Resources and IV-H- Growth Inducing Effects in the EIR, and include measures to ensure consistency with this policy to the degree feasible.

City of Solvang Circulation Element

Circulation Element policy 1.b

This policy requires new development to be served by streets of adequate capacity and designed to provide reasonable access consistent with City standards. Section IV-D Traffic addresses this issue and includes measure to make the project consistent with this policy.

Circulation Element policy 1.c

This policy requires evaluation of traffic impacts associated with new development. Section IV-D meets this policy.

Circulation policy 1.f

This policy requires the City use it's discretionary authority over land use development to ensure development levels do not exceed the capacity of the City's street system. This issue is addressed in Section IV-D of the EIR.

D. STATE PLANS AND POLICIES

Compliance with the California Land Conservation Act of 1965

The subject property is not under an LCA ("Williamson Act") contract and is not eligible for participation in an agricultural preserve program.

State Farmland Mapping and Monitoring Program

The State Department of Conservation Farmland Mapping and Monitoring Program map for the area around the site is shown on **Map 6—Important Farmlands**. The Project site is designated Prime Farmland. This designation means the land meets the Program's criteria for "Prime Farmland". Land that is classified as "Farmland of Local Importance" or "Other Lands" typically contains soils which might otherwise qualify for "Prime Farmland" but have some limiting characteristic. The state classification criteria for Prime Farmland includes Class I and II soils which has been used for the production of irrigated crops at some point during the last two mapping update cycles prior to the mapping date, and 2003 aerial photos show the site and adjoining land to the east in the County under row crop (presumably irrigated) cultivation.

E. NATIONAL HISTORIC LANDMARK DISTRICT

The Proposed Project site adjoins the Mission Santa Ines National Historic Landmark (NHL) District on the east and south. The District was formed in 1998 and encompasses the Mission property related lands that was once an integral part of Mission activity, as described in Section IV-A Cultural Resources.

The 94.65 acres comprising the District are within a boundary determined to include buildings, sites, agricultural fields, and water systems that have historically been part of Mission Santa Ines. Six parcels are included, four owned by the Santa Ines Mission, Los Angeles Diocese, one by the Santa Barbara Trust for Historic Preservation and one by the City of Solvang. The Santa Barbara Trust for Historic Preservation parcel is APN 139-250-36.

Acceptance into National Historic Landmarks Program is determined by the federal government, however, listing does not give either the state or federal governments any additional authority over the property, or adjacent properties. Listing does not prohibit any actions which might otherwise be taken by a property owner within the District with respect to the property, according to the NHL government website.

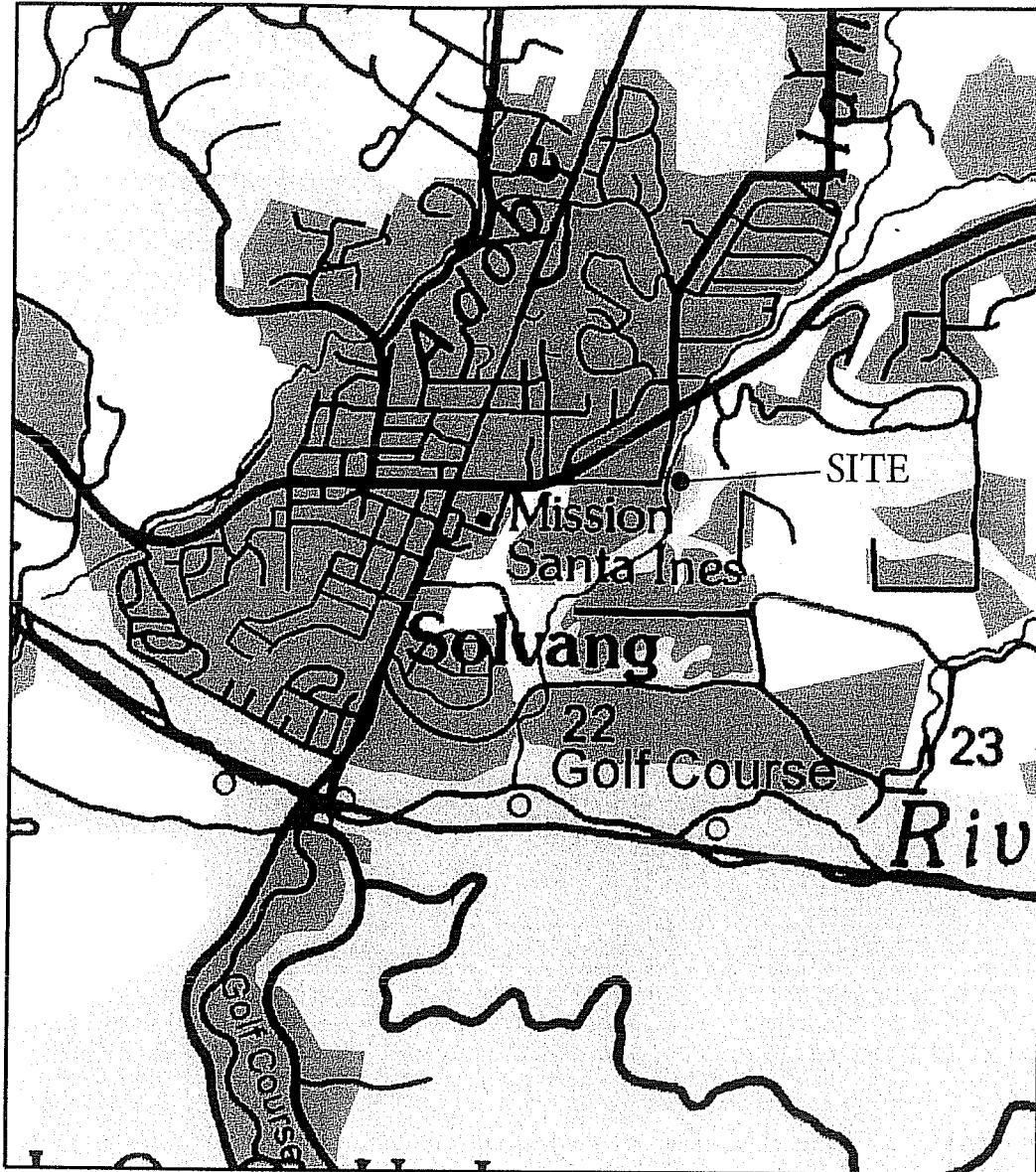
F. CUMULATIVE IMPACT SCENARIOS








State CEQA Guidelines Section 15130 requires that cumulative impacts be discussed in the EIR when they are significant. The discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, however, the discussion need not provide as great detail as provided for the impacts of the project alone. The analysis may be based on either a list of past, present, and reasonably anticipated future projects which could produce related or cumulative impacts or a summary of projections contained in an adopted general plan or related document which is designed to evaluate regional or area-wide conditions.

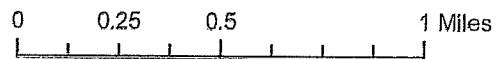
For the purposes of this EIR, projected community growth rates, population projections and resource availability used in the cumulative impact analyses are derived from the City's General Plan and a list of current project applications. These documents upon which the cumulative analyses are based are available for review at the City Planning and Community Development office located at 1644 Oak Street, Solvang, California. The list of current project applications in the area, forming the basis for cumulative analyses, is located in Section IV -D, Table D-2, of this EIR.

G. AREAS OF KNOWN CONTROVERSY

During the process of determining the scope of this EIR, the City solicited comment on the Initial Study as described in Section I of this EIR. The City also solicited public comment at an EIR scoping public workshop. The City received comments and letters concerned about the added traffic at the intersection of Highway 246 and High Meadow Road. Issues included concern about safety, delay and emergency vehicle access during times of congestion on Highway 246. Concerns also included noise, dust and traffic effects during construction, proximity of the project to important cultural resources and biological resources.



-  Prime Farmland
-  Farmland of Statewide Importance
-  Unique Farmland
-  Farmland of Local Importance
-  Grazing Land
-  Urban and Built-Up Land
-  Other Land



Source: Dept. Of Conservation. Farmland Mapping and Monitoring Program

Important Farmland- Solvang Vicinity Map



Map
6

IV. Environmental Analysis

A. CULTURAL RESOURCES

1. Environmental Issue

This section is included in accordance with the California Environmental Quality Act of 1970 which declares that the policy of the State of California is to: "...take all steps necessary to provide the people of this state with...enjoyment of...historic environmental qualities...." The CEQA definition of "environmental qualities" includes objects of historic, archaeological and aesthetic significance (Public Resources Code Section 21001)

Archaeological studies continue to contribute to our knowledge of past cultural patterns and add considerably to our store of information on ancient environments and climatic conditions. Data generated by the systematic surface and subsurface testing of archaeological deposits contributes a significant element to the scientific history of California and to the history of Santa Barbara County. Prehistoric archaeological sites are also an integral part of the modern day Native American community.

The phase 1 cultural resource survey prepared by Cultural Resource Management Services for this site is contained in Appendix B of this EIR.

2. Environmental Setting

The general vicinity of the site is considered to be sensitive for archaeological resources based on the general historic settlement patterns of the Chumash Indians. A review of archaeological reports on file at the Central Coast Information Center as well as State Historical Data Files, National Register of Historic Places; etc determined at least 34 cultural resource investigations have been conducted in the vicinity of the proposed project, resulting in the identification of six prehistoric and three historic resources in the immediate vicinity of the property. Many of these are associated with the Mission Santa Inez and the historic roadway north of the site.

The adjacent land is owned by the Santa Barbara Trust for Historic Preservation. The existing farm house near where the proposed access easement will occur is on this property. The main portion of this parcel extends to the south and includes features related to the historic use of the Mission Santa Inez.

3. Environmental Impacts

Impact Significance Criteria

The project would have a significant effect if it would disrupt or alter any significant prehistoric or historic cultural remains including human remains (*CEQA Guidelines*).

Project Impacts

The phase 1 surface survey identifies two artifacts that had been recovered northeast of the existing residence on the adjacent parcel. Due to the lack of other prehistoric artifacts on the surface (on land that has been cultivated) supports an interpretation that these artifacts were likely to have been collected by one of the previous residents of the farm house, occupied since 1911.

The farm house itself is reported to have been built from a 1937 Sears and Roebuck kit. The proposed project as designed will not impact this structure. Due to the nature of the setting and indications of some possibility that subsurface artifacts may exist the following potential impact is identified in the area of the proposed access drive:

Impact A1: Grading and excavation for utilities in the proposed access road could disturb artifacts both historic and prehistoric that have been covered by alluvium and / or human activities in the past. This impact is potentially significant.

The site work for construction of the proposed residence lots will involve the import of fill material. This activity will not adversely affect potential cultural resources in the alluvial plain. The following impact is identified for excavations within the project site:

Impact A2: Excavation within the project site has some potential to disturb prehistoric artifacts that could be significant resources.

4. Mitigation Measures

Mitigation Measure A1: To reduce potentially significant impacts to cultural resources on the site, a pre-construction limited phase 2 subsurface survey shall be conducted:

- The program for subsurface investigation shall be developed by an archaeologist.
- The program shall include additional archival research.
- The program shall determine the significance of any recovered resources and identify appropriate mitigation measures to ensure the effects on these resources are less than significant.

Mitigation Implementation / Monitoring

- 1) Performance Standard: The program shall define performance standards..
- 2) Contingency Measure: The Phase 2 evaluation may recommend alternative measures.
- 3) Implementation Responsibility: City shall require applicant to conduct phase 2 survey.
- 4) Implementation Schedule: Prior to construction.
- 5) Monitoring Method: As defined in Phase 2 Program.

Impact Significance After Implementation of Mitigation Measure:

Implementation of the phase 2 program will reduce potential impacts to less than significant.

Mitigation Measure A2: To avoid or reduce potentials to resources that could be significant, a qualified archaeologist shall monitor all excavation into natural grade within the alluvial plain portion of the site.

Mitigation Implementation / Monitoring

- 1) Performance Standard: The final grading plan shall reflect the monitoring requirement.
- 2) Contingency Measure: The monitor may recommend alternative measures.
- 3) Implementation Responsibility: City shall require applicant to fund monitor.
- 4) Implementation Schedule: During construction.
- 5) Monitoring Method: Capping and grading shall be field verified by the City for compliance.

Impact Significance After Implementation of Mitigation Measure: Implementation of the historic resource evaluation and avoidance or protective capping of the site will reduce potential impacts to less than significant.

B. AGRICULTURAL RESOURCES

1. Environmental Issue

The proposed project site may have been farmed in the past and has agricultural zoned land adjacent to it on the east and south / southwest that have Class I prime agricultural soils.

The State CEQA Guidelines Appendix G States that a project may be deemed to have a significant impact on the environment if it will "convert prime agricultural land to non-agricultural use or impair the agricultural productivity of prime agricultural land".

This section of the EIR will address the potential suitability of the existing Project site for viable agricultural use given past, current and reasonably foreseeable circumstances and trends in agriculture in the region around the site. This section will likewise evaluate the proposed project's potential effects on the agricultural viability of surrounding lands.

2. Environmental Setting

Physical Setting

Map 7--Soils is derived from the Natural Resource Conservation Service (formerly Soil Conservation Service) maps of the area. Mocho fine sandy loam soils are designated by the letters Mu on the map. This soil is classified as Class I soil, with a Storie index of 100. Botella clay loam is designated by the letters BtD2 on the map. This soil is classified as a Class IIIe soil (non-prime), with a Storie index of 48. This soil occurs to the east of the project site.

Prime Agricultural Land

As noted in Section III of this EIR, the State Department of Conservation designates the Proposed site as "Prime Farmland" under the criteria of the state Farmland Mapping and Monitoring Program. The CEQA Guidelines Initial Study checklist uses the Department of Conservation mapping definitions to designate prime farmland. The site is also identified as Prime Agricultural soil on Exhibit 1 in the City's Open Space and Conservation Element, reproduced in part as **Map 8- Prime Agricultural Soils in the Vicinity**. The site could be designated as prime farmland under other state and county definitions.

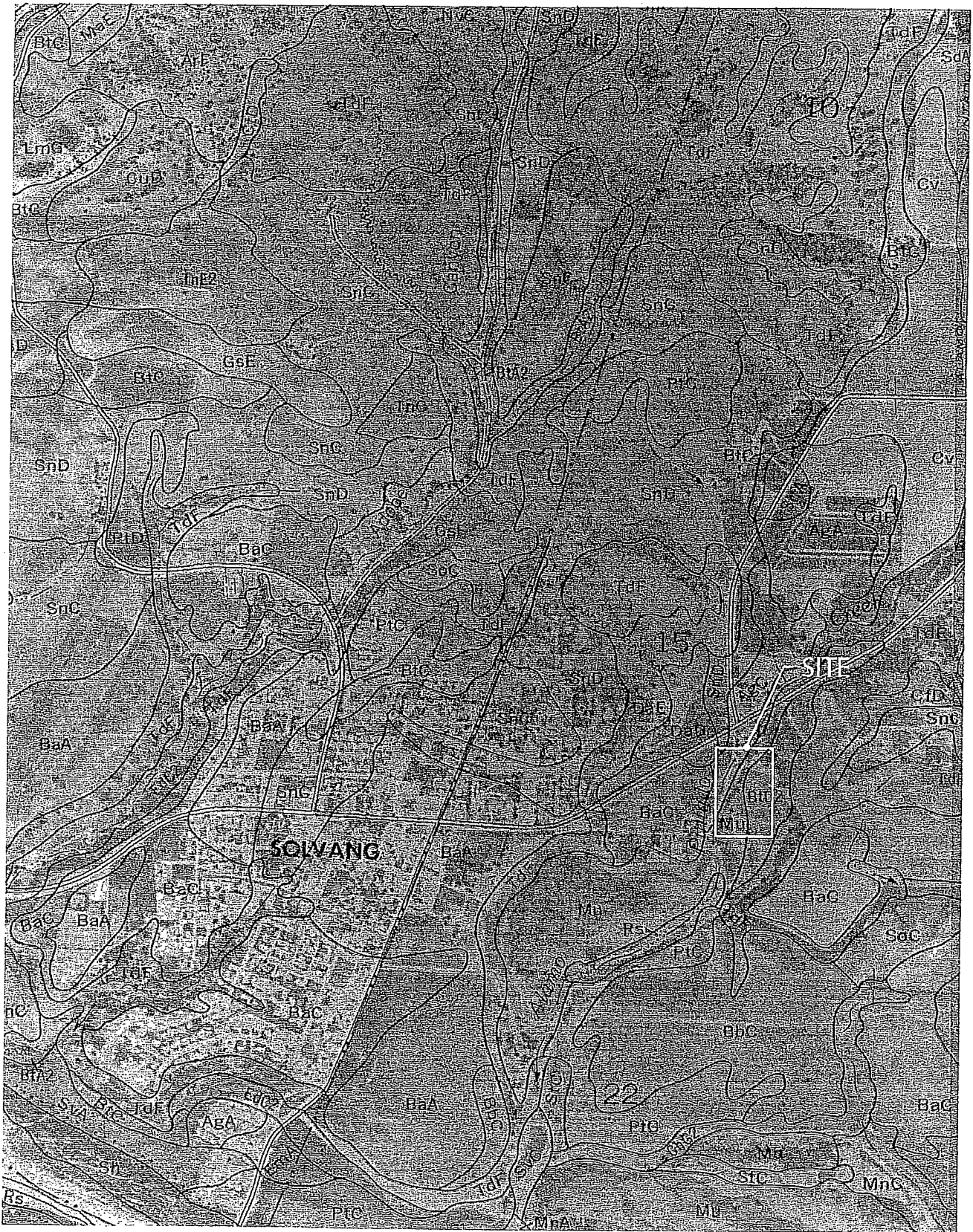
Section 51201(c) of the state Williamson Act defines "prime agricultural land" as follows:

"(c) 'Prime agricultural land' means any of the following:

"(1) All land which qualifies for rating as Class I or Class II in the [Natural Resource Conservation Service] land use capability classifications.

"(2) Land which qualifies for rating 80 through 100 in the Storie Index Rating.

"(3) Land which supports livestock used for the production of food and fiber and which has an annual carrying capacity equivalent to at least one animal unit per acre as defined by the United States Department of Agriculture.

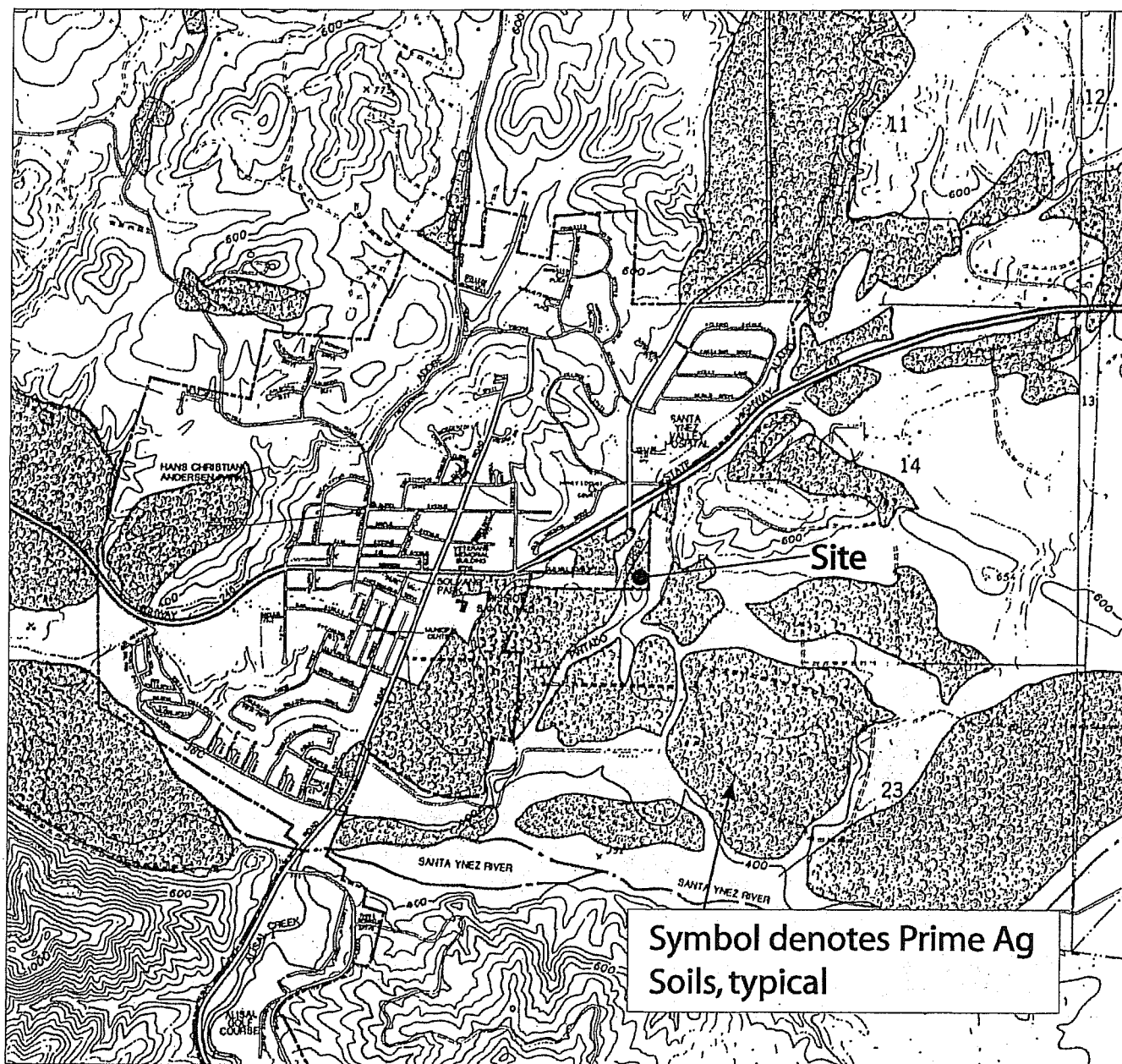


Soils Map

Source: Soil Survey of N. Santa Barbara County, NRCS



Map
7



Source: City of Solvang Conservation Open Space Element

Prime Agricultural Soils in the Vicinity



Map
8

"(4) Land planted with fruit- or nut-bearing trees, vines, bushes or crops which have a nonbearing period of less than five years and which will normally return during the commercial bearing period on an annual basis from the production of unprocessed agricultural plant production not less than two hundred dollars (\$200) per acre.

"(5) Land which has returned from the production of unprocessed agricultural plant products an annual gross value of not less than two hundred dollars (\$200) per acre for three of the previous five years."

Although the site may not have produced the minimum revenue in three of the last five years, the proposed project contains Class I soils and would qualify as "prime agricultural land" as defined by the Williamson Act.

Based on this information, it can be seen that the designation of "Prime Farmland" or "prime agricultural soils" can vary in applicability depending on the statutory or regulatory context. From a CEQA standpoint, the land would be considered prime farmland.

Surrounding Agricultural Activities

Map 9—Surrounding Agricultural Zoned Parcels is derived from the County of Santa Barbara Zoning Map. The parcel on which access to this site would be taken is part of a much larger parcel in the agricultural zone with minimum 40 acre parcel size. This map also shows that some lands in the county to the east have been subdivided into residential parcels with a minimum lot size of 5 acres.

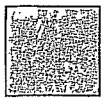
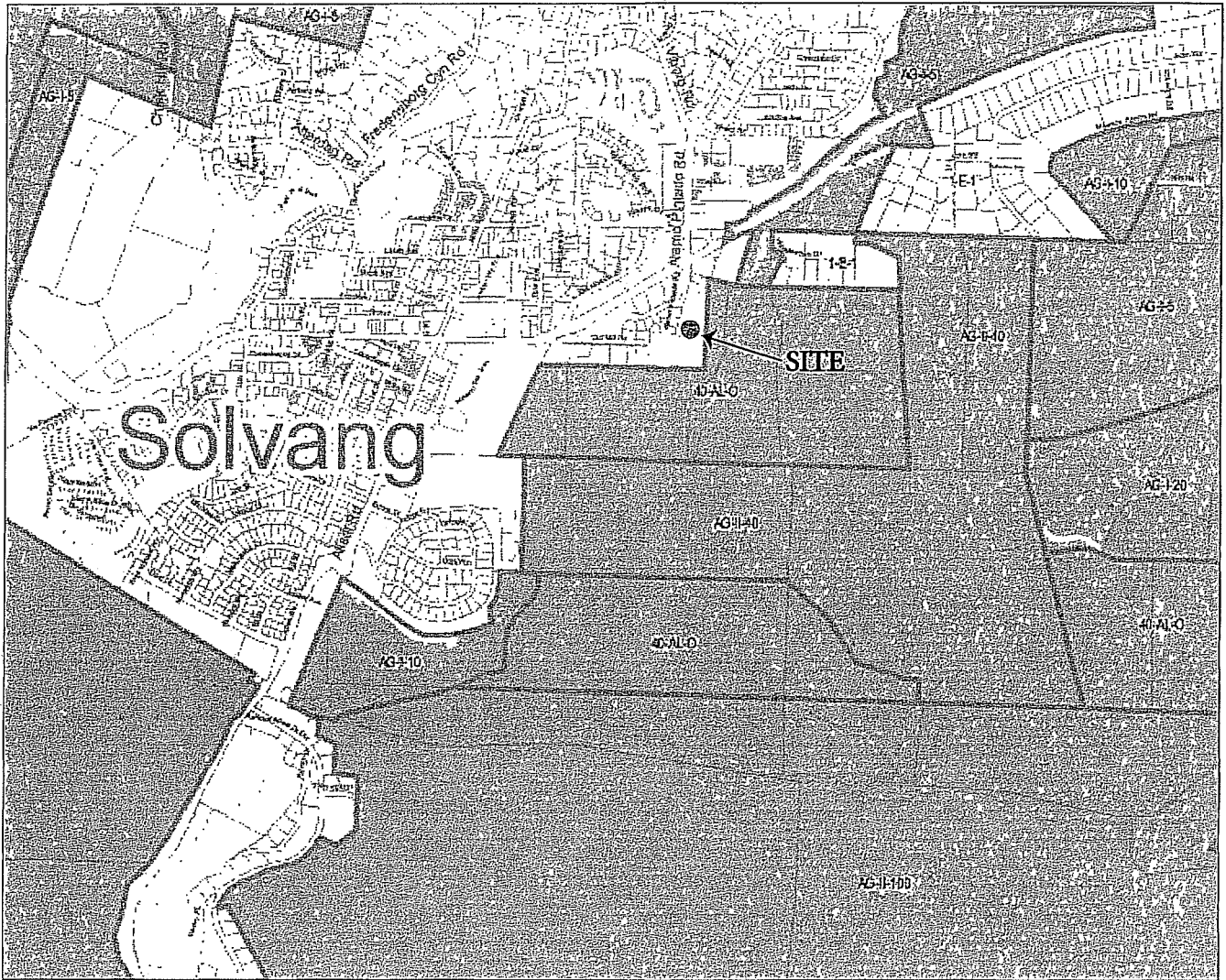
Agricultural operations on lands to the south and south west include row crops on prime soils, and based on 2003 aerial photography, row crops have been grown on the land immediately to the east of the proposed project site.

The County has adopted a Right-to-Farm Ordinance that is designed to support existing farming operations that adjoin other types of land uses. According to the County Agriculture Commissioner's Office (ACO), this ordinance does not provide relief on pesticide use, in other words, the Right to Farm does not mean pesticide permit conditions can be ignored. Based on the Right to Farm Ordinance, the ACO does not usually view the effects on non-agricultural land uses of dust or noise resulting from farming operations as significant issues that justify limiting agricultural activities.

Agricultural Preserves

Much of the land used for agricultural production within northern Santa Barbara County is contracted within the agricultural preserve program under the State Land Conservation Act (Williamson Act). One of the purposes for this program is to protect agricultural resources for long-term agricultural productivity.

According to County maps, the nearest Agricultural Preserve parcels to the proposed project site are in the Santa Ynez River corridor to the south, while the parcels immediately to the east and south of the Project site do not have preserve contracts.



Agricultural Zoning

Source: Santa Barbara County Planning & Development
 Web Site\Zoning-B4.mxd - 3/1/04

Surrounding Agricultural Zoned Parcels



Map
9

County Agricultural Policies

The County of Santa Barbara has policies to protect agriculture. Land use policies are intended to direct intensive development to urban areas in order to maintain areas in agricultural production.

3. Environmental Impacts

Impact Significance Criteria

The project would have a significant effect on agricultural resources if it would convert prime agricultural land to non-farming uses or conflict with adopted environmental plans or goals of the community where it is located (CEQA Guidelines). The Guidelines recommend a methodology for scoring a piece of property to determine if a proposed project would create a significant adverse impact on agriculture due to loss of land. Additionally, the project would have a significant adverse impact on existing agricultural operations in the area if the ability of the farming operation to carry out normally accepted practices is impaired to a degree that results in the farmland being removed from agricultural production.

The project would have a significant adverse impact if the effects of continuing agriculture on surrounding lands were to create a substantial health risk or interfere with the normal use of the proposed project site.

Impacts on Agricultural Resources due to the Development of the Project Site

The project site contains prime agricultural soils. Upon adoption of the General Plan Land Use Element CEQA document, the City made findings related to the unavoidable loss of prime agricultural land related to the potential urbanization of prime agricultural soils under the land use designations on the Land Use map. With development of the site under the General Plan land use as residential lots, prime agricultural soils would be converted to urban use. Because the conversion of this property to urban use was covered in previous CEQA action(s) and is not in conflict with COS policy 7.a related to protecting agricultural zoned lands outside the City, this impact is considered less than significant.

Impact B1: Conversion of prime agricultural soils was found in the General Plan Land Use CEQA document to have a significant and unavoidable impact on agricultural resources because this site, among others, have prime agricultural soils that would be irreversibly converted to other use. Due to this previous finding and adoption of related statements of overriding considerations related to the conversion of prime agricultural soils to urban use and the fact that the proposed project land use is consistent with the adopted Land Use Plan for which such findings were made, the development of the site for residential uses is considered an adverse but less than significant impact on agricultural resources.

Impacts of Continued Agricultural Operation on Surrounding Land Uses

Lands immediately south and southwest of the site are in agricultural production. The soils are generally the same as the project site (prime agricultural soils).

There would be a potentially significant impact if the inability to perform accepted farming practices on these adjoining lands due to perceived or real health or nuisance complaints could reasonably lead to removal of that farmland from production.

The Agricultural Commissioner's Office (ACO) regulates the use of pesticides within Santa Barbara County, primarily as the local enforcement agency of state laws and regulations under the auspices of California Department of Pesticide Regulations. The program includes the permitting and monitoring of pesticide and herbicide applications on agricultural lands.

According to the Agricultural Commissioner's Office, both restricted and non-restricted chemicals are regulated and restricted chemicals are subject to permit conditions on a case by case basis. Permit restrictions have the force of law. Typically a restricted chemical is so designated due to hazards to the handler in concentrated form, and not due to special risks associated with the dilute applied to crops or soil. About 90% of the permitted chemicals are non-restricted. The ACO applies setbacks for the use of restricted chemicals on agricultural land, not on surrounding non-farm land. In the case of residential uses in an urban setting, the setback, which is a permit condition, is generally 100 to 200 feet from the agricultural land property line. However, often the setback is reviewed on a case by case basis depending on the farming activity and chemicals involved. Pending state legislation would empower the ACO to impose similar setbacks for non-restricted chemicals.

The regulatory framework for pesticide use requires that the applicator contain drift of pesticides and not create a health safety hazard, both on the agricultural land on which the pesticides are applied and on surrounding properties. The Agricultural Commissioner's office monitors permitted activity and responds to complaints on potential violations. Physicians who diagnose pesticide exposure are required to notify the County Health Department for referral to the Agricultural Commissioner for investigation.

Lands to the west, north and east and west of the site are urbanized. Land to the south in County jurisdiction is zoned agriculture. Parcel sizes are 50 to 300 acres and are currently planted with vineyards and row crops. Due to the substantial physical separation of the proposed subdivision from these lands by Alamo Pintado Creek (west / southwest) and topography (southeast) the project residential uses would not be expected to conflict with the agricultural activities on these lands. Likewise, the proposed access drive would physically separate the residences from potential farming activities immediately to the east by about 80 feet.

However, the farming activities on the portion of the parcel adjoining the site on the south would be potentially about 30 feet from the residence on proposed lot 8. According to the property owner, the Santa Barbara Trust for Historic Preservation, the land is only occasionally leased for farming, and the trust does not rely on a lease revenue stream. The Trust is considering planting olive trees, which have historical precedent and require far less intensive use of pesticides than row crops. The County Agricultural Commissioner's office does not always require setbacks or buffers within non-agricultural projects. Typically, if due to complaints or hazards due to inability to control pesticide drift, for example, a buffer is warranted, the ACO requires this setback on the farm parcel. Many areas of the County have

residential uses immediately next to residences or schools without setbacks required ¹. If this buffer is ultimately mandated, the loss of agricultural land could be the lot frontage (230 feet) times 100 to 200 feet, or about 1/2 to 1 acre, of farmland out of production. Although this is not a substantial portion of the parcel used for agriculture, the potential loss of farmable area would be a significant impact.

Impact B2: The potential for the project to impact existing or future agricultural activities on adjoining land to the south along proposed Lot 8 lands is adverse and potentially significant due to the removal of up to one acre of farmable land from production.

The portion of the larger parcel cited above that adjoins the project site to the east and is farmed is about 3.2 acres. The proposed access road for the project would remove 1.2 acres of prime soils, leaving a remainder of 2.4 acres. As currently configured with the proposed project site combined with this off site area, roughly seven acres is farmable. Generally this parcel size is marginal for a viable agricultural operation, however perhaps due to the adjacency of lands to the south, this land has been farmed.

The analysis following will present an opinion of the significance of the impact of potentially removing all of this 7 acres from production based on the state guidelines (California Agricultural Land Evaluation and Site Assessment Model) for determining the potential significance of agricultural conversions. (It is assumed that the post-project remainder of 2.4 acres is not a viable agricultural parcel due to size, shape, proximity to residences.)

- **AGRICULTURAL SUITABILITY**

Storie Index value is 76 weighted by 0.25 equaling 19 points

- **SOILS**

Land Capability Class is I and IIIe with a score of 86 weighted by 0.25 equaling 21.5 points.

- **WATER AVAILABILITY**

Water availability is constrained by cost with a score of 95 weighted by 0.15 equaling 14.25

- **PARCEL SIZE**

Site area less than 10 acres is zero points

- **SURROUNDING LANDS IN AGRICULTURE**

Less than 40% of the sites area of influence in agriculture, zero points

- **SURROUNDING LANDS PROTECTED**

Ag preserves, conservation easements or public lands (less than 40% of project's zone of influence protected), zero points.

¹ Personal comm. Bill Gillette, County Agricultural Commissioner and cited in Santa Maria High Scholl #3 EIR, 2002 and Claeysens Tract (Santa Ynez Valley) EIR (unpublished) 2001.

The weighted score for the LESA model above is 56.25. A score of 40 to 59 is only significant if the combined soils and agricultural suitability score is over or equal to 20 points and the combined water, size and surrounding lands score is also over or equal to 20 points. The latter combined score is 15.75 points, therefore the impact of this conversion would not be significant based on the LESA model. The less than significant score is primarily due to the fact that the site is relatively small and is urbanized on three sides.

Impact B3: The conversion of the proposed project site's 3.8 acres of prime agricultural land combined with the potential loss of agricultural viability for the adjoining 3.2 acres of Class III farm land is less than significant based on the state farmland conversion rating system criteria.

Cumulative Impacts

Pressure to convert farm land to urban uses can come from a variety of sources:

- Population growth can create pressure for speculative investment in agricultural land for conversion to non-agricultural uses
- Estate planning issues among members of agricultural families, or estate taxes, can act as pressure for the sale or parceling of farms.
- Lands best suited for farming are often situated near existing residential areas which can create operational conflicts.

Because the proposed site is within the urban boundary and consistent with previous land use approvals and zoning it is unlikely that the proposed project alone would be a factor in its possible future conversion of agricultural lands in County jurisdiction to smaller lots conducive to residential and not agricultural uses. Many other factors can come into play that could speed or slow pressure to convert farm land in nearby unincorporated areas.

The *Status of Agriculture in Santa Barbara County* published by the County and the UC Cooperative Extension indicates that from 1986 to 1996 at least 5,665 acres of grazing and farm land were converted to urban or other uses. Over this period, 123 subdivisions and lot line adjustments were approved and eight denied by the County in the Santa Ynez valley. These requests involved about 16,830 acres in the Santa Ynez valley and about half of the resulting lots were less than 10 acres in size, creating about 1,000 acres of parcels often used primarily for non-commercial agriculture and / or residences. Eight of these subdivision / lot line adjustments occurred in the zone around the site roughly bounded by Alamo Pintado Road, Baseline Avenue, Refugio Road and State Route 246. These statistics provide evidence of a trend toward the subdivision of lands into parcel sizes that may not always support commercial agriculture in the Santa Ynez valley. However, countywide there has been an increase of over 25,000 harvested acres of row crops and 10,000 acres of vineyards, many in the Santa Ynez valley. Therefore there appear to be several dynamics at work in the evolving character of the region, some pressing for more rural residential scale lots and others intensifying farming on agricultural lands not used intensively in the past, e.g. vineyards on non-prime soils.

Pressure related to estate planning and ownership are speculative and it is difficult to assess the role this might play in the area. It is likewise not clear that the proliferation of small agricultural-zoned lots used primarily for residences has created pressure to convert prime farmland due to land use conflicts. The single most potent force for conversion of agriculture

land to other uses appears to be population growth and the speculative value increases in land. These factors notwithstanding, because the project site is within the incorporated area of Solvang and is urbanized on two sides and has been planned for urbanization for 15 years, and will include measures to minimize growth inducing effects (refer to Section IV-H, Mitigation measure H1) and conflicts with farming operations (refer to Mitigation measure B2), the development of this site would not be significant cumulatively.

Impact B4: Evidence of a trend toward agricultural land conversion in the Santa Ynez valley notwithstanding, the Project would not contribute to a cumulatively significant impact on agricultural resources due to its location within the urban boundary and consistency with previously adopted land use plans. This impact is less than significant.

4. Mitigation Measures

Mitigation Measure B2-a: In order to minimize the potential need for an agricultural buffer (setback) on farmland that could take that land out of agricultural production, the project shall incorporate a solid fence, subject to City BAR approval on final height and materials, along the south boundary of lot 8 and across the end of street stubs contiguous to agricultural land unless a waiver to the satisfaction of the City is obtained from the adjacent property owner(s). The fencing shall be designed and installed to protect farmland from intrusion by residents for the life of the project. In addition to the installation of a landscape screen as part of the project description, the minimum residence setback from the south property line of lot 8 shall be 30 feet.

Mitigation Implementation / Monitoring

- 1) Performance Standard: The Final Tract Map shall show the fence and 30 foot residence setback.
- 2) Contingency Measure: Fence subject to BAR approval and / or waiver from adjacent land owner.
- 3) Implementation Responsibility: City shall require applicant to install approved fence and require setback.
- 4) Implementation Schedule: The setback shall be a condition of permit issuance and the fence must be installed prior to residence occupancy clearance.
- 5) Monitoring Method: Community Development to verify measure compliance.

Mitigation Measure B2-b: The following "Buyer Notification" applicable to lot 8 shall be recorded on a separate information sheet on the Final Map:

"Important Buyer Notification: This property is located adjacent to property in the County of Santa Barbara that is zoned for agriculture and is located in an area that has been planned for agricultural use. The County Board of Supervisors has determined that it is in the public interest to preserve agricultural lands and operations within the County of Santa Barbara and to specifically protect these lands for exclusive agricultural use. Through enactment of an ordinance adding section 3-23, Article V to Chapter 3 of the County Code, any inconvenience or discomfort from properly conducted agricultural operations, including noise, odors, dust and chemicals will not be deemed a nuisance."

Mitigation Implementation / Monitoring

- 1) Performance Standard: The Final Tract Map shall show the Notice.
- 2) Contingency Measure: None required.
- 3) Implementation Responsibility: City shall require applicant to include the map sheet with notice on the Final Tract Map.
- 4) Implementation Schedule: Prior to Final Map recordation.
- 5) Monitoring Method: Community Development to verify measure compliance.

Level of Impact Significance after Implementation of Measures:

Implementation of the mitigation measure will minimize the potential for an agricultural buffer that would take farmland out of production by establishing a barrier and setback on the residential parcel. The "Buyer Notification" will reduce the potential for nuisance claims that might lead to limitations on agricultural activities on the adjoining property. In addition, a feature of the project condition is to plant a landscape screen along that boundary, which will serve to block dust and airborne chemical drift.

Impacts B1, B3 and B4 were found to be less than significant and do not require mitigation under CEQA.

C. FLOODING, HYDROLOGY AND WATER QUALITY

1. Environmental Issue

In the Initial Environmental Study for the Old Mill Road Vesting Tentative Tract Map, dated April 20, 2005, it was determined the proposed project may have impacts on hydrology and water quality. The following potentially significant impacts were identified in the Initial Study (refer to EIR Appendix A):

- Change currents or the course or direction of water movements;
- Discharge into surface waters or alteration of water quality, including but not limited to temperature, dissolved oxygen, turbidity, or thermal water pollution;
- Expose people or property to water related hazards such as flooding, or place within a 100-yr flood hazard area, structures, which would impede or redirect flood flows; and
- Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam.

The discussion elaborated on these findings, as follows:

- The project would place fill within the floodplain of Alamo Pintado Creek, resulting in a rise in the 100-yr Base Flood Elevation (BFE). Impact to the watercourse is expected and should be further studied;
- The project will contribute additional water runoff as well as possible polluted runoff as a result of proposed street drainage. (It was noted this could be mitigated through use of storm water filtering system or similar mitigation measures);
- The project will drain directly into Alamo Pintado Creek via a storm drain system. No mitigation measure could prevent this, as proposed; and
- Project will be constructed in the 100-year floodplain as well as having a retaining wall to protect structures from rising flood waters in Alamo Pintado Creek. Flooding and potential risk should be evaluated.

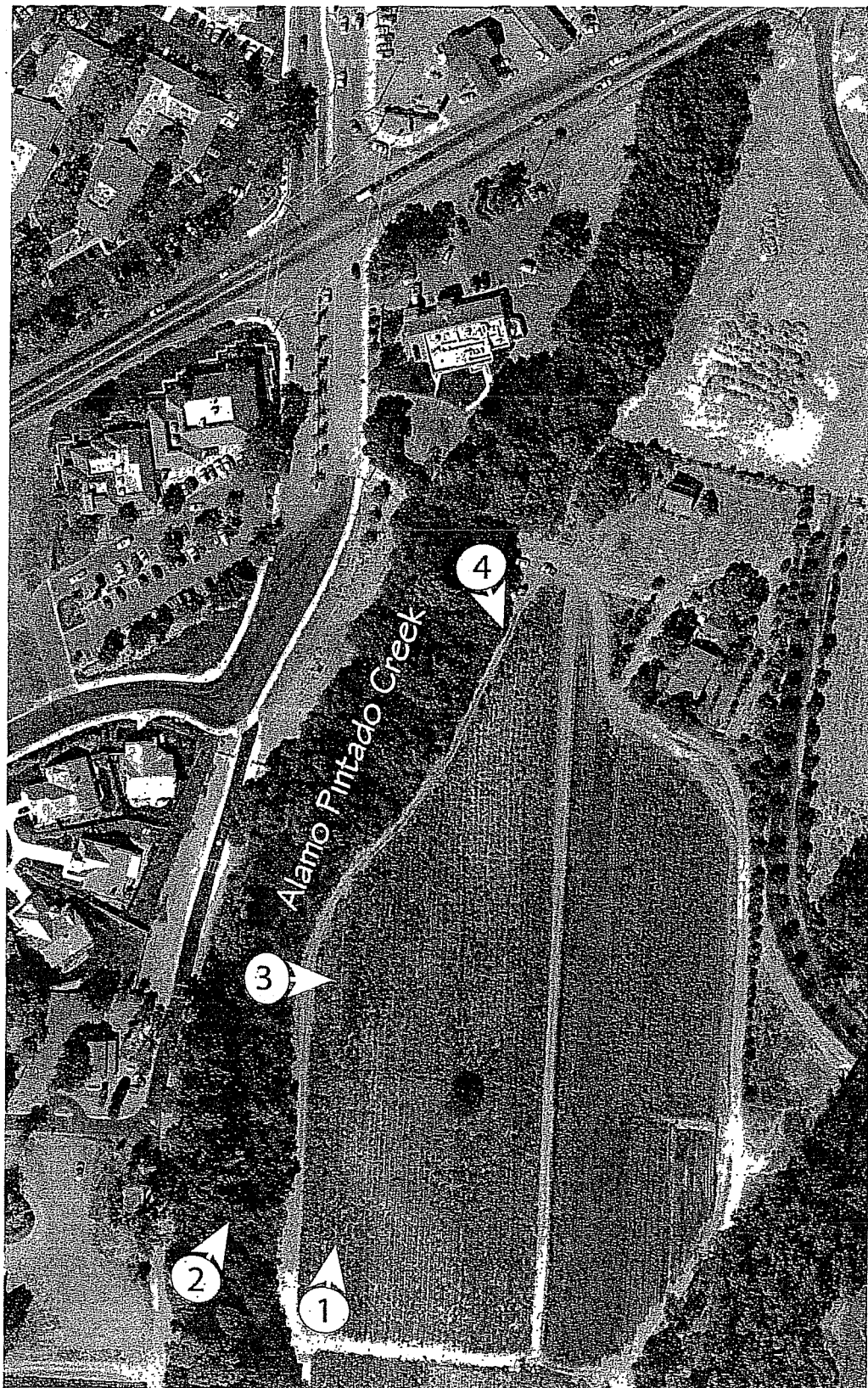
2. Environmental Setting

Environmental setting for the project is summarized below:

Topography: The tract is bounded on the entire eastern edge by Alamo Pintado Creek, running north-south along the entire eastern edge of the property. Site slope is downward to the west at approximately 2-3 percent, towards Alamo Pintado Creek. Site elevations vary between 450 feet at the northeast to 430 at the south, along the creek bank.

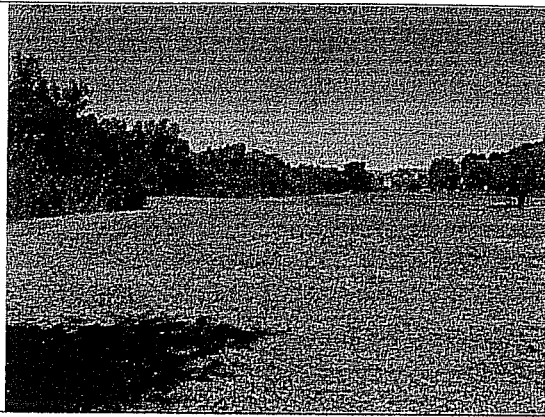
Soils: According to the Soils Engineering Report for the project (Earth Systems Pacific, November 29, 2004), the general soil profile consisted of a 3.5 to 35 foot layer of soil over bedrock. Soils were sandy lean clay and clayey sand, in moist to wet conditions with a medium stiff to hard or medium dense consistency. Bedrock was moist, soft to hard claystone, siltstone, or sandstone. Subsurface water was encountered in two of the borings, as would be expected adjacent to Alamo Pintado Creek.

Land Use: As shown in the 2003 aerial photograph (Figure C-1), the property is periodically farmed. The project site was recently tilled and was bare at the time photographs were taken on October 13, 2005 (Figure C-2).



Alamo Pintado Creek Photo Positions

Figure
C-1



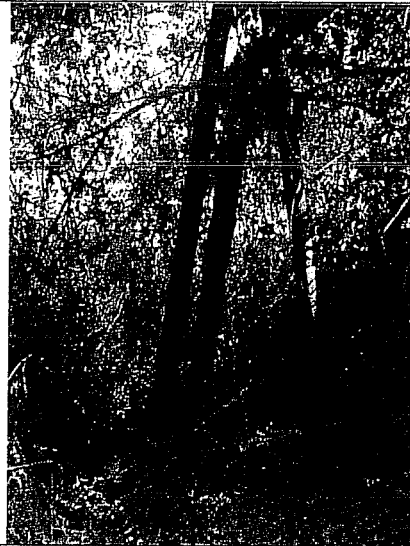
Site 1. Looking north from SW corner



Site 2. Upstream from SW corner



Site 3. Looking west at pipe x-ing



Site 3. Pipe on east bank



Site 3. Just north of pipe x-ing (see pipe)



Site 4. ~50' downstream of Arizona

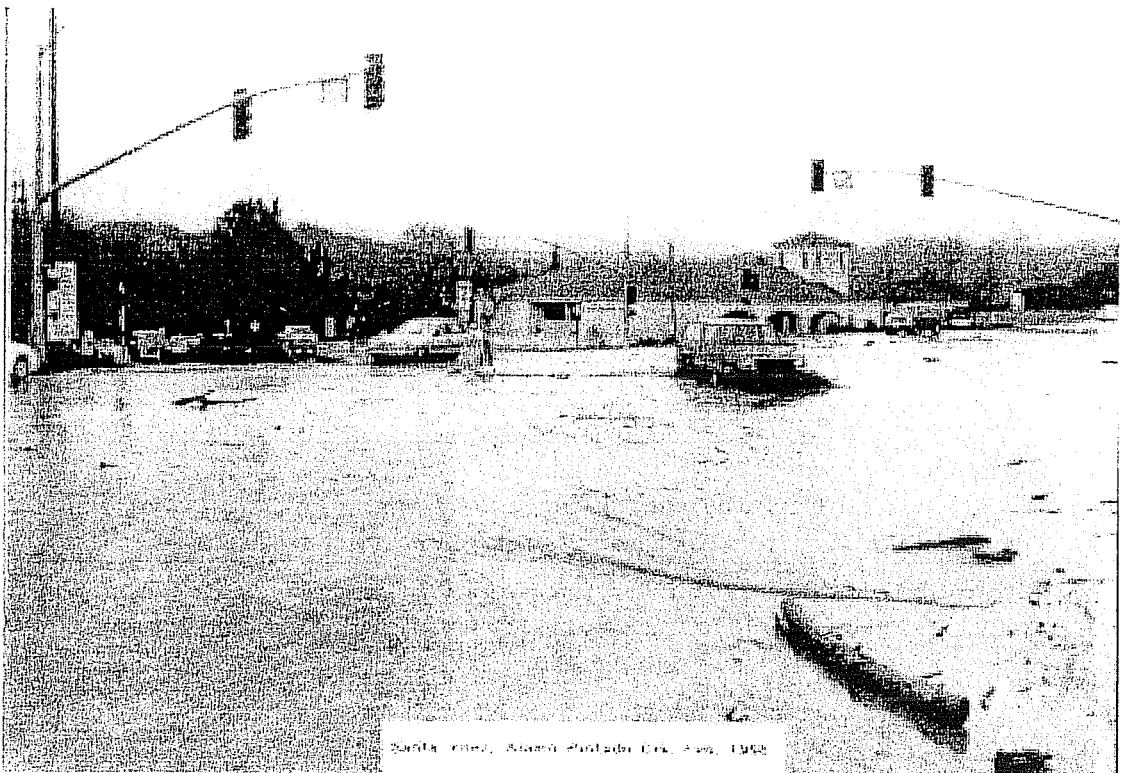
Alamo Pintado Creek Characteristics

Figure
C-2

Alamo Pintado Creek: As proposed, the project would be constructed along Alamo Pintado Creek. The Creek is a tributary to the Santa Ynez River, identified as an impaired water body in the Clean Water Act, Section 303(d) list, by the State Water Resources Control Board for nutrients, salinity, TDS, chlorides, and sedimentation/siltation.

The creek flows to the south along the western boundary of the proposed lots. Figure C-2 includes a photographic survey of this creek segment; see Figure C-1 for an index of photograph locations. The east bank of the creek is wooded and brushy. Significant debris was noted at 3 to 5 feet above the banks along the entire reach, indicating the creek has flowed outside its banks in the past.

A photograph provided by Santa Barbara County Public Works Department captured a recent flood in the vicinity of Mission Drive and Alamo Pintado Road. The photograph below was taken facing the south from Mission Drive on February 4, 1998.



Regulatory Floodplain: The project site is located within the FEMA Special Flood Hazard Area, according to the Flood Insurance Study and Flood Insurance Rate Map (revision dated May 7, 2003). The flood plain elevation varies from approximately 451.2 ft (NGVD 29) at the north end of the project to approximately 440.3 at the downstream end, based on the Conditional Letter of Map Revision based on Fill (CLOMR-F) Comment Document from FEMA (June 16, 2005). The floodway elevations are between 451.4 ft and 440.9 ft, respectively. The alignment of the proposed retaining wall is approximately 1 foot outside the floodway boundary.

3. Environmental Impacts

Impact Significance Criteria

The project would be considered significant if it resulted in any of the following impacts:

- Change currents or the course or direction of water movements;
- Discharge into surface waters or alteration of water quality, including but not limited to temperature, dissolved oxygen, turbidity, or thermal water pollution;
- Expose people or property to water related hazards such as flooding, or place within a 100-yr flood hazard area, structures, which would redirect flood flows; and
- Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam.

Impact Analysis: Change currents or the course or direction of water movements

The proposed project would affect the area inundated by Alamo Pintado Creek during major storm events such as the 100-year flood event, since the retaining wall will represent a flow constriction during these events. However, the impact on water movement during bank-full and low flow events would be minimal since the channel itself will not be redirected. In fact, no construction would take place within 100 feet of the centerline of the channel according to the Preliminary Rough Grading Plan dated February 9, 2005. Therefore, this impact is considered to be less than significant.

Impact Analysis: Discharge into surface waters or alteration of water quality, including but not limited to temperature, dissolved oxygen, turbidity, or thermal water pollution

Vehicle traffic and agricultural use can reduce runoff water quality by contributing metals and hydrocarbons. The existing land use is primarily agriculture. As noted in the 303(d) list, agriculture is listed as one of the contributors to nutrients, salinity, TDS, chlorides, and sedimentation/siltation in the Santa Ynez River.

Nutrients, salinity, TDS, and chlorides – Nutrients and other dissolved inorganic contaminants are contributed through runoff and erosion, which transport fertilizers from agricultural areas. Approximately 7 acres will be converted from agricultural uses to residential lots and pavement, and approximately 50% of these 7 acres will be covered with impervious surfaces and will not be erodible. Row crops typically are intensively fertilized, as well as managed with herbicide and other pesticides. In contrast, application of typical chemicals and fertilizer to residential landscape is less than row crop agriculture. Therefore, converting the land from agricultural use to residential use should decrease the amount of fertilizers applied to the property. Based on these factors, the impact on nutrients, salinity, TDS, and chlorides is expected to be negligible and loads may actually decrease as a result of converting this land.

Metals and hydrocarbons – The presence of vehicles and pavement will likely result in an increase in hydrocarbon and metal transport from the site. The impact is considered significant but is mitigable, as described in the Mitigation Measures section of this report.

Sedimentation / siltation – In order to estimate the impact on sediment load of converting the site from agricultural use to residential, the Universal Soil Loss Equation was applied. The

calculations are shown on Figure C-3. According to these estimates, the proposed project would reduce erosion from the site from 18 tons per year to 1 ton per year on average. As discussed below, the increased runoff from the site is not considered significant and is therefore not expected to result in a significant increase in offsite sediment transport.

Impact Analysis: Exposure of people or property to water related hazards such as flooding, or place within a 100-yr flood hazard area, structures, which would impede or redirect flood flows.

The project, as proposed, would present two flooding concerns:

- Offsite impacts due to floodway encroachment; and
- Onsite impacts due to construction in the floodplain.

Offsite impacts resulting from increased stormwater flows are not considered significant. The potential peak runoff from the tract was calculated on Figure C-4 and summarized below using the Rational Method.

Storm Frequency (year)	Pre-Developed Peak Flow (CFS)	Post-Developed Peak Flow (CFS)
10	8	9
25	11	12
50	14	15
100	16	18

According to the FEMA Flood Insurance Study (ibid.), the 100-year peak runoff along Alamo Pintado Creek was estimated as 7400 cubic feet per second (cfs) through this reach. The proposed project would result in an increase of 2 cfs, which is less than 0.03% of the 100-year storm flow from the FEMA study. As discussed later in the Cumulative Impacts section of this analysis, the peak flow from our site would not coincide with the peak flow from the upstream watershed. Therefore, it is unlikely that the peak runoff along the creek (7400 cfs) would increase as a result of this project. As a result, the potential impact on flooding is considered to be negligible.

Onsite impacts to flood safety are not considered significant since the project includes a retaining wall and fill to remove the site from the Special Flood Hazard Area (SFHA). A Comment Document from FEMA for a Conditional Letter of Map Revision based on Fill (CLOMR-F) stated that FEMA would consider the project, as proposed, outside the SFHA. The FEMA document appeared to support the developer's request for a Conditional Letter of Map Revision based on Fill. The Comment Document from FEMA is reproduced in Appendix A of the EIR, following the Initial Study.

Impact Analysis: Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam.

The proposed project would use a retaining wall and fill along the floodplain boundary. There would be no levee or dam, as the fill would extend from the top of the retaining wall to the existing ground surface along the east side of the property. As discussed in the CLOMR-F and Comment Document from FEMA, the building pads would be located outside the

floodplain. The proposed retaining wall would be subject to flood-stage flows during large storm events along its face and on the floodway ground surface. The existing creek channel is not deeply incised and the channel does not appear to be incising and creating steep vertical banks. This is an indication that scouring at the base of the proposed wall would not be a substantial risk since water velocities are at the lowest at the edge of the channel. The potential for scour leading to wall undermining and wall failure, though remote, is a potentially significant impact.

Cumulative Effects: Project's contribution to cumulative effects on watershed as a result of development.

The watershed of Alamo Pintado Creek appears to be approximately 95% built-out within Solvang city limits (according to the Zoning Map and 2003 aerial photography) and is primarily agricultural or open space further upstream towards Los Olivós. The area downstream of the project is mostly agricultural and not expected to be significantly developed in the near future.

If area upstream of the project was developed in the future, the proximity of the project to Alamo Pintado Creek and the Santa Ynez River minimizes the potential for the project to contribute to cumulative impacts on peak storm flows in the Creek and River. By the time the peak storm flow from the upstream communities (Santa Ynez, Ballard, and Los Olivós) travels several miles along Alamo Pintado Creek to the vicinity of the project, peak flows from the project site would already be approaching the Santa Ynez River. This lag in travel time between the peaks prevents them from combining and creating a significantly higher cumulative peak. This fact is further complemented by the relatively small difference in peak flows between the project site before and after development, as discussed previously.

Due to the position of the project relative to the Creek, cumulative effects due to other developments in the watershed should be minimal. The cumulative effects are considered to be negligible and therefore less than significant.

Project Impacts

The proposed project as designed includes measures to reduce or avoid impacts on flooding and water quality including:

- Avoidance of the floodway
- Construction of a retaining wall to elevate the residences above the flood level

In addition, the project is subject to the following standard permits applied to all projects in the City that would reduce potential impacts to water quality during construction to less than significant levels:

- Stormwater Pollution Prevention Plan (SWPPP) under the National Pollutant Discharge Elimination System (NPDES) program. This plan would include construction stage erosion and water quality protection measures, limitations on work timing, procedures for hazardous material spill clean up, etc.

After the project is constructed, vehicles and pavement will likely result in an increase in hydrocarbons and metals in runoff from the site. The impact is considered significant but mitigable, as described in the Mitigation Measures section below.

Impact C1: Discharge into surface waters or alteration of water quality, including but not limited to temperature, dissolved oxygen, turbidity, or thermal water pollution are potentially significant.

Impact C2: The risk of retaining wall failure due to scour and undermining leading to wall failure though remote is a potentially significant impact.

5. Mitigation Measures

Mitigation Measure C1-a: Install Best Management Practices (BMP) to prevent metals and/or hydrocarbons from entering the creek from the proposed development.

Mitigation Implementation / Monitoring

- 1) Performance Standard: Design and install Best Management Practices (BMPs) such as storm drain filters to reduce hydrocarbon and/or sediment-bound metals.
- 2) Contingency Measure: Other BMPs may be approved by City reviewers. It is assumed BMPs selected and designed according to the Design Guidelines for Storm Water Quality Treatment Facilities (Santa Barbara County Flood Control) will be acceptable.
- 3) Implementation Responsibility: City Public Works Department for final development plan and construction.
- 4) Implementation Schedule: Final plan development and prior to and during construction.
- 5) Monitoring Method: BMPs shall be field verified by the City for compliance.

Impact Significance After Implementation of Mitigation Measure:

Implementation of storm water BMPs will reduce potential impacts to less than significant.

Mitigation Measure C1-b: Submit proof of exemption or a copy of the Notice of Intent to obtain coverage under the Construction General Permit of the National Pollutant Discharge Elimination System issued by the California Regional Water Quality Control Board.

Mitigation Implementation / Monitoring

- 1) Implementation Responsibility: Applicant shall submit a copy of the Notice of Intent to Planning Department.
- 2) Implementation Schedule: A copy of the SWPPP must be maintained on the project site during grading and construction activities. Prior to approval of Land Use Permits the applicant shall submit proof of exemption or a copy of the Notice of Intent and the required SWPPP to Planning and Development Department.
- 3) Monitoring Method: The City Engineer shall review the documentation prior to approval of Land Use Permits. The City Engineer shall inspect site during construction for compliance with the SWPPP.

Impact Significance After Implementation of Mitigation Measure:

Implementation of NPDES Permit will reduce potential water quality impacts during construction activities to less than significant.

Mitigation Measure C1-c: Provide for an onsite private drainage system to convey storm flows to Alamo Pintado Creek.

Mitigation Implementation / Monitoring

- 1) **Implementation Responsibility:** The applicant shall provide a drainage plan showing the location and design of the storm drain system. Plan shall be submitted to Planning and Public Works Departments for review and approval. Installation shall be ensured through a bond or performance security provided by the applicant.
- 2) **Implementation Schedule:** Onsite drainage system shall be installed prior to clearance for occupancy. Storm drain system shall be maintained by the Homeowners' Association for the life of the project. Homeowner Association CC&R's shall specify long-term maintenance requirements.
- 3) **Monitoring Method:** Public Works shall inspect site for installation of drainage system. Public Works sign-off is required on final grading/drainage plans, and Planning Department sign-off is required for release of the performance security.

Impact Significance After Implementation of Mitigation Measure:

Implementation of onsite drainage system will prevent erosion and reduce potential water quality impacts to less than significant.

Mitigation Measure C2:

To ensure public safety in the event of a major flood, the final engineering design of the proposed retaining wall along the floodway shall be signed by the project geotechnical, civil and structural engineers certifying that the wall design accounts for maximum stream velocities, scour potential and other relevant forces acting upon the wall.

Mitigation Implementation / Monitoring

- 1) **Performance Standard:** Retaining wall plans shall be signed by registered professionals.
- 2) **Contingency Measure:** As determined by the City Engineer.
- 3) **Implementation Responsibility:** City Public Works Department for final plan check and construction.
- 4) **Implementation Schedule:** Final plan development and prior to and during construction.
- 5) **Monitoring Method:** Building Official to check in field..

Impact Significance After Implementation of Mitigation Measure:

Engineered retaining wall design will reduce potential public safety impacts to less than significant.

Boyle Engineering Corporation

BY: EL DATE: 10-11-05 SUBJECT Old Mill JOB NO: F12-100-02
 CHKD. BY: MKV DATE: 11/18/05

Soil Loss Calculations

To calculate the soil loss/sedimentation caused by the Old Mill development, the Universal Soil Loss Equation is used. Water Quality Prevention, Identification, and Management of Diffuse Pollution

Authors: Vladimir Novotny / Harvey Olem

Publisher: Van Nostrand Reinhold, NY 1994

$$A = R \times K \times LS \times C \times P \quad (\text{pg. 254, eq. 5.2})$$

where,

A = calculated average annual soil loss in tonnes/ha

R = rainfall intensity factor = 50 ton/ac, fig 5.11 = 112 tonnes/ha

K = soil erodibility factor K = 0.4

LS = slope length factor L = 390' = 119m S = 10' = 3m Slope = 2.5% LS = 0.3 from

L = flowpath from asphalt road near centrally Fig 5.14

located building site, on east edge of development, to creek

C = cropping management (vegetative cover) factor

0.18 undeveloped 0.00 developed

P = erosion control practice factor

0.45 undeveloped pg. 263 close-grown crop on 2-7% slope, with contours

0.5 developed pg. 264 normal rate of usage of erosion control measures

The 7.3 acre site was gridded to have 56 intersecting points, each point was given a corresponding C-value, as referenced from Table 5.4

Undeveloped: annual average soil loss

$$A = 112 \times K \times 0.3 \times 0.18 \times 0.45 \quad \text{Assumes legumes planted with contours}$$

$$= 1.09 \text{ tonnes/ha}$$

$$= 2.44 \text{ ton/ac-yr} \quad \text{with 7.3 acres}$$

$$= 17.8 \text{ tons/yr}$$

Developed: annual average soil loss

$$A = 112 \times K \times 0.3 \times 0.01 \times 0.5$$

$$= 0.07 \text{ tonnes/ha}$$

$$= 0.15 \text{ ton/ac-yr} \quad \text{with 7.3 acres}$$

$$= 1.1 \text{ tons/yr}$$

Assumes areas for pavement, building pad, landscaping,
average construction pollution prevention

This is a 94 percent reduction

Program Rational - XL

User Data:

Project Name: Project Number:

Date of Run: Run By:

Notes:

Input Data:

Location: Land Use Type:

Area (Acres): Time of Concentration (Min.):

Calculated Runoff Coefficient:	Q10: <input type="text" value="0.46"/>	Q25: <input type="text" value="0.53"/>	Q50: <input type="text" value="0.58"/>	Q100: <input type="text" value="0.63"/>	Calculate
User Selected Runoff Coefficient (Optional):	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	

For Large Lot Subdivisions (>10,000 sq. ft.):

	Low Value:	High Value:	User Selected:
Q10:	<input type="text"/>	<input type="text"/>	<input type="text"/>
Q25:	<input type="text"/>	<input type="text"/>	<input type="text"/>
Q50:	<input type="text"/>	<input type="text"/>	<input type="text"/>
Q100:	<input type="text"/>	<input type="text"/>	<input type="text"/>

Results:

	Rainfall Intensity:	Runoff Coef:	Q (cfs):		
Q10:	<input type="text" value="2.35"/>	<input type="text" value="0.46"/>	<input type="text" value="8"/>	<input type="button" value="View RI Curves"/>	<input type="button" value="Print"/>
Q25:	<input type="text" value="2.87"/>	<input type="text" value="0.53"/>	<input type="text" value="11"/>		
Q50:	<input type="text" value="3.23"/>	<input type="text" value="0.58"/>	<input type="text" value="14"/>	<input type="button" value="View RC Curves"/>	<input type="button" value="Exit"/>
Q100:	<input type="text" value="3.58"/>	<input type="text" value="0.63"/>	<input type="text" value="16"/>		

Notes:

Input Data:

Location: Land Use Type:

Area (Acres): Time of Concentration (Min.):

Calculated Runoff Coefficient:	Q10: <input type="text" value="0.53"/>	Q25: <input type="text" value="0.59"/>	Q50: <input type="text" value="0.63"/>	Q100: <input type="text" value="0.67"/>	Calculate
User Selected Runoff Coefficient (Optional):	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	

For Large Lot Subdivisions (>10,000 sq. ft.):

	Low Value:	High Value:	User Selected:
Q10:	<input type="text" value="0.46"/>	<input type="text" value="0.59"/>	<input type="text" value="0.53"/>
Q25:	<input type="text" value="0.53"/>	<input type="text" value="0.65"/>	<input type="text" value="0.59"/>
Q50:	<input type="text" value="0.58"/>	<input type="text" value="0.68"/>	<input type="text" value="0.63"/>
Q100:	<input type="text" value="0.63"/>	<input type="text" value="0.71"/>	<input type="text" value="0.67"/>

Results:

	Rainfall Intensity:	Runoff Coef:	Q (cfs):		
Q10:	<input type="text" value="2.35"/>	<input type="text" value="0.53"/>	<input type="text" value="9"/>	<input type="button" value="View RI Curves"/>	<input type="button" value="Print"/>
Q25:	<input type="text" value="2.87"/>	<input type="text" value="0.59"/>	<input type="text" value="12"/>		
Q50:	<input type="text" value="3.23"/>	<input type="text" value="0.63"/>	<input type="text" value="15"/>	<input type="button" value="View RC Curves"/>	<input type="button" value="Exit"/>
Q100:	<input type="text" value="3.58"/>	<input type="text" value="0.67"/>	<input type="text" value="18"/>		

D. TRAFFIC AND TRANSPORTATION

1. Environmental Issue

The following section, prepared by Orosz Engineering Group (OEG) contains an analysis of the potential traffic, circulation and parking impacts associated with the Proposed Project. The section provides information relative to existing and future traffic conditions within the project study area. Traffic impacts are identified based on City of Solvang thresholds and mitigations are recommended where required. A review of the site's access is also presented.

2. Existing Conditions

The project setting relative to the street system is shown on **Figure D1**. The study area for this project included the section of Highway 246 between and including the intersections of High Meadow Road and Alamo Pintado Road. Due to the small size of the project, the study area was limited to these two intersections. Access to the project site is via High Meadow Road.

The street system around the proposed project has the following characteristics:

- Highway 246 (a State Highway) provides two travel lanes (one in each direction) with a center left turn lane at Alamo Pintado Road. The posted speed limit is 35 MPH (within the City of Solvang) transitioning to 55 MPH (toward Santa Ynez).
- Alamo Pintado Road at the intersection with Highway 246 is signalized and provides two travel lanes on each approach with left turn lanes. The speed limit on this portion of Alamo Pintado Road is 25 MPH.
- High Meadow Road is a 24-foot wide private paved road that provides local access to 18 residential homes, south of Highway 246. The intersection with Highway 246 is STOP controlled for High Meadow Road traffic only. No left or right turn lanes are provided along Highway 246.

To the west of High Meadow Road is the Alamo Pintado Creek Bridge. This bridge currently has reduced shoulder widths of approximately four feet and tends to constrict the flow of traffic through it. Frequently, the queue of westbound traffic from the Alamo Pintado Road intersection backs up past the bridge during peak high school departure (2-3:00 PM) and peak summer hours due to this constriction.

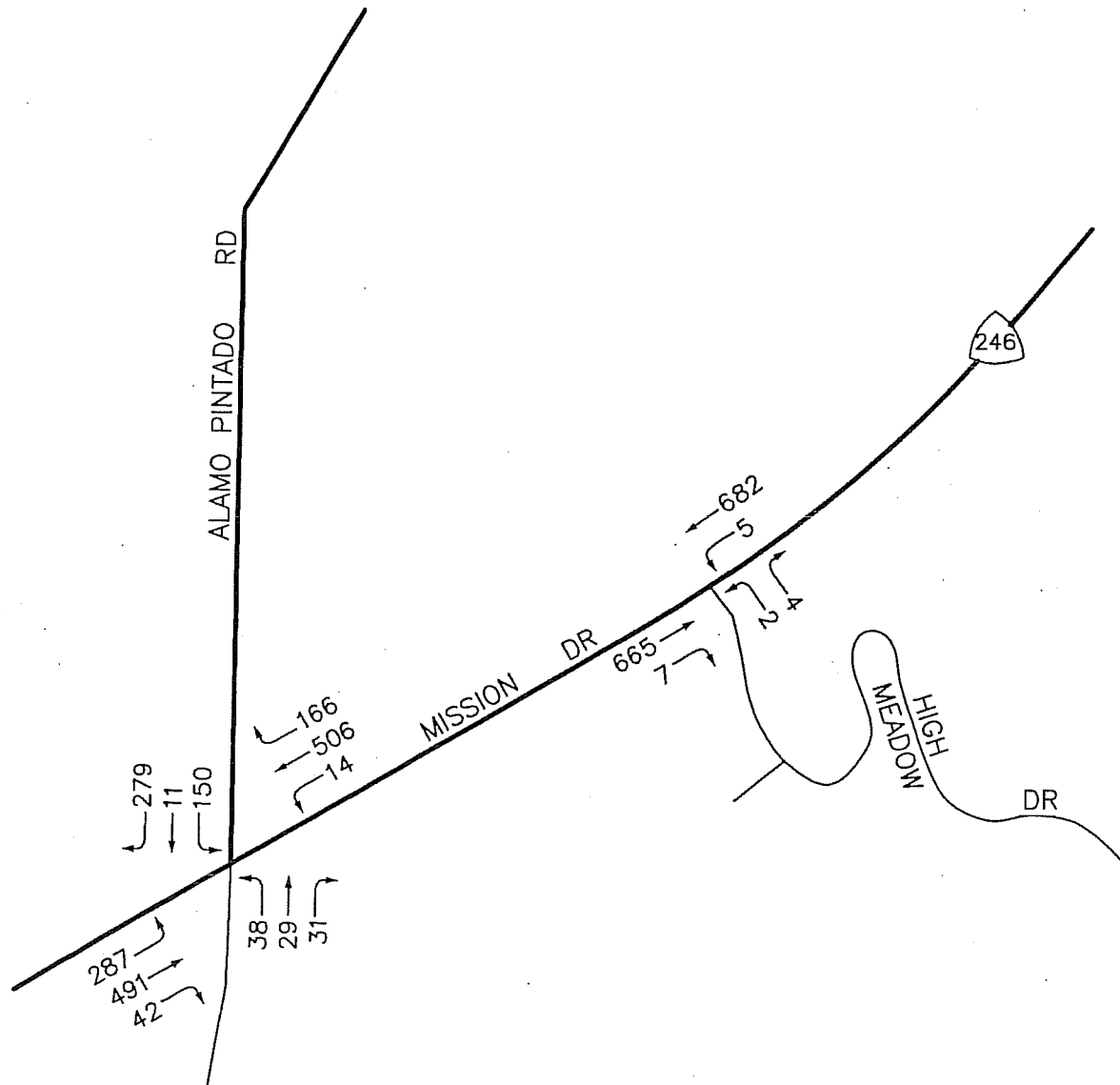
State Route 246 / Alamo Pintado Intersection

The City has retained a consultant to develop a Project Study Report (PSR) for this intersection. The PSR is the first step in the process of improving the intersection. The PSR is developed in coordination with Caltrans because Route 246 is a State Highway. The title of the PSR is the State Route 246 / Alamo Pintado Intersection Traffic Operation Improvement Project. Typically the PSR process involves evaluation of a range of alternative improvements. At the time of this EIR the PSR process is not far enough along to definitively predict the preferred option and what it might mean for the Proposed Project.

Traffic volumes for the study area intersections were obtained from previous recent traffic studies conducted in the City of Solvang. The existing PM peak hour (highest one hour between 4 and 6 PM) traffic volumes are depicted in **Figure D1**. Even with the high school peak traffic flow between 2-3:00 PM, the intersection experiences a higher total amount of traffic during the evening peak hour.

State Route 246 / High Meadow Road Intersection

Caltrans has indicated that the current crash rate for the intersection of Highway 246 and High Meadow Road is below the statewide average for similar types of intersections. The intersection does experience a higher than average property damage-only crash type. This intersection is outside the City limit.



EXISTING CONDITIONS
 PM PEAK HOUR TRAFFIC VOLUMES
 Old Mill Road Residential Project



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D1

To formulate a baseline to measure the potential impact of the proposed project, the existing intersection operation was calculated. The City of Solvang prefers to use the Highway Capacity Manual (HCM) procedures produced by the Federal Highway Administration to estimate unsignalized intersection operation and the Intersection Capacity Utilization (ICU) procedures for signalized intersections. Within the intersection operation procedures, the operation is gauged by various Levels of Service or LOS. The measurements range from LOS A – very good operation to LOS F – severe congestion. The City has adopted LOS C range as the maximum level of service acceptable on City Streets. Caltrans has also indicated that the LOS C is the maximum level of service desired for the State Highway System. The existing intersection operating conditions are summarized in **Table D1**.

Table D1

Existing Conditions Peak Hour Intersection Operation

Location	Type of Control	PM Peak Hour (ICU or Delay)
Highway 246 at Alamo Pintado Road	Traffic Signal	0.70/LOS B/C
Highway 246 at High Meadow Road	One-Way STOP	26.0 sec delay per veh/LOS D

As seen in this table, the intersection of Alamo Pintado Road at Highway 246 operates at LOS C. However, the intersection level of service for the High Meadow Road intersection falls below the City and Caltrans desired LOS C.

Future Conditions

As described above, the City of Solvang is currently studying the opportunities to improve the operations along Highway 246 near the Alamo Pintado intersection, including the Alamo Pintado Creek Bridge. The City has begun the Project Study Report phase of evaluating various highway improvements. The results of this study should be available late in 2006. Although not initially under consideration, under one possible scenario, the Highway 246 bridge over Alamo Pintado Creek may be recommended for widening to include standard shoulders and two-way left turn lane.

The City has provided a list of pending and approved projects within the City and surrounding communities to provide a picture of possible future traffic conditions. The list of projects is summarized in **Table D2**.

Based on the traffic projections in **Table D2**, the future traffic volumes along the study area intersections that were used in this analysis are graphically depicted in **Figure D2** for the PM peak hour.

To form a future baseline to evaluate the potential impacts that could be expected with the proposed project, the future intersection traffic operation was determined using the future traffic volumes and the ICU or Highway Capacity Manual intersection operation procedures, as appropriate. The resulting intersection operations for the future conditions are summarized in **Table D3**.

Table D2

Cumulative Development List
July 1 - December 31, 2005

Cumulative Projects

TAZ	Project Name/Number	Location	Development Type	Size	Status	Remaining Traffic During PM Peak Hour	
						ADT	In Out
<u>City of Solvang</u>							
254	Village Estates	Esrom/Valhalla Drive	Single Family Residential	68 DU	66 DU constructed	20	1 1
252	Nyborg Office Building	1420 Mission Drive	Office	7,800 SF	Approved	86	2 10
251	Creekside Place (Parson's)	801-809 Creekside Place	Single Family Residential	6 DU (net)	5 DU constructed	10	1 0
252	Skytt Mesa	Chalk Hill Road	Single Family Residential	169 DU	Approved	1618	103 68
254	Nielsen's High Meadow (Griss)	Highway 246 at High Meadow	Single Family Residential	4 DU	Approved	38	3 1
253	King Christian Towers Mixed Use	436 First Street	Commercial/Residential	5 Apts	Approved	34	2 1
251	Bella Vista Estates	1871 Laurel Avenue	Single Family Residential	3 DU (net)	Approved	29	2 1
251	Petersen TPM	675 Pine Street	Single Family Residential	1 DU (net)	Approved	10	1 0
251	Dunn TPM	1760 Viborg	Single Family Residential	1 DU (net)	Approved	10	1 0
251	Cunningham TPM	622 Alisal Road	Single Family Residential	1 DU (net)	Approved	10	1 0
254	Trendwest Worldmark Resort	280 Alisal Road	Timeshare Hotel Resort	76 DU (condo)	Under Construction	445	27 14
251	Leo DP/Evergreen Dynasty Mixed Use	1635 Mission Drive	Commercial/Residential	2 DU	Approved	172	5 6
251	Solvang Lutheran Home	636 Atterdag Road	Institutional	3,937 SF 25 Units	Pending	50	2 2
252	Apple Farm Arbors	1450 Mission Drive	Commercial	7 rooms	Pending	62	3 2
251	Quick TPM	785 Fredensborg	Hotel Expansion Single Family Residential	1 DU	Approved	10	1 0
252	Pahler TPM	290 Fifth Street	Single Family Residential	2 DU	Approved	20	1 1
254	Cerry TM	Old Mission Drive	Single Family Residential	8 DU	Pending	76	6 2
253	Wine Country Inn (Chinney Sweep Inn) Triangle Park	1554 Copenhagen Drive	Hotel	13 rooms	Approved	118	4 4
		Alamo Pintado Annexation	Park		Approved	201	33 26
		Elverhoy Court	Park		Pending	136	34 34
<u>Santa Ynez</u>							
	Chumash Cultural Center	Chumash Reservation	Commercial	41,925 SF	Pending	1221	55 56
<u>Buellton Area</u>							
	Oak Spring Village	McMurray Rd/Highway 246	Mixed Use	187,000 SF 156 DU	Approved	5322	203 304
	Vintage Walk	Avenue Of Flags	Mixed Use	10,430 SF 17 Apts	Approved	537	19 19

Table D3

Future Conditions Peak Hour Intersection Operation

Location	Type of Control	PM Peak Hour (ICU or Delay)
Highway 246 at Alamo Pintado Road	Traffic Signal	0.80/LOS C/D
Highway 246 at High Meadow Road	One-Way STOP	36.4 sec delay per veh/LOS E

As seen above, the intersection of High Meadow Road and Highway 246 would be expected to operate at LOS E during the PM peak hour under future traffic conditions. Under these conditions, the Alamo Pintado Road intersection is operating at the upper end of the acceptable level of service limits set by the City and Caltrans. The High Meadow Road intersection continues to operate below acceptable limits.

3. Traffic Impacts

Impact Thresholds

The City of Solvang utilizes the County of Santa Barbara standards for evaluating the level of significance of project impacts. For existing plus project level impacts, a significant impact is considered when an intersection level of service change exceeds one of the following conditions. The City has set a LOS of C as the target goal for weekday peak hours.

Significant Changes in Levels of Service	
Intersection Level of Service (Including Project)	Increase in volume to capacity ratio or trips greater than
LOS A	0.20
LOS B	0.15
LOS C	0.10
LOS D	15 trips
LOS E	10 trips
LOS F	5 trips

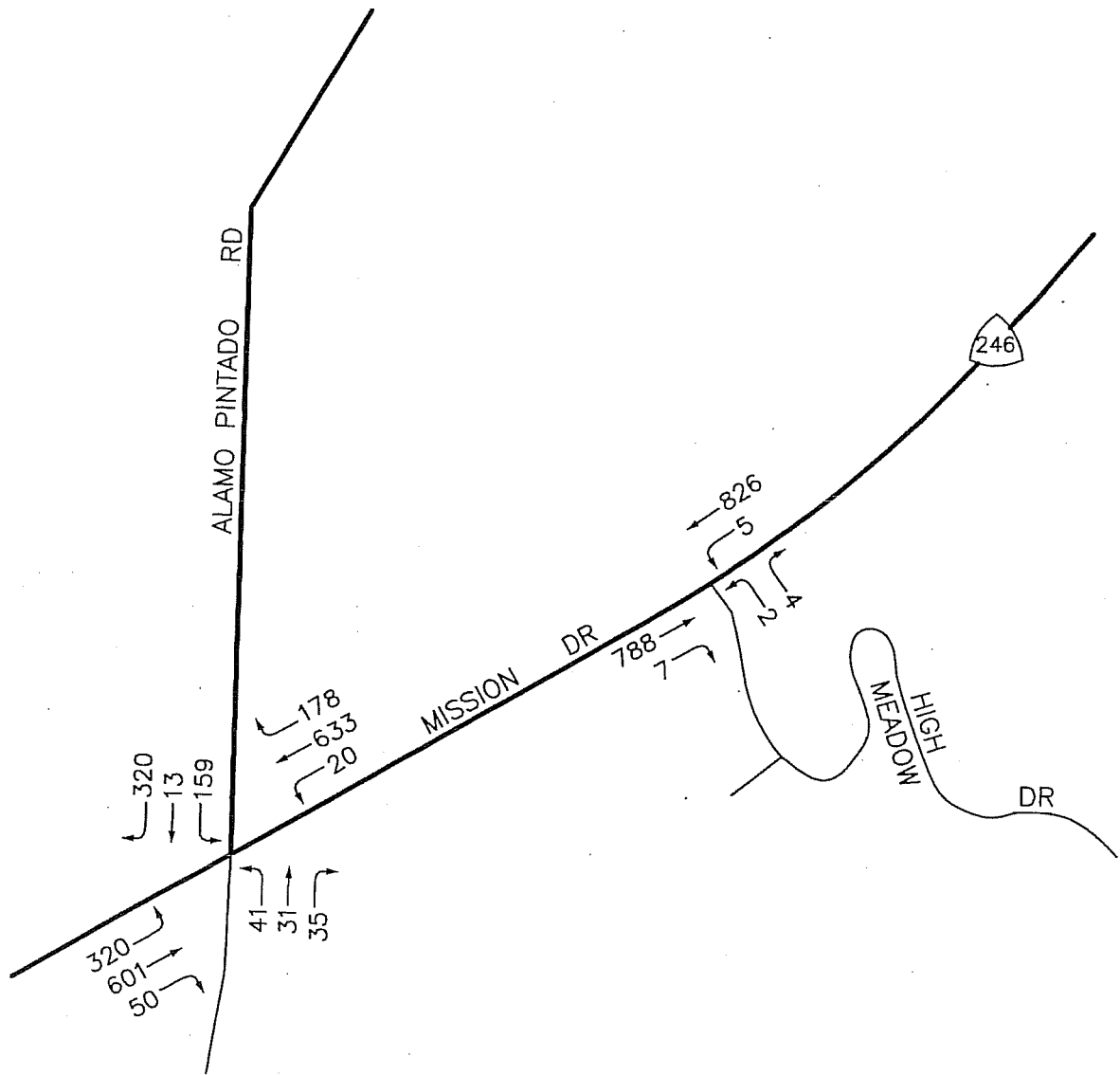
** We reduced project to 7 Houses*

Project Traffic Impact Analysis

The proposed project consists of a total of eight single family residential lots. To estimate the traffic that could be generated by the project, the Institute of Transportation Engineers (ITE) produces a reference documenting trip generation rates for a variety of land uses. For this project, ITE has identified the following trip rates for townhome/condominiums (ITE Code 210):

- 9.57 trips per unit on a Daily Basis
- 1.01 trips per unit during the PM Peak Hour (63% in, 37% out)

For this project, the trips that could be expected to be added to the surrounding street system would total 76 Daily Trips; with 8 PM Peak Hour trips. Based on the residential nature of the project, the traffic volumes were assigned to the local street system toward shopping, educational and work related destinations. In general, 65% of the project traffic was assigned to the west and north south toward the downtown area and Buellton/Highway 101. The remaining 35% of the traffic was to the east toward the High School, town of Santa Ynez and Highway 154/Santa Barbara. The distribution of project traffic is graphically depicted on **Figure D3**.



CUMULATIVE CONDITIONS
 PM PEAK HOUR TRAFFIC VOLUMES
 Old Mill Road Residential Project



Orosz Engineering Group, Inc.

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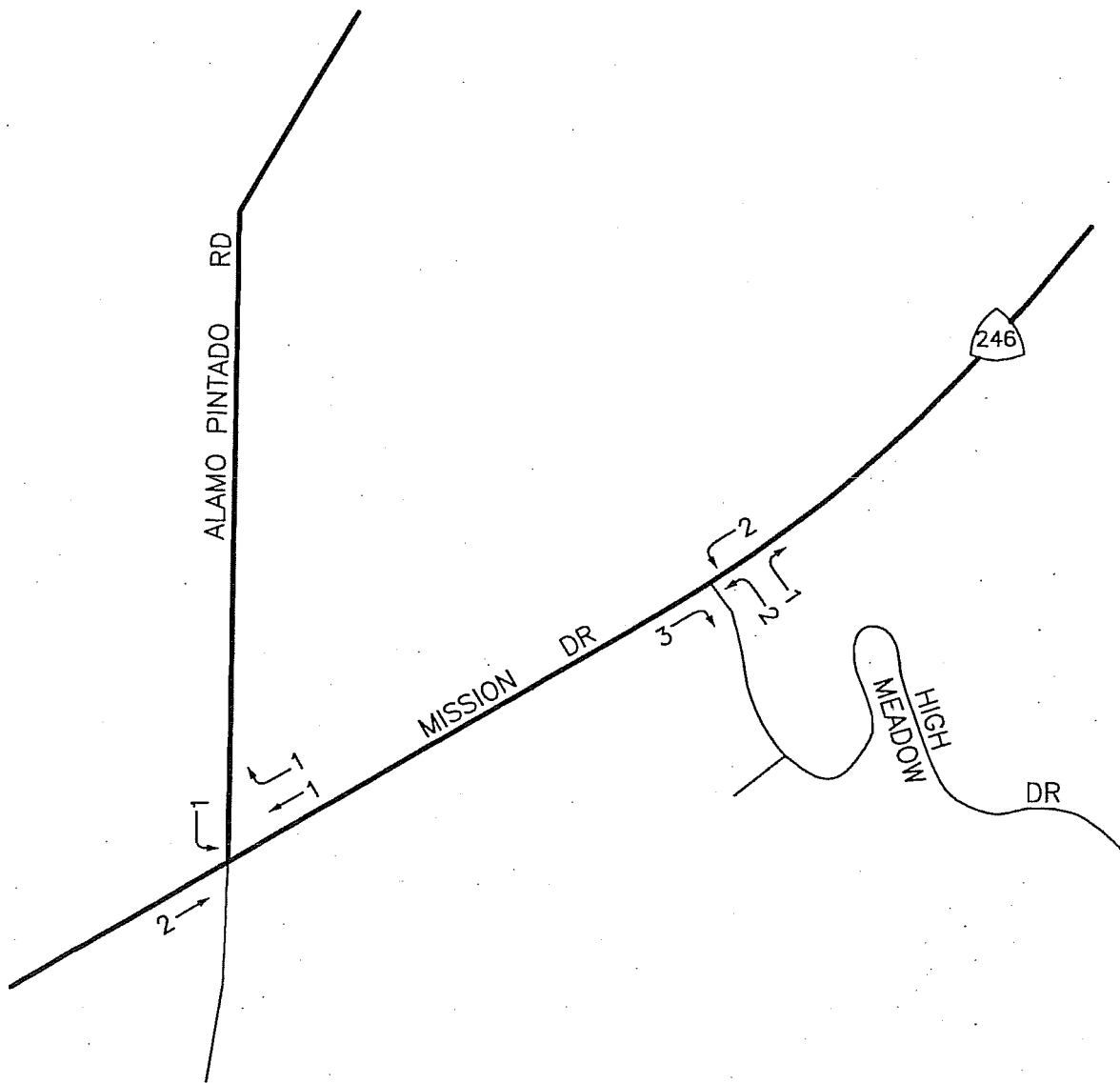
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City of Solvang

D2

Traffic. IV-D6



PROJECT ADDED
 PM PEAK HOUR TRAFFIC
 Old Mill Road Residential Project



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To evaluate the project's potential impact on existing conditions, the proposed project traffic was added to the existing conditions volumes and the intersection operation was recalculated. The resulting Levels of Service for the existing plus project analysis are summarized in **Table D4**.

Table D4

**Existing Plus Project Conditions
Peak Hour Intersection Operation**

Location	PM Peak Hour (ICU or Delay)	PM Peak Hour Plus Project	Project Added Traffic	Impact Yes/No
Highway 246 at Alamo Pintado Road	0.70/LOS B/C	0.70/LOS B/C	5 trips	No
Highway 246 at High Meadow Road	26.0 sec / LOS D	26.8 sec / LOS D	8 trips	No

As shown in this table, the addition of the proposed project traffic is not expected to result in any significant change of poor intersection operations, according to City LOS Standards. The project would contribute to the poor existing operation of the High Meadow Road intersection, but not significantly based on City of Solvang thresholds. During the High School peak traffic flow the project impact would be less than during the PM peak hour, as the project traffic is greater during the 4-6 PM weekday peak hour than during the High School peak traffic flows.

Impact D1: At an addition of 8 peak hour trips, the project does not exceed the City impact threshold for a significant intersection impact even though the contribution of added trips is to an intersection operating at LOS D.

As the intersection currently does not have a significant crash history, the project traffic does not result in significant safety impacts.

Cumulative Traffic Impacts

With respect to the future intersection operating conditions, the proposed project traffic was added to the future traffic volumes and the intersection operation was recalculated. The results of this analysis are summarized below in **Table D5**.

Table D5

**Future Operating Conditions Plus Project
Peak Hour Intersection Operation**

Location	PM Peak Hour (ICU or Delay)	PM Peak Hour Plus Project	Project Added Traffic	Impact Yes/No
Highway 246 at Alamo Pintado Road	0.80/LOS C/D	0.80/LOS C/D	5 Trips	No
Highway 246 at High Meadow Road	36.4 sec / LOS E	37.9 sec / LOS E	8 Trips	No

The proposed project would add to the poor projected intersection operation at the High Meadow Road intersection. The project would contribute to the poor forecast operation of the High Meadow Road intersection, however, the project does not exceed the thresholds of significance set by the City of Solvang. Using this standard, the project contribution to the cumulative condition is less than significant.

However, due to that fact that the project is contributing to an existing and cumulative condition that is, and will be, at a below-standard level of service, under CEQA, the cumulative impact would be considered significant.

Impact D2- The project contribution to the cumulative traffic condition is a significant impact because the intersection operation at State Highway 246 and High Mountain Road will fall to LOS E.

Construction Traffic

During the construction of the homes and site preparation, the daily traffic volumes for construction traffic are similar to the proposed project, 76 ADT. Additional heavy truck traffic for dirt import (20,000 yards) and concrete, lumber, and other building materials would vary over the course of the site development. The peak times would be during the import of the dirt for the project. During this time, 25-30 heavy trucks per day or 50-60 truck trips would be expected to arrive and depart the project site.

Impact D3- The construction traffic associated with the project would result in similar impacts to the roadway system as the project, but for a shorter and limited time frame. This temporary impact would also be less than significant based on City impact significance thresholds.

4. Mitigation Measures

As described above, the Highway 246 / Alamo Pintado PSR may potentially include a center turn lane extending to High Meadow Road. The final design and implementation timing for this improvement project is not certain and may not be reasonable foreseeable. As a result, three potential mitigation scenarios to address the projects impacts to the cumulatively significant impact on the High Meadow Road / Highway 246 intersection are presented below. To avoid confusion, only mitigation scenario 1 is presented in Table S- Impact and Mitigation Summary in Section II of the EIR.

A. Mitigation Scenario 1- Intersection Improvements with a Center Left Turn Lane

While the project does not result in a significant impact at this intersection (see impact D1 above), mitigation measures are still required by the City to mitigate the existing base and future base (cumulative) conditions poor intersection level of service. With the addition of a center left turn lane, the future plus project intersection level of service would improve to LOS C. This mitigation scenario assumes the improvements will include the left turn lane and are foreseeable in the near future.

If the ultimate PSR improvement for the intersection of High Meadow Road and Highway 246 contains a left turn lane, and the project would be required contribute its fair share toward the improvement, the turn lane would serve to mitigate cumulatively significant impacts. The City has a traffic impact fee program, but does not have a process that would result in a mitigation fee for the PSR defined project.

Mitigation Measure D2: To mitigate the project's contribution to cumulatively significant impacts to the Highway 246 / High Meadow Road intersection, the project shall contribute a pro rata share of the projected (and yet to be determined) cost of the planned roadway improvement project which is anticipated to include a center left turn lane to bring the intersection operation to LOS C. The resulting impact would be less than significant.

Mitigation Implementation / Monitoring

- 1) Performance Standard: The project applicant shall provide payment of the stipulated amount
- 2) Contingency Measure: None required.
- 3) Implementation Responsibility: City Public Works Department shall ensure fees are collected.
- 4) Implementation Schedule: Prior to Final Map recordation.
- 5) Monitoring Method: None required.

Impact Significance After Implementation of Mitigation Measure: The project's pro rata financial contribution to planned intersection improvements will reduce the project' contribution to a significant cumulative impact to less than significant.

B. Mitigation Scenario 2- Intersection Improvements Indeterminate and Not Foreseeable

This mitigation scenario is presented in view of the current indeterminate nature of the PSR and funding source for the improvements. Under this scenario, it is assumed the PSR process and allocation of funding is not reasonably foreseeable. In that case, there is no identifiable feasible mitigation for the project's contribution to a cumulatively significant impact. As a result, under this scenario the cumulative traffic impact would be significant and unavoidable.

C. Mitigation Scenario 3- Elimination of Project Access from High Meadow Road

This mitigation scenario is presented because it would avoid project impacts on the High Meadow Road / Highway 246 intersection. In this scenario the project would construct a bridge over Alamo Pintado Creek from Alamo Pintado Road to access the Proposed Project and emergency only ingress / egress provided from the project to High Meadow Road via an easement. Alternatively, the scenario could further be developed to extend the project access road as a street to link to High Meadow Road. The segment of High Meadow Road linking to Highway 246 could be closed. All High Meadow Road traffic would flow to Alamo Pintado Road via the bridge to the controlled intersection at Highway 246.

This mitigation scenario is described in more detail in Section V of the EIR as an Alternative Project, where issues of feasibility related to the floodway are discussed. Under this scenario, if determined to be feasible, the cumulative impact would be less than significant and the project would have a beneficial effect of eliminating a problem intersection.

Mitigation of Construction Related Traffic Impact

Mitigation Measure D3: To reduce less than significant impacts to the existing road system associated with construction traffic, project heavy truck traffic involved in the fill import process shall be limited to the hours of 8:30 AM to 2 PM.

Mitigation Implementation / Monitoring

- 1) Performance Standard: The final grading plan shall include notes limiting construction traffic times.
- 2) Contingency Measure; The City may approve alternative times such as times before the AM peak hour and after the high school PM traffic but before the PM peak hour.
- 3) Implementation Responsibility: City Building Official.
- 4) Implementation Schedule: At final plan permit issuance and during construction.
- 5) Monitoring Method: City shall monitor during construction as part of the grading permit inspection phase.

Impact Significance After Implementation of Mitigation Measure: By avoiding the AM and M peak hours the temporary, and less than significant, effects of construction traffic can be substantially avoided.

E. AIR QUALITY

1. Environmental Issue

Maximum air pollutant concentrations in Santa Barbara County continue to exceed State standards that are based upon the health effects of these pollutants. Plans to attain these standards already accommodate the future growth projections available at the time these plans were prepared. However, an individual project that would substantially contribute to area-wide population growth exceeding these projections -- or to an area-wide growth in total miles traveled by motor vehicles that exceeds the rate of population growth -- could be considered inconsistent with the relevant air quality plan. Furthermore, any development project capable of generating air pollutant emissions exceeding regionally-established criteria is considered significant for purposes of CEQA analysis, whether or not such emissions have been accounted for in this plan. For this EIR, the focus is specifically on impacts related to the project's construction-phase activities.

2. Environmental Setting

Ambient air quality is commonly determined by climate conditions, the area's topography, and the quantity and type of pollutants released.

a. Climate and Topography

The following discussion is drawn directly from relevant Santa Barbara County Air Pollution Control District documentation.¹

Santa Barbara County's air quality is influenced by both local topography and meteorological conditions. Surface and upper-level wind flow varies both seasonally and geographically in the County and inversion conditions common to the area can affect the vertical mixing and dispersion of pollutants. The prevailing wind flow patterns in the County are not necessarily those that cause high ozone values. In fact, high ozone values are often associated with atypical wind flow patterns. Meteorological and topographical influences that are important to air quality in Santa Barbara County are as follows:

- Semi-permanent high pressure that lies off the Pacific Coast leads to limited rainfall (around 18 inches per year), with warm, dry summers and relatively damp winters. Maximum summer temperatures average about 70 degrees Fahrenheit near the coast and in the high 80s to 90s inland. During winter, average minimum temperatures range from the 40s along the coast to the 30s inland. Additionally, cool, humid, marine air causes frequent fog and low clouds along the coast, generally during the night and morning hours in the late spring and early summer. The fog and low clouds can persist for several days until broken up by a change in the weather pattern.
- In the northern portion of the County (north of the ridgeline of the Santa Ynez Mountains), the sea breeze (from sea to land) is typically northwesterly throughout the year while the prevailing sea breeze in the southern portion of the County is from the southwest. The proposed project site, just north of those mountains, experiences conditions closer to those typical for the northern County. During summer, winds characteristic of each portion of the County are stronger and persist later into the night. At night, the sea breeze weakens and is replaced by light land breezes (from land to sea). The alternation of the land-sea breeze cycle can sometimes produce a "sloshing" effect, where pollutants are swept offshore at

night and subsequently carried back onshore during the day. This effect is exacerbated during periods when wind speeds are low.

- The terrain around Point Conception, combined with the change in orientation of the coastline from north-south to east-west can cause counterclockwise circulation (eddies) to form east of the Point. These eddies fluctuate temporally and spatially, often leading to highly variable winds along the southern coastal strip. Point Conception also marks the change in the prevailing surface winds from northwesterly to southwesterly.
- Santa Ana winds are northeasterly winds that occur primarily during fall and winter, but occasionally in spring. These are warm, dry winds blown from the high inland desert that descend down the slopes of a mountain range. Wind speeds associated with Santa Ana's are generally 15-20 mph, though they can sometimes reach speeds in excess of 60 mph. During Santa Ana conditions, pollutants emitted in Santa Barbara, Ventura County, and the South Coast Air Basin (the Los Angeles region) are moved out to sea. These pollutants can then be moved back onshore into Santa Barbara County in what is called a "post-Santa Ana condition." The effects of the post-Santa Ana condition can be experienced throughout the County. Not all post-Santa Ana conditions, however, lead to high pollutant concentrations in Santa Barbara County.
- Upper-level winds (measured at Vandenberg Air Force Base once each morning and afternoon) are generally from the north or northwest throughout the year, but occurrences of southerly and easterly winds do occur in winter, especially during the morning. Upper-level winds from the south and east are infrequent during the summer. When they do occur, they are usually associated with periods of high ozone levels. Surface and upper-level winds can move pollutants that originate in other areas into the County.
- Surface temperature inversions (0-500 ft) are most frequent during the winter, and subsidence inversions (1000-2000 ft) are most frequent during the summer. Inversions are an increase in temperature with height and are directly related to the stability of the atmosphere. Inversions act as a cap to the pollutants that are emitted below or within them and ozone concentrations are often higher directly below the base of elevated inversions than they are at the earth's surface. For this reason, elevated monitoring sites will occasionally record higher ozone concentrations than sites at lower elevations. Generally, the lower the inversion base height and the greater the rate of temperature increase from the base to the top, the more pronounced effect the inversion will have on inhibiting vertical dispersion. The subsidence inversion is very common during summer along the California coast, and is one of the principal causes of air stagnation.
- Poor air quality is usually associated with "air stagnation" (high stability/restricted air movement). Therefore, it is reasonable to expect a higher frequency of pollution events in the southern portion of the County where light winds are frequently observed, as opposed to the northern part of the County where the prevailing winds are usually strong and persistent.

b. Air Pollutants of Primary Concern

1) Criteria Air Pollutants

(a) Ozone

Ozone is a colorless gas with a pungent odor. Ozone causes eye irritation and respiratory function impairment. Most ozone in the atmosphere is formed as a result of the interaction of ultraviolet light, reactive organic gases (ROG), and oxides of nitrogen (NO_x). ROG is composed of nonmethane hydrocarbons, and NO_x is made of different chemical combinations of nitrogen and oxygen, mainly NO and NO_2 . A highly reactive molecule, ozone readily combines with many different components of the atmosphere. Consequently, high levels of ozone tend to exist only while high ROG and NO_x levels are present to sustain the ozone formation process. Once the precursors have been depleted, ozone levels rapidly decline. Because these reactions occur on a regional scale, ozone is considered a regional pollutant.

(b) CO

Carbon monoxide (CO) is an odorless, colorless, gas. CO causes a number of health problems including fatigue, headache, confusion, and dizziness (see Table E-1). The incomplete combustion of petroleum fuels in on-road vehicles is a major cause of CO. CO is also produced during the winter from wood stoves and fireplaces. CO tends to dissipate rapidly into the atmosphere; consequently, violations of the State CO standard are generally limited to major intersections during peak hour traffic conditions.

(c) Suspended Particulate Matter

Suspended particulate matter (airborne dust) consists of particles small enough to remain suspended in the air for long periods. Fine particulate matter includes particles small enough to be inhaled, pass through the respiratory system, and lodge in the lungs, with resultant health effects. Particulates can include materials such as sulfates and nitrates which are particularly damaging to the lungs. Health effects studies resulted in revision of the Total Suspended Particulate (TSP) standard in 1987 to focus on particulates that are small enough to be considered "inhalable", i.e., 10 microns or less in size (PM_{10}). In July of 1997 a further revision of the federal standard added criteria for $\text{PM}_{2.5}$, reflecting recent studies that suggested that particulates less than 2.5 microns in diameter are of particular concern. (The status of implementation of this standard is discussed under the Regulatory Context heading, below.)

c. Regulatory Context

1) Federal

The Federal Clean Air Act (CAA) of 1970, as amended, establishes air quality standards for several pollutants. These pollutants are termed "criteria" pollutants because the United States Environmental Protection Agency (U.S. EPA) has established specific concentration threshold criteria for them based upon specific medical evidence of health effects. These national ambient air quality standards (NAAQS) are divided into primary standards and

secondary standards. Primary standards are designed to protect the public health, and secondary standards are intended to protect the public welfare from effects such as visibility reduction, soiling, nuisance, and other forms of damage. Federal primary standards for the pollutants of greatest concern in the South Central Coast Air Basin (SCCAB) are presented in Table F-1. Regions of the country are classified with respect to their attainment – or the extent of their “nonattainment” – of these standards.

(a) Ozone

NAAQS's for ozone are based upon one- and eight-hour average concentrations. With respect to the former NAAQS, the County was redesignated to attainment status effective August 2003. U.S. EPA issued initial formal attainment status designations for the latter NAAQS in April 2004. The County was not among the air quality planning areas designated as non-attainment with respect to that NAAQS. The U.S. EPA anticipates revoking the one-hour ozone NAAQS this summer².

(b) CO

Carbon monoxide (CO) is an odorless, colorless, gas. CO causes a number of health problems including fatigue, headache, confusion, and dizziness (see Table 1). The incomplete combustion of petroleum fuels in on-road vehicles is a major cause of CO. CO is also produced during the winter from wood stoves and fireplaces. CO tends to dissipate rapidly into the atmosphere; consequently, violations of the State CO standard are generally limited to major intersections during peak hour traffic conditions.

(c) Suspended Particulate Matter

Suspended particulate matter (airborne dust) consists of particles small enough to remain suspended in the air for long periods. Fine particulate matter includes particles small enough to be inhaled, pass through the respiratory system, and lodge in the lungs, with resultant health effects. Particulates can include materials such as sulfates and nitrates which are particularly damaging to the lungs. Health effects studies resulted in revision of the Total Suspended Particulate (TSP) standard in 1987 to focus on particulates that are small enough to be considered “inhalable”, i.e., 10 microns or less in size (PM₁₀). In July of 1997 a further revision of the federal standard added criteria for PM_{2.5}, reflecting recent studies that suggested that particulates less than 2.5 microns in diameter are of particular concern.

2) State

The State of California has established its own set of ambient air quality standards (CAAQS) that are generally more stringent than the corresponding NAAQS. The California Clean Air Act (CCAA), which became effective on January 1, 1989, provides a planning framework for attaining the CAAQS. Non-attainment areas in the State were required to prepare plans for attaining these standards. The CCAA provided for the classification of regions within the State into three classes depending upon the findings of the attainment plans: moderate, if CAAQS attainment could not be demonstrated before December 31, 1994; serious, if CAAQS attainment could not be demonstrated before December 31, 1997; and severe, if CAAQS attainment could not be demonstrated at all. For each class, the CCAA specifies

Construction of the project would include the import of 20,000 cubic yards of fill, as well as the erection of a residence on each of eight new parcels, creation of a new paved local road to access those residences, and other related activities.

Mobile and stationary construction equipment would be required to perform these activities.

At one time or another during construction, mobile equipment in use on-site might include one or more graders, dozers, backhoes and/or paving equipment. Stationary equipment could include one or more portable generators (at least until electrical power is extended to the site).

Table E5 summarizes estimates of criteria air pollutant emissions that would be generated by activities related to project construction.

Impact E1 - Criteria Air Pollutant Emissions: Criteria Air pollutant emissions would remain well below the APCD-derived significance thresholds applied in this analysis, resulting in a less than significant impact.

d. Cumulative Impacts to Which Construction-Phase Activities Would Contribute

Generation of or Substantial Contribution to a Violation of a NAAQS or CAAQS for a Pollutant Other than Ozone

As discussed above, the County is in attainment for the CO NAAQS and CAAQS, and monitoring within APCD boundaries in recent years has consistently shown worst-case annual CO concentrations well below the thresholds for exceedance. The County is designated as attainment for the PM₁₀ NAAQS, non-attainment for the PM₁₀ CAAQS and as unclassified for the PM_{2.5} NAAQS and CAAQS.

As discussed above, the primary CO-related concern during the project's construction phase would be the potential for haul trucks to approach the site from the east, requiring them to turn left across westbound Highway 246 traffic to enter High Meadow Road and approach the project. Table E6 summarizes ambient CO concentration modeling results at the nearest observed existing receiver location (a commercial structure west of the intersection) and at a hypothetical worst-case curbside location (the intersection does have the sort of pedestrian improvements and adjacent land use that would tend to position sensitive receivers at these curbside locations.) As shown in Table E5, predicted CO concentrations with project-related construction traffic are well below applicable AAQS.

Impact E2-Construction Phase PM concentrations: The proposed project has potential to generate substantial localized increases in PM concentrations during construction. The existing adjacent residence most likely to be exposed to such impacts is east of proposed Parcel 1. Without proper controls on fugitive dust emissions during site preparation activities, PM₁₀ and/or PM_{2.5} concentrations at that location could temporarily exceed applicable AAQS a potentially significant impact.

4. Mitigation Measures

Criteria Air Pollutant Emissions Related to Project Construction

No mitigation is required for Impact E1, although, consistent with APCD policy, the fugitive dust controls presented under Mitigation Measure E2 should be incorporated.

Generation of or Substantial Contribution to a Violation of a NAAQS or CAAQS for a Pollutant Other than Ozone

Mitigation Measure E2- To mitigate potentially significant short-term construction impacts related to PM concentrations, project construction measures shall control fugitive-dust-generated PM impacts at the nearest off-site receivers as follows:

- During construction, use water trucks or sprinkler systems to keep all areas of vehicle movement damp enough to prevent dust from leaving the site. At a minimum, this should include wetting down areas of exposed (un-vegetated) soil in the late morning and after work is completed for the day. Increased watering frequency should be required whenever the wind speed exceeds 15 mph. Reclaimed water should be used whenever possible.
- Minimize the amount of disturbed area (e.g., associated with underground placement of utility lines) and reduce on site vehicle speeds to 15 miles per hour or less.
- Install gravel pads at all vehicular access points to prevent tracking of mud on to public roads.
- Soil stockpiled for more than two days shall be covered, kept moist, or treated with soil binders to prevent dust generation. Trucks transporting fill material to and from the site shall be tarped from the point of origin.
- All unloading and stockpiling of fill materials shall be performed in the southeastern portion of the project, as far from the nearest existing off-site homes as possible, except where to do so would necessitate substantial additional disturbance/movement of such materials beyond that which would be required if the activity were to be performed elsewhere.
- Avoid dust-generating site preparation activities on Parcels 1 through 3 when local winds exceed 15 miles per hour oriented in a direction generally towards the adjacent off-site home (i.e., generally from the south-southwest).
- After clearing and earth moving is completed, treat the disturbed area by watering, or revegetating, or by spreading soil binders until the area is paved or otherwise developed so that dust generation will not occur.
- The contractor or builder shall designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust offsite. Their duties shall include holiday and weekend periods when work may not be in progress. The name and telephone number of such persons shall be provided to the APCD prior to initiation of construction activities.

Mitigation Implementation / Monitoring

- 1) Performance Standard: Prior to land use clearance, the applicant shall include these dust control requirements in project construction plans.
- 2) Contingency Measure: To be determined in the field.
- 3) Implementation Responsibility: City Building / Public Works Inspector,
- 4) Implementation Schedule: Throughout construction operations.

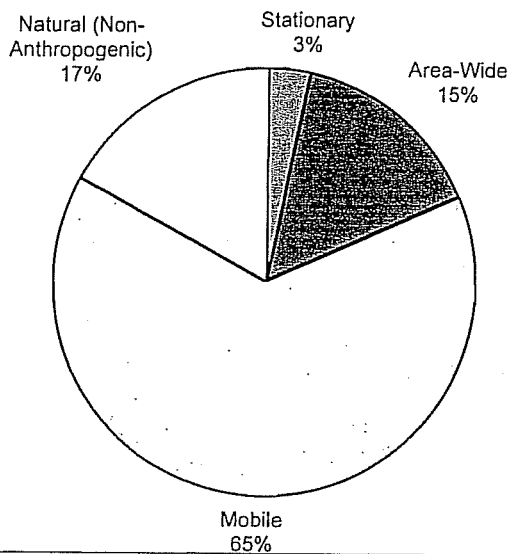
Impact Significance after Implementation of the Measure: This measure would mitigate the impact to a less-than-significant level.

TABLE E1 – SELECTED CRITERIA POLLUTANTS: AMBIENT AIR QUALITY STANDARDS AND HEALTH EFFECTS

Air Pollutant	Averaging Time	Standards (Concentration, Averaging Time)		Potential Health Effects
		California	Federal	
Ozone (O ₃)	1 Hour	0.09 ppm	NA	<ul style="list-style-type: none"> • Eye irritation • Respiratory function impairment
	8 Hour	0.07 ppm	0.08 ppm	
Respirable Particulate Matter (PM ₁₀)	24 Hour	50 g/m ³	150 g/m ³	<ul style="list-style-type: none"> • Increased risk of chronic respiratory disease with long exposure • Altered lung function in children • With SO₂, may produce acute illness • Particulate matter 10 microns or less in size (PM₁₀) may lodge in and/or irritate the lungs. In the last several years, the fraction of particulate matter 2.5 microns or less in diameter (PM_{2.5}) has attracted particular concern in this regard.
	Annual Arithmetic Mean	20 g/m ³	50 g/m ³	
Fine Particulate Matter (PM _{2.5})	24 Hour	N/A	65 g/m ³	
	Annual Arithmetic Mean	12 g/m ³	15 g/m ³	
Carbon Monoxide (CO)	1 Hour	20 ppm	35 ppm	<ul style="list-style-type: none"> • Impairment of oxygen transport in the blood stream, increase of carboxyhemoglobin • Aggravation of cardiovascular disease • Impairment of central nervous system function • Fatigue, headache, confusion, dizziness • Can be fatal in the case of very high concentrations in enclosed places
	8 Hour	9.0 ppm	9 ppm	

SOURCES: CARB, 2005; U.S. EPA, 1996-97; Bay Area Air Quality Management District, 1993

CO



PM10

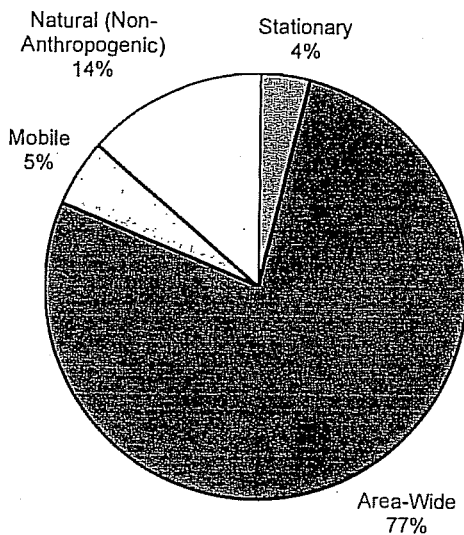


Figure E2- SCCAB Emissions by Source Category- CO and PM 10

TABLE E-2 – 2004 ESTIMATED ANNUAL AVERAGE EMISSIONS FOR SANTA BARBARA COUNTY AND THE SOUTH CENTRAL COAST AIR BASIN

Source Category	Emissions (tons/day)									
	ROG		NO _x		CO		PM ₁₀		PM _{2.5}	
	Co.	AB	Co.	AB	Co.	AB	Co.	AB	Co.	AB
Fuel Combustion	4.10	6.1	10.26	17.6	8.24	21.1	0.55	1.3	0.52	1.3
Waste Disposal	0.75	0.9	0.02	0.1	0.04	0.3	0.01	0.0	0.01	0.0
Cleaning and Surface Coatings	5.15	15.9	--	--	--	--	--	0.0	--	0.0
Petroleum Production and Marketing	5.44	8.9	0.13	0.4	0.60	0.6	0.03	0.3	0.03	0.1
Industrial Processes	0.21	0.8	0.06	0.2	0.48	1.3	0.87	1.7	0.35	0.8
Total Stationary Sources	15.65	32.7	10.46	18.3	9.36	23.3	1.47	3.4	0.91	2.3
Solvent Evaporation	6.84	21.9	--	--	--	--	--	--	--	--
Miscellaneous Processes	4.49	12.4	2.01	4.7	31.21	104.3	19.41	69.1	7.97	25.6
Total Area-Wide Sources	11.33	34.4	2.01	4.7	31.21	104.3	19.41	69.1	7.97	25.6
On-Road Vehicles	11.80	35.5	19.23	55.3	117.86	326.6	0.58	1.7	0.40	1.1
Other Mobile	5.67	18.2	47.26	34.3	35.39	127.2	3.65	2.7	3.35	2.4
Total Mobile Sources	17.47	53.7	66.49	89.6	153.25	453.8	4.23	4.4	3.75	3.5
Subtotal w/o Natural Sources	44.45	120.7	78.96	112.5	193.82	581.4	25.11	76.9	12.62	31.4
<i>Natural Sources</i>	<i>60.49</i>	<i>123.4</i>	<i>0.37</i>	<i>3.7</i>	<i>12.07</i>	<i>119.7</i>	<i>1.22</i>	<i>12.1</i>	<i>1.04</i>	<i>10.3</i>

¹ County

² Air Basin

SOURCE: CARB (Almanac Emission Projection Data), 2005

TABLE E-3 - SUMMARY OF AIR POLLUTANT DATA^a COMPARED TO AMBIENT AIR QUALITY STANDARDS, 2002-2004

POLLUTANT	2004				2003				2002						
	SYnz	LmpH	SM-SB	SBC	SCCAB	SYnz	LmpH	SM-SB	SBC	SCCAB	SYnz	LmpH	SM-SB	SBC	SCCAB
OZONE															
Highest 1-hour	.090	.084	.074	NA	.122	.099	.071	.065	.107	.130	.085	.080	.065	.113	.132
Days>0.12 ppm (Fed)	0	0	0	NA	0	0	0	0	0	2	0	0	0	0	1
Days>0.09 ppm (Cal)	0	0	0	NA	23	1	0	0	7	45	0	0	0	3	24
Highest 8-hour	.083	.075	.064	NA	.102	.080	.060	.060	.102	.114	.072	.071	.059	.090	.109
Days>0.08 ppm (Fed)	0	0	0	NA	18	0	0	0	4	35	0	0	0	5	16
CO															
Highest 8-hour (Fed)	NM	1.26	.95	NA	2.62	NM	1.71	1.13	2.3	3.65	NM	1.83	1.24	1.8	2.41
Days>=9.5 ppm (Fed)	NM	0	0	NA	0	NM	0	0	0	0	NM	0	0	0	0
Days>=9.1 ppm (Cal)	NM	0	0	NA	0	NM	0	0	0	0	NM	0	0	0	0
PM₁₀															
<i>Daily Average</i>															
Highest Value (Fed) ^b	NM	50.4	52.0	NA	146	NM	56.1	58.0	98	149	NM	43.4	48.0	50	178
Days>150 ug/m ³ (Fed) ^c	NM	0	0	NA	0	NM	0	0	0	0	NM	0	0	0	1
Highest Value (Cal) ^c	NM	52.3	52.0	NA	999 ^b	NM	57.1	58.0	96	169	NM	45.1	49.0	49	100
Days>50 ug/m ³ (Cal) ^c	NM	1	1	NA	2	NM	1	1	6	6	NM	0	0	0	3
<i>Annual Average</i>															
Fed	NM	20	24.1	NA	31.4	NM	21	24.4	24.4	30.7	NM	21	23.5	23.5	28.9
>50 ug/m ³ ? (Fed)	NM	No	No	NA	No	NM	No	No	No	No	NM	No	No	No	No
Cal	NM	21	24.7	NA	28.7	NM	21	25.2	25.2	30.0	NM	21	24.3	24.3	28.6
>20 ug/m ³ ? (Cal)	NM	Yes	Yes	NA	Yes	NM	Yes	Yes	Yes	Yes	NM	Yes	Yes	Yes	Yes
PM_{2.5}															
<i>Daily Average</i>															
Highest Value (Fed) ^b	NM	NM	16.6	NA	NA	NM	NM	20.5	24.0	149	NM	NM	21.3	21.3	46.4
Days>65 ug/m ³ (Fed)	NM	NM	0	NA	NA	NM	NM	0	0	1+	NM	NM	0	0	0
<i>Annual Average</i>															
Fed	NM	NM	7.6	7.6	NA	NM	NM	8.6	8.6	30.7	NM	NM	9.6	9.6	14.6
>15 ug/m ³ ? (Fed)	NM	NM	No	No	NA	NM	NM	No	No	Yes	NM	NM	No	No	No
Cal	NM	NM	7.5	7.5	NA	NM	NM	8.6	8.6	30.0	NM	NM	9.5	9.5	15.2
>12 ug/m ³ ? (Cal)	NM	NM	No	No	NA	NM	NM	No	No	Yes	NM	NM	NA	NA	Yes

LEGEND: SYnz = Santa Ynez-Airport Road, Lmpch = Lompoc -- S H St., SM-SB = Santa Maria-906 S Broadway, SBC = Santa Barbara County
 SCCAB = South Central Coast Air Basin ; NA = Not (readily) Available, NM = Not Measured

^a Due to the heterogeneity of data sources used to develop this table, the data are not perfectly consistent, but are sufficiently so for illustrative purposes.

^b This value was measured at the Simi Valley monitoring station in Ventura County. Assuming this value does not represent a typographic error or invalid measurement, it most likely represents an extreme PM event most likely exacerbated by agricultural burning (an ongoing issue in Ventura County), or perhaps a localized increase in fugitive dust emissions associated with Santa Ana wind conditions.

SOURCES: CARB (Aerometric Data Analysis and Management System, ADAM; California Almanac of Emissions and Air Quality); SBCAPCD -- 2005

**TABLE E-4 – ESTIMATED EMISSIONS OF KEY CRITERIA AIR POLLUTANTS
RESULTING FROM PROJECT OPERATIONS**

Source Category	Reference Condition	Emissions (lb/dy)		
		ROG	NO _x	PM ₁₀
Mobile	Weekday	2	2	2
	Weekend	8	11	10
	Annual Average Day	4	5	4
	Threshold	25	25	N/A
	Exceeded?	No	No	
Area ^a	Annual Average Day	0	0	0
Both	Annual Average Day	4	5	4
	Threshold	240	240	80
	Exceeded?	No	No	No

^a For the land use category most relevant to this project, URBEMIS2002 does not account for emissions related to field/landscape maintenance. For this analysis, MSW reviewed relevant CARB-promulgated off-road vehicle emissions standards and applied corresponding emissions factors and reasonable activity assumptions to estimate corresponding emissions for an annual average day. At the level of precision used for this table, those emissions are too low to register.

SOURCE: MSW Consulting, 2005; APCD, 2004

**TABLE E-5 – ESTIMATED EMISSIONS OF KEY CRITERIA AIR POLLUTANTS
RESULTING FROM PROJECT-RELATED OPERATION**

	tons/year		
	ROG	NO _x	PM ₁₀
Emissions	0.1	0.8	0.6
Threshold	25		
Exceeded?	No		

SOURCE: MSW Consulting, 2005; APCD, 2004

¹ Santa Barbara County Air Pollution Control District (APCD), 2004 Clean Air Plan (CAP), December 2004, Section 2.2.

² Tan, Ron, APCD, pers. comm., April 25, 2005.

³ South Coast Air Quality Management District (SCAQMD), Rimpo and Associates, Jones & Stokes; URBEMIS (Emissions Estimation for Land Use Development Projects) 2002 Version 8.7, 2005.

⁴ Orosz Engineering Group (OEG), *Traffic Impact Analysis – Old Mill Road Residential Project: Solvang, CA* (December 2005)

⁵ APCD, Scope and Content of Air Quality Sections in Environmental Documents, Updated July 2005

⁶ California Air Resources Board (CARB), *Emfac2002 v2.2*, April 2003.

F. BIOLOGICAL RESOURCES

1. Environmental Issue

The proposed project site currently supports active annually cultivated cropland habitat bordered by the mature dense riparian habitat along Alamo Pintado Creek. The project site is surrounded by commercial and residential development within the City of Solvang and County of Santa Barbara. The State CEQA Statute states that a project may be deemed to have a significant impact on the environment if it will have a substantial or potentially adverse change in the environment. The CEQA Guidelines further state that a significant effect on the environment could result from the substantial reduction in the habitat of a fish or wildlife species, reduction of a fish or wildlife population below self-sustaining levels, eliminate a plant or animal community, or substantially reduce the number or restrict the range of an endangered, rare or threatened species. The City of Solvang General Plan Conservation and Open Space Policy CO-4(A) requires all development proposals to provide mitigation for substantial effects on biological resources.

This section of the EIR will establish the existing conditions of biological resources on the project site, and evaluate the potential for significant impacts on biological resources that could result from project implementation including the project contribution to cumulative impacts. The existing conditions and analysis of potential project impacts on biological resources are based on the review available background information including an aerial photograph and the search and review of the California Natural Diversity Data Base (CNDDDB) within an approximately ten-mile radius of the City of Solvang. The CNDDDB provided a list and mapped locations of special-status plant and wildlife species that have been recorded in the vicinity of the proposed project site to focus the field survey effort on specific species issues. David Wolff, David Wolff Environmental Principal Ecologist, conducted a general field reconnaissance of the project site on November 9, 2005 to document the existing conditions in terms of habitat for plants and wildlife species, the potential to support habitat for special-status plant or wildlife species, and wetland and/or riparian habitats.

2. Environmental Setting

Physical Setting

The proposed project site is composed of active annually cultivated cropland and riparian habitats. The majority of the site is cropland habitat and was recently disced at the time of the November 9, 2005 biological resources field reconnaissance was conducted. As such no discernable vegetation was present within the cropland habitat. A single English walnut tree is located in the middle of the field. Given the regular disturbance from cultivation, cropland habitat supports low values for native plant and wildlife species. No wildlife species were observed in the cropland habitat during field reconnaissance of the site.

Alamo Pintado Creek runs along the western border of the proposed project and supports a tall overstory of riparian trees and a dense understory of riparian shrubs and vines. Tree species observed in the Alamo Pintado Creek riparian habitat include willows, sycamore, cottonwood, and California walnut. Scattered non-native tree of heaven trees occur in the riparian habitat and a stand of large eucalyptus trees border the riparian habitat in front of the

residence on the southwest corner of the site. The dense understory was composed of blackberry and grape vines, short-pod mustard, jimson weed, poison hemlock, and annual grasses. No other wetlands or riparian areas were observed within the proposed project site.

The riparian habitat was observed supporting numerous bird species common to riparian and woodland habitats in the region. Bird species observed in the riparian habitat included the scrub jay, northern mockingbird, house finch, song sparrow, house wren, chestnut-backed chickadee, plain titmouse, bushtit, spotted towhee, Nuttall's woodpecker, acorn woodpecker, northern flicker, ruby-crowned kinglet, and Audubon's warbler. European starlings were observed in the windrow of eucalyptus trees bordering the southeast corner of the site. While commonly observed in riparian areas, none of these species are exclusive users of riparian habitat. Upwards of six feral kittens were observed along the riparian habitat edge along the cropland habitat suggesting a breeding population of feral cats in and around the project site.

The offsite road access to the proposed project site supports ruderal landscape vegetation around existing residential development. The ruderal habitat includes a ground cover of Bermuda grass with an array of olive, pepper, elm, and pine trees with a row of landscape planted oaks along the existing road/driveway to the development to the east.

Special-Status Species

The search and review of the CNDDDB revealed the recorded occurrence of 15 plant species and 12 wildlife species considered as special-status species within an approximately ten-mile radius around the City of Solvang. None of these recorded occurrences are within the City of Solvang. Special-status species are those species either formally listed under the federal and/or state Endangered Species Acts or considered by the California Department of Fish and Game (CDFG) as a species of concern worthy of consideration and analysis under CEQA review for projects that could result in impacts on these species. The California Native Plant Society (CNPS) provides a listing system of native plants for consideration under CEQA review that it considers rare, threatened or endangered throughout all or a portion of the plant species range. The CNDDDB search also revealed five natural communities of special concern within an approximately ten-mile radius of Solvang. These natural communities typically support special-status species or are becoming limited in their state-wide distribution and should be considered under CEQA review. **Table F-1** provides a list of the special-status species and natural communities of special concern with recorded occurrences in the CNDDDB along with listing status and general habitat requirements.

The 15 plant species with CNDDDB recorded occurrences within the ten-mile radius of Solvang typically require specific soil or moisture regimes for occurrence. In general, the cropland habitat supports a low potential for any native plant species given the regular planting of crops and annual tillage over time. Shaly/gravelly surface soils were observed during field reconnaissance but as stated above no vegetation was present following discing of the previous year's crop. With the exception of the black-flowered figwort and mesa horkelia, the special-status plant species with recorded occurrences in the CNDDDB as shown in **Table F-1** have specific soil requirements not found on the proposed project site such as sandy, clay, alkaline, or wetland soils. Given the regular tillage of the site over time, it is unlikely that the black-flowered figwort or mesa horkelia would be found on the site.

Table F-1
 California Natural Diversity Data Base
 Special-Status Species Recorded in the Solvang Region (10-Mile Radius)

Species	Status Fed/State/CNPS ¹	General Habitat Requirements
Plants		
<i>Agrostis hooveri</i> Hoover's bent grass	--/--/1B	Sandy soils in woodland, chaparral, and grassland habitats
<i>Arctostaphylos refugioensis</i> Refugio manzanita	--/--/1B	Sandstone in chaparral habitat
<i>Astragalus didymocarpus</i> var. <i>milesianus</i> Miles's milk-vetch	--/--/1B	Clay soils in coastal scrub habitat
<i>Atriplex serenana</i> var. <i>davidsonii</i> Davidson's saltscale	--/--/1B	Alkaline soils in coastal bluff/scrub habitat
<i>Calochortus weedii</i> var. <i>vestus</i> late-flowered mariposa lily	--/--/1B	Serpentine soils in woodland and chaparral habitats
<i>Cordylanthus rigidus</i> ssp. <i>littoralis</i> seaside bird's-beak	--/E/1b	Sandy soils in coastal scrub, chaparral, and dune habitats
<i>Deinandra increscens</i> ssp. <i>villosa</i> Gaviota tarplant	E/E/1B	Sandy areas on coastal terrace in ecotone between scrub and grassland
<i>Delphinium umbraculorum</i> umbrella larkspur	--/--/1B	Shale soils on sunny and shaded slopes in coastal scrub habitat.
<i>Horkelia cuneata</i> ssp. <i>puberula</i> mesa horkelia	--/--/1B	Sandy or gravelly soils in woodland, chaparral and coastal scrub habitats
<i>Scrophularia atrata</i> black-flowered figwort	--/--/1B	Sandy shale soils in riparian, woodland, coastal scrub and coastal dune habitats
<i>Senecio aphanactis</i> rayless ragwort	--/--/2	Drying alkaline flats in woodland and coastal scrub habitats
<i>Thelypteris puberula</i> var. <i>sonorensis</i> Sonoran maiden fern	--/--/2	Seeps, springs, meadows, and along creeks
<i>Thermopsis macrophylla</i> Santa Ynez false lupine	--/R/1B	Sandstone open areas after burns in chaparral habitat
Wildlife		
<i>Accipiter cooperii</i> Cooper's hawk	--/--/SC	Nests in riparian and oak woodlands. Transient winter migrant.
<i>Agelaius tricolor</i> tricolored blackbird	--/--	Nests in cattail/tule marshes. Locally nomadic winter migrant.
<i>Aimophila ruficeps canescens</i> southern CA rufous-crowned sparrow	--/SC	Resident of coastal scrub and chaparral habitats on steep rocky hillsides
<i>Anniella pulchra pulchra</i> silvery legless lizard	--/SC	Coastal scrub and chaparral habitats with sandy soils.
<i>Danaus plexippus</i> monarch butterfly	--/SC	Winter roosts in wind protected eucalyptus and other groves of trees.

<i>Empidonax traillii extimus</i> southwestern willow flycatcher	E/E	Breeding season migrant nests in wide expanses of riparian jungle habitat.
<i>Eucyclogobius newberryi</i> tidewater goby	E/SC	Coastal estuaries and lagoons.
<i>Neotoma lepida intermedia</i> San Diego desert woodrat	--/SC	Rocky areas in coastal scrub habitat
<i>Oncorhynchus mykiss irideus</i> southern California ESU	T/SC	Coastal streams without fish passage barriers to the ocean.
<i>Rana aurora draytonii</i> California red-legged frog	T/SC	Permanent water in ponds and creeks.
<i>Taxidea taxus</i> American badger	--/SC	Annual grassland habitat with friable soils and small mammal prey base.
<i>Thamnophis hammondi</i> two-striped garter snake	--/SC	Highly aquatic found near ponds, creeks, and wetlands.
Natural Communities of Special Concern		
Southern California Steelhead Stream		
Southern Coast Live Oak Riparian Forest		
Southern Cottonwood Willow Riparian Forest		
Southern Vernal Pool		
Valley Needlegrass Grassland		
¹ Listing Status Federal: E=Endangered; T= Threatened State: E=Endangered; R= Rare (plants); SC=Species of Special Concern CNPS – California Native Plant Society: 1B= Plants rare, threatened or endangered throughout their range; 2= Plants rare, threatened or endangered in California but more common elsewhere. Source: California Natural Diversity Data Base, September 30, 2005, Solvang 10-mile radius		

The majority of the 15 wildlife species with CNDDDB recorded occurrences within a ten-mile radius of Solvang as shown in Table F-1 have specific habitat requirements that are not found on the project site. The site does not support suitable habitat for the wetland coastal scrub, or grassland species such as the tricolored blackbird, rufous-crowned sparrow, silvery legless lizard, San Diego desert woodrat, or American badger. The tidewater goby is strictly a coastal lagoon species and would not be found this far inland. The Alamo Pintado riparian habitat could provide suitable habitat for the wide-ranging Cooper's hawk, wintering monarch butterflies, and two striped garter snake but their use of the site would be restricted to the riparian corridor. The southwest willow flycatcher is known from wide expanses of dense and multi-layered riparian jungle along the Santa Ynez River with nest sites typically associated with areas of perennial water. The riparian habitat along Alamo Pintado Creek is a narrow band and does not support the expanse of riparian jungle where this species is typically found. The southern California steelhead ecologically significant unit (ESU) is known from coastal streams along the Gaviota coast and Santa Ynez River. Alamo Pintado Creek is not recorded as a steelhead stream by the CNDDDB. The California red-legged frog requires permanent water and can persist in areas with temporary aquatic habitat with available moist riparian areas for dry season refuge. There are no recorded occurrences in the CNDDDB for the Solvang area for the California red-legged frog.

The southern cottonwood willow riparian forest natural community of special concern could be represented by the reach of riparian habitat along Alamo Pintado Creek running through the proposed project site. However, the CNDDDB does not have this reach of habitat identified or any of the other natural communities of special concern listed in the CNDDDB as occurring on the project site.

3. Environmental Impacts

Impact Significance Criteria

Appendix G of the CEQA guidelines provides the basis for determining if the project would have a substantial adverse effect on biological resources. For the purposes of this analysis, a significant impact from project could result from the following:

- Substantial adverse direct or indirect effect on any special-status species including habitat modification.
- Substantial adverse effect on any riparian habitat or other natural communities of special concern.
- Substantial effect on any federally protected wetlands or other waters of the U.S.
- Substantial adverse effect or interference with the movement of any native resident or migratory fish or wildlife species or wildlife nursery areas.
- Conflict with any local policies protecting biological resources or adopted Habitat Conservation Plans or Natural Community Conservation Plans.

In addition, the City Planning Commission has established the precedent of requiring a 20 foot minimum setback from riparian vegetation along Alamo Pintado Creek on the subdivision north of the Proposed Project site as well as precluding development in the floodplain. The Planning Commission action was based in part on the desire to be consistent with Conservation and Open Space Element policy CO-4.a, described above.

Impact F-1: Implementation of the proposed project would result in the loss of cropland habitat. This is considered to be a less than significant impact.

The proposed project building sites are exclusively within the active cropland habitat. Areas of ongoing and regular annual cultivation have resulted in the site supporting only minimal habitat values for native plant and wildlife species. The review of aerial photographs and field reconnaissance suggest that the areas of development were absent any substantial use by native wildlife species. Therefore, development of the cropland habitat would be considered a less-than-significant impact on biological resources. No mitigation required.

Impact F-2: Implementation of the proposed project would result in the establishment of residential lots within the Alamo Pintado Creek riparian corridor that could have direct and indirect adverse affects on the riparian habitat. This is considered to be a potentially significant impact.

The subdivision of lots includes a portion of the Alamo Pintado Creek riparian habitat in the backyards of private residences that could result in the removal of native riparian vegetation, planting of non-native landscape vegetation, introduction of non-native invasive plant species, and deposition of trash or yard wastes into the riparian habitat. The riparian habitat supports the only area of remaining habitat for native plant and wildlife species on the project site and represents suitable habitat for several riparian dependent special-status species such as the Cooper's hawk and two-striped garter snake. No formally listed species are recorded from the project area. While the home sites will be restricted to the proposed fill area well outside the riparian habitat, the potential for private landowner discretion on their property could result in adverse modification to the riparian habitat as described above. Therefore, subdivision of the land and creating lots that include the riparian habitat could result in direct and indirect adverse effects on the riparian habitat. This would be considered a potentially significant impact.

Cumulative Impacts

Implementation of the proposed project will contribute to the cumulative loss of biological resources from conversion of cropland and native habitats in the region to urban uses. The City of Solvang is reaching build-out and would not contribute any further to the substantial cumulative loss of habitat for native plant and wildlife species. Given the project would be developed within the cropland habitat, would avoid direct development within the riparian habitat, and with implementation of Mitigation Measures F-1 a and b, restore and dedicate a minimum 20-foot wide riparian habitat restoration setback area, the proposed project contribution to the cumulative loss of biological resources would be considered a less-than-significant impact.

4. Mitigation Measures

Mitigation Measure F-2a: The proposed project shall be modified to establish a 20-foot wide riparian habitat setback and restoration area measured from the outside edge of the existing riparian habitat. The developer shall record an open space agreement and / or deed restriction with the City of Solvang establishing the 20-foot setback. No development or vegetation

removal (except non-native invasive plant species removal per F-2b below) shall occur within the riparian area habitat or setback area.

Mitigation Implementation / Monitoring

- 1) Performance Standard: The Final Tract Map shall show the easement.
- 2) Contingency Measure: None needed.
- 3) Implementation Responsibility: City shall require applicant to provide easement.
- 4) Implementation Schedule: Prior to Final Map recordation.
- 5) Monitoring Method: Community Development to verify measure compliance.

Mitigation Measure F-2b: A riparian habitat restoration / buffer zone mitigation and monitoring plan shall be prepared by a City approved biologist and funded by the applicant, for the dedicated riparian habitat setback area. The restoration plan shall include at a minimum a detailed planting plan for the setback area, specific plant species palette that includes only native riparian species indigenous to the region, a non-native species removal plan, success criteria to achieve a minimum survival of 75 percent of all plantings after five years, a five-year monitoring and maintenance program and contingency measures to ensure meeting the success criteria. The outside edge of the riparian habitat setback area shall be fenced with a split rail or similar open style fence, approved by the Board of Architectural Review, to delineate the restoration area and no development zone.

Mitigation Implementation / Monitoring

- 1) Performance Standard: Planting shall be 75% survival at five years.
- 2) Contingency Measure: To be prescribed in the Restoration Plan.
- 3) Implementation Responsibility: City shall require applicant to prepare and implement plan.
- 4) Implementation Schedule: Prior to Final Map recordation or acceptance of public improvements.
- 5) Monitoring Method: Community Development to verify measure compliance.

Level of Impact Significance after Implementation of Measures:

Implementation of the mitigation measures F-1a and F-1b would eliminate the potential for direct and indirect impacts on the existing riparian habitat by establishing the 20-foot non-disturbance and no development buffer zone. The expansion of the riparian habitat by restoring riparian vegetation within the dedicated setback would provide for an overall net increase in the riparian habitat values along the project reach of Alamo Pintado Creek. Therefore, potential project and cumulative impacts on the Alamo Pintado Creek riparian corridor would be less-than significant level.

G. EFFECTS FOUND NOT TO BE SIGNIFICANT

1. Environmental Issue

This section presents the effects on the environment found to be less than significant pursuant to the *CEQA Guidelines* Section 15128, and which no mitigation is required. For many of these topics, standard conditions of approval, such as grading plan requirements for erosion and dust control that are applied to all projects in the City, will also serve to further reduce effects found to be less than significant.

2. Water Resources

Groundwater Resources

The City prepared a *Water System Master Plan Update* in 2002. This document indicates that the City obtains water from the following sources:

Table G-1 Present and Potential Future Water Supplies by Source

Supply Source	2001 Annual Production, Acre feet	Potential Delivery, Acre Feet
Local Sources		
Santa Ynez River Wells	465	3,600
Wells 4 and 21	568	799
Solvang Subtotal	1,033	4,399
External Sources		
State Water Project	0	1,500
Imp. District No. 1	444.53	1,936
Total Supply	1,498	7,835

For planning purposes the City has a potential supply of 7,835 AFY; however the actual delivery potential currently is dependent on several factors including the availability of State Water Project supplies on a year-to-year basis (dependent on Sierra Nevada snow pack) and the ability to re-activate two of the river wells damaged during floods. In 2004, the City used 1,350 acre feet from the State Water Project (SWP) allocation and 43 acre feet (2.7% of the total) from Improvement District No. 1 to meet water demand.

The Water Master Plan recommends the preferred policy goal for priority of water sources be Santa Ynez River wells first and the SWP allocation second. The City is in the process of developing their water right from the Santa Ynez River underflow, which among other things involves installing a sufficient number of wells along the river to extract a peak flow of 5 cfs, upgrading filtration and establishing beneficial use. Currently, the City uses Irrigation District No. 1 water on an on-demand basis through two master water meters. This water is from the Santa Ynez River Water Conservation District river wells.

The total demand for water citywide has been in decline in spite of the fact that population has grown. This is generally attributed to water conservation efforts. The average per capita water

use from 1995 to 2001 is 250 gallons per day. The Water Master Plan uses a maximum-day demand ratio of 1.9 times the per capita daily use and a peak hour demand ratio of 3.0 times the per capita use to determine system demand related to delivery and storage capacity.

The Water Master Plan indicates the City has enough water supply for build out of the General Plan land uses, including Skytt Mesa residential project and the proposed project, which, along with all other General Plan land use projections, were used to arrive at a build out water demand of 2,213 AF. The Water Master Plan states:

“Evaluation of....supply and demand issues indicates the City of Solvang has a dependable supply of water adequate for the build out condition. The City’s primary sources of water supply include the River wells and the State Water Project. Provision of alternate sources such as the SYRWCD [Irrigation District No. 1] connections and wells #4 AND #21, allows assurance that the City will continue to serve its users with safe and adequate water during highly unusual climate events such as prolonged drought.”

As noted above, the most recent year water demand was 1,373 AF, which is less than any year from 1995 through 2001 except 1998. The average water delivered during these years is 1,452 AF. (Table 2, *Water Use Master Plan*). The project is expected to have a water demand of about 19.8 acre feet per year (AFY). This estimate is based on the City *Water System Master Plan Update* figure of 250 gallons per day per capita and assumes 2.5 persons per residence.

Based on the available supply, the addition of 19.8 AF demand (a 1.3% increase in 2004 average delivery volume) for the proposed project would not be a significant adverse impact on groundwater resources. There is no evidence that the project water demand will substantially deplete groundwater supplies such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level.

As indicated above, the long term potential water supply available to the City for buildout of the General Plan exceeds projected demand. Therefore the project will not have a significant adverse cumulative impact on groundwater resources provided planned measure contained in the Water Master Plan are implemented to secure the river underflow water use rights, etc.

Because no significant impact is identified no mitigation is required. City policy requires as standard conditions of project approval that the project incorporate low water flow plumbing fixtures and drought tolerant landscape.

3. Public Facilities

The development of the site as a residential subdivision would contribute to the incremental demand for public services but would not create the need for new facilities and thus would not constitute a substantial impact on the environment. Existing police and fire services could accommodate the added residential use.

Solid waste collection for the project would be provided by private collection services, and waste disposal would occur in one of several County Class III (non-hazardous) landfills, most likely Foxen Canyon Landfill. This landfill has a remaining capacity of about 400,000 cubic yards (*Skytt Mesa FEIR, 2003*). County environmental thresholds identify a significant impact

from projects that generate 196 tons per year of solid waste. Waste generation of 40 tons per year is considered a significant contribution to cumulative waste generation.

The County *Environmental Threshold and Guideline Manual* provides a method to calculate solid waste stream from residential projects, with a per capita waste generation of 0.95 tons per year. For the eight new lots created with the proposed project the waste stream would be 22.8 tons per year. This volume does not reach the impact significance threshold for project or cumulative impacts, therefore, proposed project impact on solid waste would be considered less than significant.

The project would connect to an existing City sewer main. The City is 95% built out and has wastewater treatment capacity greater than buildout projections would demand, however the treatment plant cannot currently operate at it's listed capacity because of limitations on the with solids handling capabilities (*Skytt Mesa FEIR, 2003*). The City has plans to upgrade the facility to achieve capacity. Once the upgraded facilities are in place the City will have adequate capacity to process the cumulative wastewater flows for build-out of the City.

The wastewater flow from the proposed eight new lots would be 5,720 gallons per day (gpd). The average flow, not peak, for a single family residence is 715 gpd. This additional wastewater flow represents an extremely small fraction (0.38%) of the daily wastewater capacity flow to the plant of 1.5 million gallons per day, and is not directly or cumulatively significant. No mitigation is required.

4. Energy

Utility service providers for the project would be Pacific Gas and Electric, Southern California Gas Company, and GTE. The scale of the project is not large enough to significantly affect energy demand or require the development of new energy sources. No mitigation is required since impacts to energy would be considered less than significant.

5. Fire Protection

The site is located in an area with flat topography. The site is not designated by the Fire Department as a High Fire Hazard area. Fire response services for the site would be provided by the City Fire Station, located at 1644 Oak Street. Standard Fire Department requirements for development in would be required as conditions of project approval per City regulations, in order to address public safety issues related to emergency response. These would include requirements for access road widths, fire equipment turnaround needs, and other fire-preventive building requirements for structures, visible addressing, and any applicable fees.

Adherence to the Fire Department's conditions of approval and standard requirements would mitigate potential fire hazards on the site found to be less than significant.

6. Recreation

The Parks and Recreation Element of the General Plan requires developers of residential land to pay fees for park and recreation purposes. This requirement is contingent upon a Quimby Ordinance, which the City has not established as yet. The project would result in eight new single-family residences. The impact to existing City parks would be less than significant.

7. Housing

The project would not involve the loss of existing affordable dwelling or the displacement of residences. The project would add eight single family residences to the city. No impacts on housing are identified.

8. Hazards

There are no known hazardous materials or wastes on the project site, nor is the site located near uses involving substantial public safety risks. No use or storage of hazardous materials would be anticipated from the development and uses proposed, other than small quantities of horticultural chemicals such as herbicide and fertilizers. These chemicals are generally applied as granules not liquid, therefore drift to other neighboring lands is not a substantial risk. The future residential development of the parcels will not expose people to known hazardous risks or wild land fires, as defined in the City's adopted General Plan. Due to the type of uses contemplated and the scope of the project, the project does not have the potential to significantly affect land, water, air or public safety from hazardous materials. Project impacts would be considered less than significant and no mitigation would be necessary.

9. Geology and Soils

The proposed uses would not be subject to excessive risk related to geologic or soil conditions with the application of standard building permit requirements for engineered design and geotechnical review.

Impact G1: Due to the geologic and soils setting, and the relatively minor types of land disturbance required to implement development of the site, the Project would not contribute to any cumulatively significant effect on geology or soils.

The following measure for impacts found to be less than significant will reduce potential impacts:

Mitigation Measure G1: The project plans shall incorporate and implement all the recommendations outlined in the project Soils Engineering Report prepared by Earth Systems Pacific, dated November 29, 2004, including but not limited to site preparation, grading, utility trenches, foundations, slab-on-grade and exterior flatwork, retaining walls, pavement sections and drainage around improvements. Additional conditions may be imposed by the City Engineer.

Mitigation Implementation / Monitoring

- 1) Performance Standard: The final architectural and wall plans shall comply with the final project soils report signed and stamped by a registered geotechnical engineer.
- 2) Contingency Measure: the engineer of record or city building official may impose other requirements based on field conditions..
- 3) Implementation Responsibility: City Community Development Department
- 4) Implementation Schedule: Final plan development and construction.
- 5) Monitoring Method: Construction shall be verified by Building official for compliance.

Impact Significance After Implementation of Mitigation Measure: Implementation of the measures and any other BAR imposed architectural requirements will further reduce impacts found to be less than significant.

10. Visual Resources

The project site is setback from State Highway 246 and is well concealed from public view by the existing riparian canopy along Alamo Pintado Creek, which would remain. The future development of the single-family residences and proposed retaining wall along the creek would not obstruct any scenic vista, or damage scenic resources, and would be screened from view by the existing tree canopy. No rock outcroppings would be disturbed.

As a standard requirement for all such projects in the city, all residences, the retaining wall and any proposed lighting would be required to obtain approval from the City Board of Architectural Review to ensure neighborhood compatibility.

Standard lighting conditions of approval would apply to the project. Any exterior night lighting installed on the project site would be of low intensity, low glare design, and would be hooded to direct light downward onto the subject parcel and prevent spillover onto adjacent parcels. All proposed lighting would be required to obtain approval from the Board of Architectural Review.

Impact G2: Impacts related to visual resources are limited to potential for limited glare, color and material compatibility with surrounding features.

Mitigation Measure G2: Prior to approval of any Land Use and/or Building Permits, the Board of Architectural Review shall approve the architectural design, materials, and colors, of all new residential and accessory structures subject to the specific standards set forth in the EIR to ensure neighborhood compatibility, as follows:

- All exterior night lighting installed on the project site shall be of low intensity, low glare design, and shall be hooded to direct light downward onto the subject parcel and prevent spill-over onto adjacent parcels. All proposed lighting shall be reviewed and approved by the Board of Architectural Review.
- The retaining walls shall be in tones compatible with surrounding terrain using textured materials or construction methods, which create a textured effect. The wall shall be designed to include pilasters, capping and proper architectural transitioning due to the varying grade heights. Native vegetation to screen retaining walls shall be planted and maintained by the homeowner.

Mitigation Implementation / Monitoring

- 1) Performance Standard: The final architectural, wall and lighting plans shall comply with the EIR standards and any additional requirement imposed by the city BAR.
- 2) Contingency Measure: The BAR action may be appealed however the City Council cannot deviate for the certified EIR mitigations,.
- 3) Implementation Responsibility: City Community Development Department
- 4) Implementation Schedule: Final plan development and construction.
- 5) Monitoring Method: Construction shall be verified by Building official for compliance.

Impact Significance After Implementation of Mitigation Measure: Implementation of the measures and any other BAR imposed architectural requirements will further reduce impacts found to be less than significant.

11. Noise

The project operation would not have the potential to expose people to noise levels exceeding City or County thresholds. The parcels created would remain consistent with existing surrounding land use activities and the City's adopted General Plan of Land Use and Zoning District for residential uses, and such uses typically have been found to produce noise levels within the Noise Element standards for residential uses.

Ambient noise levels are in the range of 50 to 55 dBA (A-weighted decibels) based on Noise Element maps and other studies within the City¹. Current noise levels in the Highway 246 corridor are at the city noise standard maximum for residential land use of 65 dBA at 99 feet from the center of the highway, projected levels are 65 dBA at 124 feet. The nearest proposed residential lot building area is about 500 feet from the center line of Highway 246, therefore no significant impact on residences is identified.

Construction activities are projected to produce noise levels up to 88 dBA at 50 feet from the source for short durations, i.e. worst case scenario with all pertinent equipment on site working at once at various stages of construction². The California Model Community Noise Ordinance recommends that noise levels from stationary sources such as construction sites (as distinguished from roadway traffic) not exceed 65 dBA at the property line for any period of time. Based on a reduction of 6 dBA for each doubling of distance from the source, other residences within 800 feet of the construction noise source could experience temporary noise over 65 dBA. This distance will be less in areas with intervening topographic barriers and structures. In practical terms, the City finds this effect, at the scale of single family residential construction, is generally less than significant due to its short duration and episodic nature.

Impact G3: Future development of the single-family residences and access road could create some temporary noise conditions within 800 feet of construction equipment that may exceed State Model Noise Ordinance noise thresholds for construction noise.

With incorporation of the following standard City mitigation related to construction noise impacts, impacts would be reduced to less than significant.

Mitigation Measure G3: Hours of construction shall be limited to 7:30 am to 5:30 pm weekdays. No construction shall be allowed on Saturday, Sunday, State or National holidays except as approved in writing by the Public Works Director, or designee, or in the case of an emergency for the immediate preservation of life, health, or property. Notwithstanding the foregoing, an individual property owner or tenant solely, (not including any volunteer or paid construction crew) in addition to the above permissible hours of construction may also construct, repair, or remodel his or her real property or any structure on such property, pursuant to obtaining the required permits, during the

¹ Skytt Mesa FEIR, 2003 and Lot 72 Park Master Plan DEIR, 2005.

² Ibid.

hours 5:30 p.m. to 8:00 p.m. on weekdays and 8:00 a.m. to 8:00 p.m. on Saturday, Sunday and National legal holidays. All noise or sounds associated with the construction, gardening and/or maintenance activities of said property shall not create any inconvenience or annoyance to the general public beyond the boundary lines of the property.

Mitigation Implementation / Monitoring

- 1) Performance Standard: The final construction plans shall contain notes limiting construction hours as detailed in the measure.
- 2) Contingency Measure: The City may require acoustical control and barriers between sensitive noise receptors and stationary construction equipment.
- 3) Implementation Responsibility: City Community Development Department
- 4) Implementation Schedule: Final plan development and construction.
- 5) Monitoring Method: Construction shall be verified by Building official for compliance.

Impact Significance After Implementation of Mitigation Measure: Implementation of the measures will reduce impacts found to be less than significant.

H. GROWTH-INDUCING EFFECTS

1. Environmental Issue

The CEQA Guidelines require that an EIR look at the potential for less direct effects that could lead to impacts on the environment, such as growth inducement. This section will examine the proposed project's potential for growth inducement.

A project may be growth inducing if:

- a) It removes impediments to growth.
- b) Extends community services or infrastructure.
- c) Encourages other activities or precedents which could cause substantial growth or impacts on the environment.
- d) It could indirectly lead to economic, population or housing growth.

2. Potential for Growth Inducement

Economic, Population or Housing Growth

The project will add population, between 20 and 24 persons, depending the census base of either 2.5 person per dwelling or 3.01 persons per dwelling. The project does not alter the availability of land zoned for residential use in the region and would not remove any housing. Construction of the Project will cycle money through the region and represents an infusion of capital which represents limited economic expansion. New jobs may be created in the short and long term by the Project, however, construction would not require a significant labor force from outside the region and would be of short duration. Therefore, the Proposed Project's effect on job-housing balance is not considered significant.

Conversion of this land could have an economic effect on agriculture by directly removing 3.8 acres from future production, and indirectly up to 4.2 off-site acres (3.2 acres adjoining the site and up to one acre in potential buffer) from future production off-site (refer to section IV-B Agricultural Resources). Historically, loss of prime farm land to urbanization has tended to move farming operations to Class III soils which have greater constraints for maintaining the same level of productivity than Class I and II agricultural soils. However, this effect cannot be readily forecast or measured other than to recognize the possibility and note the conversion of land in this case is small, and that the site has been planned for urbanization for 15 years and not consistently farmed. The effect of the potential for conversion of the 3.2 acres next to the Proposed Project was found to be a less-than-significant on agricultural resources based on the State LESA model for determining agricultural conversion significance. The effect of potential loss of farmable land due to imposition of an agricultural buffer is mitigable to less than significant (refer to Mitigation measure B2).

Removal of an Impediment to Growth

The extension of water and sewer service to an area generally carries with it the potential for further future extensions beyond the immediate development area. The Proposed Project does involve extension of water and sewer lines to serve the Project (see EIR Section I). Community water and sewer service already exist at the site in the street right of way on Old Mill Road. The extension of these lines to serve the eastern part of the site proposed for eight residential lots

lines as designed on the Tentative Tract Map would be installed in an easement within the County for this purpose.

The proposed project is within the city limit boundary which is served by municipal water and sewer infrastructure, with the exception of the proposed access road that would occur entirely outside the city within County jurisdiction. Both the proposed water and sewer extensions to serve the eight new lots would be placed within this access road easement on the adjoining property.

The City Sphere of Influence line coincides with the City limit line at the project as shown on **Map 10- City of Solvang Sphere of Influence Boundary**. This co-terminus boundary implies the City does not intend to seek to annex lands outside the City directly to the east of the project for many years, if ever.

The SOI line does extent outside the city to the northeast of the to encompass areas in the County between the City limit and the Santa Ynez Community Service District boundary. The County has identified this area as potentially needing sewer service due to the residential density (small rural lots) and groundwater concerns related to septic leach fields on small lots. Though proposed project sewer main is not designed to accommodate any future flow and ends at the south boundary of proposed lot 1, the creation of the out-of-City easement for the sewer line for the proposed project would remove an impediment to growth and could potentially be extended to serve other areas in the SOI.

By placing these infrastructure lines outside the City boundary, the project has potential to be growth inducing because the portion of the parcel on which the road and infrastructure is placed would be conceivably available for annexation into the City limits and pre-zoned to similar residential density as the proposed project. At this density, and assuming only the portion of the much larger subject parcel adjoining the proposed project to the east were annexed to the city, the number of potential homes would be five (3.2 acres less the access easement yields 2.4 acres which at 20,000 s.f minimum lots equals 5 parcels). Though the County has policies to protect and discourage urbanization of agricultural lands, such an annexation request would need to be accepted and processed with City sponsorship through LAFCO, not the County of Santa Barbara. The argument to annex this 3.2 acres may be seen to be strengthened based on it's low agricultural viability identified in section IV-B of this EIR.

The above scenario assumes a potential annexation request, having city water and sewer service readily available, for only for the 3.2 acres east of, and immediately adjoining, the proposed eight new lots in the proposed project. The subject parcel involved (APN 139-250-36) extends to the south and also adjoins the subdivision (and city limit) line at the south and is owned by the Santa Barbara Trust for Historic Preservation (Trust). The property is part of the Mission Santa Ines National Historic Landmark District. According to the Trust¹ the 38 acre parcel was purchased by the Trust with the primary purpose of protecting and preserving the old grist mill that was part of the Mission Santa Ines. The Trust is actively pursuing negotiations with the State Department of Parks and Recreation to convey the land to the State for development as a State Historical Park. However, there is nothing in the trust grant that would preclude the Trust Directors from deciding to sell part of the land to anyone if was determined by them to be beneficial to the primary goal of preserving the old grist mill.

¹ Personal communication with Jarrell Jackman, Director, Santa Barbara Trust for Historic Preservation, January 25, 2006

The parcel is currently zoned agriculture (40-AL-O) and does not appear to be subdividable with a minimum parcel size of 40 acres, under County zoning. Therefore, unless a lot line adjustment with adjoining parcels were approved by the County to maintain the 40 acre minimum parcel size with the 3.2 acre portion separated as an annexation lot, the proposed project is recognized to have limited potential to directly induce growth on to this property.

The presence of prime agricultural soils and an apparently viable agricultural parcel of close to 30 net farmable acres (subtracting out Alamo Pintado Creek, which bisects it), and specific County and City policies to preserve and protect prime agricultural land pose regulatory obstacles to annexation and / or subdivision of this parcel, as does the Trust mission of protecting the old grist mill. However, the fact of the Proposed Project creating road and infrastructure extensions within the County to serve the project has the inherent potential to be growth inducing, even acknowledging the obstacles to ultimate approval. This is largely due to the fact that the obstacles to approval of an annexation or subdivision are not primarily physical, but regulatory. Therefore, the growth inducing effect of the proposed project upon lands to the south is determined to be potentially significant.

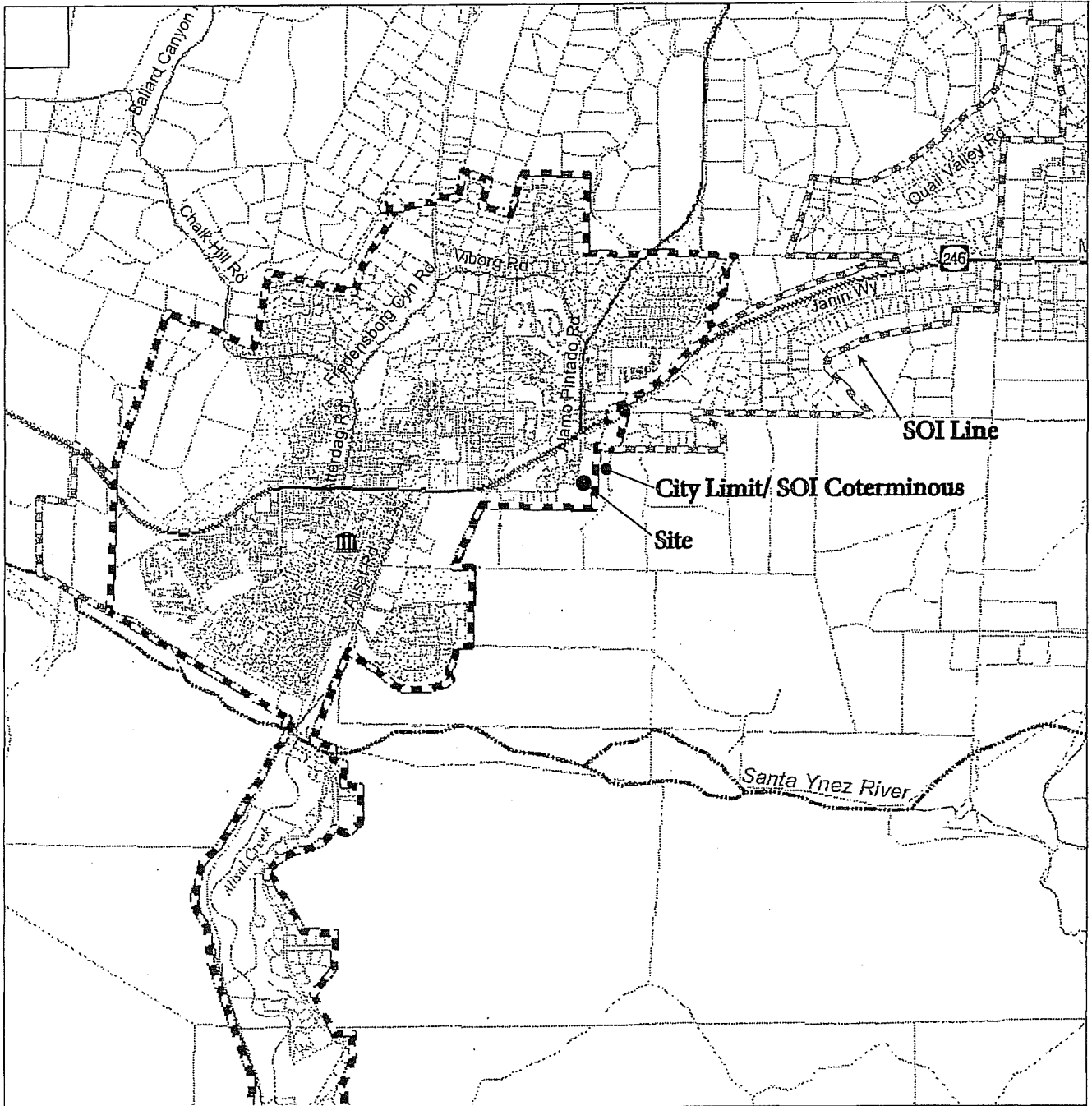
The potential to induce growth to the east beyond the immediately adjoining parcel is substantially diminished by the fact that the annexation of this adjacent parcel would necessarily need to precede further annexation east.

Likewise, growth to the north is precluded because existing residential subdivisions already have been developed there. The proposed project sewer main is not designed to accommodate any future flow and ends at the south boundary of proposed lot 1. The sewer line for the proposed project would not remove an impediment to growth and would not be likely to be extended to serve other areas in the SOI, however the creation of an easement outside the City for the purpose of sewer line would be considered growth inducing.

The proposed water main line is proposed to extend to the city limit line north of the site to link the existing City water main that extends under Alamo Pintado Creek to serve the four existing residence on the east side of the creek and within the city limits. This would provide looped service lines which is standard engineering practice and desirable to achieve flows adequate for fire suppression, however, the fact of its extension and underlying easement is potentially growth inducing for lands to the east.

The improvements that will be constructed with the project will generally be limited to those related to project needs. The improvements would not increase capacity to a degree that a direct impediment to growth is removed.

Impact H1: The extension of road and infrastructure easements and improvements within the County to serve the Proposed Project is growth-inducing because the parcel adjoining the Proposed Project on the south and east can be reasonably foreseen to have potential for annexation and / or subdivision as a result of these infrastructure easements and road extension.



Source: City of Solvang General Plan

City of Solvang Sphere of Influence Line Boundary



Map

Precedent-Setting Effects

Although not a CEQA mandated discussion topic, precedent-setting effects are often defined as the ability of a project to set an example of what can be achieved on parcels with similar land use designations and parcels of land situated in similar locations and with similar constraints. In this case, the project proposes to extend the water and sewer lines serving the new eight lots outside the city limit line along the proposed access drive. Service laterals would extend back west from the main lines to serve each lot. While this approach is uncommon it does not appear to create a strong incentive to approve similar proposals elsewhere because the subject property is uniquely situated relative to the city limit, existing services and Alamo Pintado Creek. In any case, the proposed infrastructure lines could feasibly be positioned within city limits in an easement over the proposed lots. However, this too is an unusual arrangement and not typically preferred by the City Public Works Department due to it unnecessarily encumbering the residential lot. Typically these types of public infrastructure are located in the street.

3. Mitigation Measures

Mitigation Measure H1: To reduce the potentially significant growth inducing effects of the proposed infrastructure easements and road located in the County, the Final Tract Map shall record a five foot "denied access" easement in favor of the City on the southern boundary of the tract and extending along the east side of the proposed access road on the adjoining property. The easement shall be stipulated to allow for recreational and agricultural access only.

Mitigation Implementation / Monitoring

- 1) Performance Standard: The Final Tract Map shall show the easement.
- 2) Contingency Measure: None required.
- 3) Implementation Responsibility: City shall require applicant to include the easement on the Final Tract Map.
- 4) Implementation Schedule: Prior to Final Map recordation.
- 5) Monitoring Method: Community Development to verify measure compliance.

Level of Impact Significance after Implementation of Measures:

Implementation of the mitigation measure will establish the right of the City to deny access to lands to the south and east thus providing a suitable means to limit potential pressure to annex or subdivide adjacent properties within the County. This measure would reduce potentially significant growth inducing effects to less than significant.

V. Alternatives to the Proposed Project

ALTERNATIVES

A. INTRODUCTION

The purpose of this section is to describe a range of reasonable alternatives to the project and evaluate the comparative merits of the alternatives. Pursuant to CEQA, the discussion includes the specific alternative of "no project", and identification of feasible alternatives capable of avoiding one or more significant adverse environmental effects or reducing them to a level of insignificance. This section also identifies the "environmentally superior alternative" as prescribed by CEQA.

According to the CEQA guidelines, the range of alternatives required is governed by the "rule of reason" that requires the EIR to set forth only those feasible alternatives necessary to permit an informed and reasoned choice by the decision-making body and informed public participation.

As indicated, this EIR is required to discuss only feasible alternatives. That is, alternatives that may be able to feasibly attain most of the project's basic objectives. Statutes and regulations governing CEQA generally define "feasible" to mean an alternative which is capable of being accomplished in successful manner within a reasonable period of time, taking into account economic, environmental, social, technological and legal factors. Factors generally taken into account in determining whether an alternative is feasible also include, but are not limited to, site suitability, economic viability, availability of infrastructure, General Plan consistency, other plans or regulatory limitations, jurisdictional boundaries, and an ability to acquire, control or access an alternative site. While the EIR must discuss alternatives that may feasibly attain most of the project's basic objectives, the City may ultimately reject any alternatives it finds are infeasible based on factors such as those listed above.

In consultation with the City, the alternatives to be examined were determined to be:

- No Project
- Alternative Site
- Alternative access from Alamo Pintado Road
- Reduced Scale Project

B. NO PROJECT

No project means that the parcel would remain as undeveloped land available as farmland.

With no project, the site would remain as open space for an indefinite period. Under the current residential zoning, some future development as a residential use is probable. No Project would avoid impacts on traffic, potential effects on cultural resources and biological resources, and temporary impacts on air quality and noise.

C. ALTERNATIVE SITE

The purpose of evaluating alternative sites is to determine if development of the project at another location could significantly reduce or avoid impacts while otherwise feasibly attaining the project objectives. As described in Part IV, impacts on traffic, noise, air quality, flooding, cultural resources, biological resources, etc are less than significant, or mitigable to less than significant.

Therefore, the prime consideration is whether a feasible alternative site exists that would substantially reduce any or all of these effects. The CEQA feasibility criteria are:

- The suitability of the alternative site for the proposed uses, e.g. slope, flooding, wildlife constraints.
- Economic viability, i.e. are there funds available to purchase the parcel?
- Availability of infrastructure, e.g. are water and sewer service nearby?
- General Plan consistency.
- Ability of the applicant to acquire or gain access to the property.

Other similarly zoned land in the City- The primary area of similarly zoned land in the City is in the northeast quadrant of the city between Alisal and Alamo Pintado roads. This area does not have substantial areas of prime agricultural soils, however some environmental effects would be similar to the proposed project, such as temporary noise and dust, water demand, change in the visual character. While effects on biological resources may be less, increases runoff from this area further up the watershed from the proposed site could have a potentially greater effect on flooding than the proposed project. Infrastructure is generally readily available in this area, however, review of a 2004 aerial photo of the City shows few if any areas of vacant land of comparable size that would meet the project objectives of a half-acre lot subdivision.

CEQA case law indicates that the fact that an applicant does not own an alternative site may make such a site infeasible. The proposed project applicant¹ does not own other similar properties and the question of the likelihood of the applicant to be able to find willing seller and purchase a comparable parcel is speculative.

D. ALTERNATIVE ACCESS FROM ALAMO PINTADO ROAD

Construction of a bridge over Alamo Pintado Creek from Alamo Pintado Road to the east side of the property would avoid the need for access from High Meadow Road. The intersection of Alamo Pintado Road at Highway 246 is signalized, thus having the benefit of a controlled turning movement both ways from Highway 246. This alternative is constrained because the portion of Alamo Pintado road from which the bridge would span the creek is inundated in floods (see floodway line designation on Map 4 in Section I of the EIR). This would create an unsafe access condition that would not be permitted. Therefore the bridge approach and headwall could only feasibly be located at the north edge of the site opposite proposed lot 1. This area may not have adequate horizontal distance to achieve the vertical clearance over the floodway water elevation without intruding into the floodway zone as mapped. While it is in theory possible to revise the FEMA floodway map, the process does not guarantee FEMA concurrence, in which case the bridge would not be feasible. Therefore while it is not possible to rule out this alternative it appears highly constrained and speculative.

E. REDUCED SCALE PROJECT ALTERNATIVE

The significant adverse environmental effects of the proposed project relate to impacts on cultural resources, biological resources, water quality, agricultural resources, potential for growth inducement and traffic. Mitigation measures have been identified in Part IV to reduce these effects

¹ Personal comm., Tom Rowe applicant's engineer.

to less than significant levels. In order to eliminate or further reduce these effects the number of residential lots could be reduced.

Mitigation Measure F-2 would require a minimum 20 foot setback from the riparian canopy, thus requiring a tract reconfiguration likely to eliminate Lot 1. Mitigation Measure B-2 would require a 30 foot structural setback from the south property line on Lot 8, resulting in a constrained development footprint unless the lot is widened. Removal of Lot 8 and re-combining it with others would allow a better buffer between the residence and farming operations to the south. The resulting six lots on the east side of Alamo Pintado Creek would have an incrementally less adverse effect on water quality and flooding, would decrease the number of construction related trips and potential air quality impacts, as well as short duration construction noise, and ultimately would have less daily traffic turning on Highway 246. Removal of Lot 1 would shift the proposed retaining wall at the floodway downstream and further away from the center of the creek where water velocities are lower thus reducing forces acting on the wall that could damage it during a major storm event.

The reduced scale alternative would reduce impacts already mitigable to less than significant levels. This alternative does not meet the Project objectives for a density at an approximate one acre lot size, commensurate with the zoning designation, however, this site has unique development constraints that would seem to argue for a reduce density. CEQA does not require that an alternative fully meet project objectives to be considered a feasible alternative. Though reducing the number of lots does not reduce any particular adverse impact to below the applicable threshold to a point where the effect is not significant or avoided, the benefits of compliance with EIR mitigation measures F-1 and B-2 resulting in a six lots instead of eight does reduce all other impact areas.

F. ENVIRONMENTALLY SUPERIOR ALTERNATIVE

The State CEQA Guidelines require the EIR to identify the environmentally superior alternative. The Guidelines specify that an alternative may impede to some degree the attainment of project objectives, or be more costly, without it being disqualified from consideration. The purpose of the CEQA mandate for the EIR to include a discussion of alternatives is twofold: 1) to permit a reasoned choice by decision makers, and 2) to reduce or eliminate impacts.

On **Table AP-1**, the proposed project is compared to the alternatives discussed above. Although no alternative site was identified that was feasible, the alternative site column on the table is filled in for generalized purposes of comparison only, indicating that none of the alternative sites substantially reduce the kinds of impacts identified for the proposed project, e.g. neighborhoods will be affected at all sites.

Reading left to right, other alternatives are compared to the project, therefore "Similar Impacts" means the alternative is expected to have the same general level of impact as those at the Project site, and the same kinds of necessary mitigations. "No impact" or "less impacts" means the alternative reduced the level of, or avoids, the impact resulting in the project. "Greater Significant Impact" means the alternative could have impacts of greater magnitude than the project and may result in higher levels of impact after mitigation measures are implemented.

The environmentally superior alternative would be "no project" because all significant environmental effects are avoided. However, when "no project" is designated as the environmentally superior alternative, CEQA requires a second-best alternative be identified.

The environmentally superior project would be the reduced scale alternative project because the reduced scale project reduces traffic, noise, air quality, biological, agricultural, and, potentially, cultural resource impacts. The potential for growth inducing effects is essentially the same under this alternative as for the proposed project. The alternative access and alternate sites are deemed infeasible for failing to meet the basic project objectives, economic limitations, and unsuitable site conditions such as flooding, and rejected accordingly.

Table AP. Comparison of Alternatives to the Proposed Project

Topic	Impact Level of Proposed Project	Alternative sites	No Project	Reduced Scale Project
Biological Resources	Significant but mitigable	Similar or less	None	Less
Agricultural Resources	Significant but mitigable	Less or None	None	Less
Traffic	Significant but mitigable	Similar or less	None	Less
Flooding & Water Quality	Significant but mitigable	Similar or greater	None	Similar or less
Cultural Resources	Significant but mitigable	Similar or less	None	Similar or less
Air Quality	Less than significant	Similar	None	Less
Growth Inducement	Significant but mitigable	Potentially less	None	Similar

VI. Document Preparation Sources

DOCUMENT PREPARATION AND PERSONAL COMMUNICATIONS

A. REPORT PREPARERS

- David Foote, *firma*, prepared all EIR sections with assistance as noted following.
- Michael Weber, MSW Consulting prepared the Air Quality section.
- Steve Orosz PE , Orosz Engineering Group, prepared the Traffic section.
- Todd Hannahs, Cultural Resource Management Systems prepared the Phase 1 Archaeological Survey.
- Mike Nunley, Boyle Engineering, prepared the Flooding and Water Quality section.
- David Wolff, David Wolff Environmental, prepared the Biological Resources section.

B. PERSONAL COMMUNICATIONS

Tom Rowe, Penfield and Smith, Applicant's Civil Engineer

Shelley Stahl, Director of Planning and Community Development, City of Solvang

C. SOURCES

Santa Barbara Department of Planning and Development. Agricultural Element of the Comprehensive Plan, 1991.

_____. Environmental Thresholds and Guidelines Manual, 1995

_____. *Santa Ynez Valley Newsletter*, March 2001

_____. Seismic Safety Element

_____. Ground Water Thresholds Manual

Santa Barbara Department of Planning and Building, Agricultural Commissioner and UC Cooperative Extension. *The Status of Agriculture in Santa Barbara County*, 1999.

City of Solvang. *Final EIR Duff Mesa Specific Plan Project*, Interface 1999

City of Solvang. *Final EIR Skytt Mesa Residential Subdivision Project*, Rincon Consultants, 2003

_____. Land Use Element, 1995

_____. Noise Element, 1989

_____. Open Space and Conservation Element, 1988

_____. Parks and Recreation Element, City of Solvang 1989

_____. Water System Master Plan Update, Provost & Pritchard Engineering Group, 2002

Flood Insurance Rate Map Santa Ynez Valley / Solvang, FEMA

2001 Traffic Volumes, Santa Barbara County Department of Public Works Transportation Division, October 2001.

Traffic Volumes on State Highways, California Department of Transportation, 2002.

Highway Capacity Manual, Highway Research Board Special Report 209, Transportation Research Board, National Research Council, 1997.

Governor's Office of Planning and Research, State of California General Plan Guidelines, 2003.
State Department of Health's Office of Noise Control, Model Community Noise Control Ordinance, 1977.

Appendix A - Notice of Preparation & Initial Study

Notice of Preparation

TO: All Interested Parties

FROM: City of Solvang
Planning & Community Development Dept
P.O. Box 107
Solvang CA 93464-0107

SUBJECT: Notice Of Preparation of a Draft Environmental Impact Report

PROJECT TITLE: Old Mill Road Vesting Tentative Tract Map

STATE CLEARINGHOUSE NUMBER (IF APPLICABLE): not issued

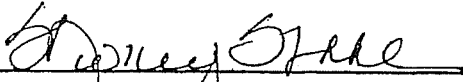
The City will be the lead agency for an environmental impact report (EIR) for the project identified above. We need to know the views of your agency as to the scope and content of the environmental information, which is germane to your agency's statutory responsibilities in connection with the proposed project.

The project description, location and probable environmental effects are contained in the attached materials. (Materials may be viewed at the Planning Department, 411 Second St. Solvang, if they are not attached to this Notice).

Due to time limits mandated by State law, your response must be sent at the earliest possible date, but *not later than 30 days* after receipt of this notice.

Please send your response to: Firma, Attn: David Foote, 849 Monterey Street, San Luis Obispo CA 93401.

We will also need the name of a contact person in your agency.

Signature: 
Title: Community Development Director

Date: August 12, 2005

Phone: 805 688-4414 or 781-9800

Air Pollution Control District
Vijaya Jammalamadaka
26 Castilian Dr. B-23
Goleta CA 93117

CA Regional Water Quality Control
Board
895 Aerovista Place, STE. 101
San Luis Obispo CA 93401

Caltrans / District 5
Lawrence Newland
50 Higuera St.
San Luis Obispo CA 93401

City of Buellton
Ray Severn, Planning Director
P.O Box 1819
Buellton CA 93427

Country of Santa Barbara
Planning & Development Dept
123 E. Anapamu St.
Santa Barbara CA 93101

County of Santa Barbara
Agricultural Commissioner
624 W. Foster Rd. Ste. E
Santa Maria CA 93455

County of Santa Barbara
Public Works Dept
123 E. Anapamu St.
Santa Barbara CA 93101

Country of Santa Barbara
Brooks Firestone, Third District
Supervisor
105 E. Anapamu St.
Santa Barbara CA 93101

Santa Ynez Community Service
Dist.
P.O.Box 667
Santa Ynez CA 93460

Santa Ynez River Water
Conservation District
P.O.Box 157
Santa Ynez CA 93460

Santa Barbara Co. Flood Control
District
Tom Fayram
123 E. Anapamu St.
Santa Barbara CA 93101

Old Mission Santa Ynez
Fr. Michael Mahoney
1760 Mission Dr.
Solvang CA 93463

City of Solvang

INITIAL ENVIRONMENTAL STUDY

for the

OLD MILL ROAD, LLC

VESTING TENTATIVE TRACT MAP

Case No. 03-16

Date: APRIL 20, 2005

1.0 PROJECT INFORMATION

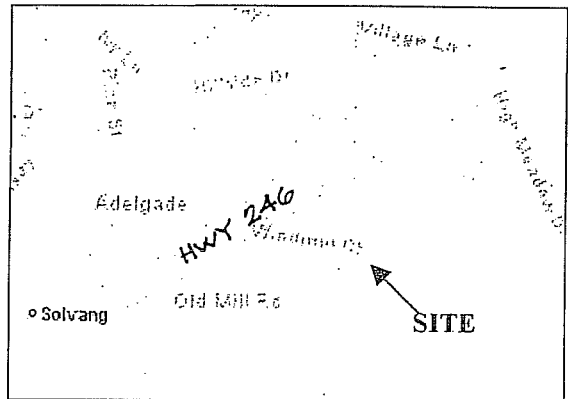
Lead agency name / address / contact information:

City of Solvang

411 Second Street / PO Box 107 Solvang CA 93464
Shelley Stahl, Planning/Community Devel. Director
(805) 688-4414 - email address: shelleys@cityofsolvang.com

Project location

Located at the southern terminus of Alamo Pintado Road, at the intersection of Old Mill Road and Alamo Pintado Road, known as 1945 Old Mill Road. The property is identified as APN: 139-540-020



Project applicant/owner/contact person / address / phone:

Contact Person/Agent: Tom Rowe, Penfield & Smith, 210 E. Enos Drive, Suite A, Santa Maria, CA 93454. Ph: 805-925-2345

Applicant/Owners: Gary Riches, Old Mill Road, LLC, P.O. Box 620, Solvang, CA 93464
Ph: 805-448-9265
Aaron Petersen, 1945 Old Mill Rd., Solvang, CA 93463
Ph: 805-689-4612

General Plan designation: Low Medium Residential (two Dwelling Units per acre). Under this General Plan category, single-family residences are to be developed at a density of two dwelling units per acre. The population density in these areas would be approximately five persons per acre based on an average household size of 2.3 persons per unit. See individual environmental factor categories for further discussions of General Plan issues.

Zoning: 20-R-1, Single Family Residential District (one dwelling unit per 20,000 square feet minimum lot size.)

Project Description:

The request of Old Mill Road, LLC for consideration of a Vesting Tentative Tract Map to divide a 9.24-acre parcel into nine (9) single-family residential lots in the 20-R-1 Zone District. The project site is Assessor's Parcel Number 139-540-020, which is Parcel 4 of Parcel Map 30,061. The parcel is addressed as 1945 Old Mill Road and is located at the southern terminus of Alamo Pintado Road, at the intersection of Old Mill Road and Alamo Pintado Road.

The majority of the parcel lies on the eastern side of Alamo Pintado creek, where eight (8) new single-family residential parcels are proposed, ranging in size from 21,981 square feet to 40,645 square feet. Currently one (1) single-family residence exists on the western side of Alamo Pintado Creek. The existing residence would remain on a 3.23-acre lot. No new development is proposed on the western side of Alamo Pintado Creek. Access to the development would be provided from High Meadow Road through a privately held easement on and across the High Meadow Development and the property owned by The Santa Barbara Trust for Historic Preservation.

Proposed Improvements:

A new 24-ft wide road will be constructed with a cul-de-sac end, as required to provide adequate turnaround for fire equipment, and solid waste collection vehicles. The majority of the road will be placed in a private easement located within the County of Santa Barbara, and secured by the Applicant. The new road will obtain the necessary construction permits from both the City of Solvang and the County of Santa Barbara according to the corresponding jurisdiction.

To construct the development, approximately 20,000 yards of fill material will be required to bring the building pads up out of the 100-year floodplain in accordance with FEMA, County Flood Control and City requirements. The pads will be constructed at a minimum of 1.5-ft above the 100-year water surface elevation, and the finished floor of each structure should be 2.0-ft above the 100-year water surface elevation. The development proposes to construct a retaining wall approximately 1-ft off the regulatory floodway line, varying in height from zero (0) to ten (10) feet. The retaining wall would be approximately 1,250-feet in length. An application to FEMA for a CLOMR (Conditional Letter of Map Revision) is currently being developed and has been provided to the Public Works Director for consideration. The residential structures will be restricted to a defined building envelope and setback from the wall in case of a catastrophic failure of the wall during 100-year flood conditions. The foundation systems for each structure and retaining walls will be further refined prior to Final Map approval, and during final design.

The development will be served by City of Solvang water and wastewater facilities. The extension of the water and sewer will be bored under Alamo Pintado Creek, and appropriate California Department of Fish & Game, and City of Solvang permits will be obtained prior to construction. Other utilities will be provided by the corresponding agencies, and further coordination will occur during the Final Map.

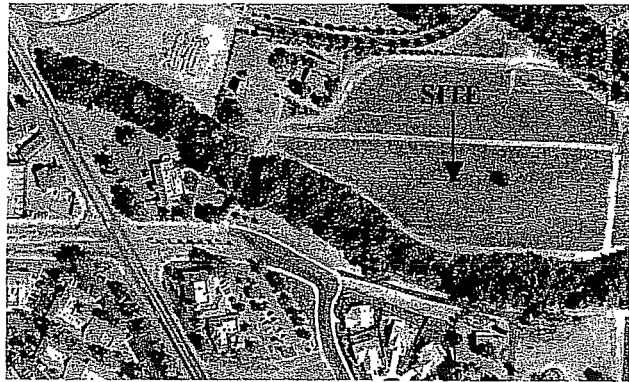
The floodway will be maintained, as there presently is a conservation easement held by the City of Solvang to preserve this area. All drainage runoff for the improved areas will be directed to the street and collected within a drainage inlet and pipe system at the end of the turnaround in compliance with the City's Storm Water Management Program. Due to the development's close proximity to Alamo Pintado Creek, drainage structures will be sized for the 100-year post developed condition.

Environmental Setting:

The site is located along the eastern boundary of the City. Alamo Pintado Creek traverses north to south, along the entire length of the property.

Slope/Topography: The site is located in and along Alamo Pintado Creek, with a varying terrain from an elevation of 445-450 along the eastern edge of the property to an elevation of 435 at the flow line of Alamo Pintado Creek to the west. Slopes vary from 2-9%. Approximately 68% of the parcel lies within the floodway of the creek.

Flora/Fauna: Riparian vegetation exists along both sides of the creek, ranging in width from 70 feet to 220 feet. Existing vegetation beyond the riparian corridor consists of grasses.



Soils: The property is identified on Solvang's General Plan Prime Agricultural Soils Map as having "prime soils". These soils are typically Class I or II soils, which can support a variety of agricultural crops. The property has historically been farmed periodically in the past.

Archaeological Sites: The City of Solvang falls within the range of the Chumash Indian Reservation and also contains several historic resources (Mission Santa Ines, Grist Mill and Fulling Mill). The property is located relatively close to the Mission and the Grist Mill and Fulling Mill. The Archeological Sensitivity Map of the Solvang General Plan also delineates this parcel as falling within "Areas of Moderate Sensitivity" with the southeast corner of the parcel falling into the "Areas of High Sensitivity".

Existing Land Uses: On the western side of Alamo Pintado Creek, existing structures consist of a single-family residence, garage and appurtenant accessory uses. There are no structures located on the eastern side of the creek. The acreage on the eastern side of the creek has historically been farmed periodically in the past.

Surrounding Zoning and Land Use		
	Zoning	Use
North:	C-2, Retail Commercial	Highway 246, and commercial development areas
East:	County of Santa Barbara agriculturally zoned land	Agricultural Use
South:	County of Santa Barbara agriculturally zoned land	Agricultural Use
West:	20-R-1, Residential, 20,000 square foot minimum parcel size	Mission Meadows Residential Development; Old Mill Road single family residences.

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

The project will require review and approval from California Department of Fish and Game. FEMA (Federal Emergency Management Agency) approval for the C-LOMR is also required in order to remove the requirement for flood insurance by the homeowners. Review and approval by the County of Santa Barbara will be required for grading and construction of the access road.

2.0 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

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

On the basis of this initial evaluation:

- Checklist of environmental factors with checkboxes: Aesthetics (checked), Agriculture Resources, Air Quality, Biological Resources (checked), Cultural Resources (checked), Geology /Soils (checked), Hazards & Hazardous Materials, Hydrology / Water Quality (checked), Land Use / Planning, Mineral Resources, Noise (checked), Population / Housing (checked), Public Services (checked), Recreation, Transportation/Circulation (checked), Utilities / Service Systems, Mandatory Findings of Significance (checked).

3.0 DETERMINATION: (To be completed by the Lead Agency)

- Five determination options with checkboxes: 1) COULD NOT have a significant effect... (unchecked), 2) although... could have a significant effect... (unchecked), 3) MAY have a significant effect... (checked), 4) MAY have a potentially significant impact... (unchecked), 5) although... could have a significant effect... (unchecked).

2005

Signature

Date

Shelley Stahl, Planning & Community Development Director

Printed name

4.0 EVALUATION OF ENVIRONMENTAL IMPACTS:

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

- 8) *The City will address the questions from this checklist that are relevant to a project's environmental effects.*
- 9) *The explanation of each issue should identify:*
 - a) *the significance criteria or threshold, if any, used to evaluate each question; and*
 - b) *the mitigation measure identified, if any, to reduce the impact to less than significance*

4.1 AESTHETICS -- Would the project:	Potentially Significant <u>Impact</u>	Less than Significant with <u>Mitigation</u>	Less than <u>Significant</u>	No <u>Impact</u>
a) Have a substantial adverse effect on a scenic vista?		X		
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				X
c) Substantially degrade the existing visual character or quality of the site and its surroundings?		X		
d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?		X		

Discussion:

(a-c) The project site is setback from State Highway 246 and is well concealed from public view by the existing riparian canopy along Alamo Pintado Creek, which would remain. The future development of the single-family residences and proposed retaining wall along the creek would not obstruct any scenic vista, or damage scenic resources, and would be screened from view by the existing tree canopy. No rock outcroppings would be disturbed. To ensure neighborhood compatibility, all residences, the retaining wall and any proposed lighting would be required to obtain approval from the Board of Architectural Review.

(d) Standard lighting conditions would apply to the project. Any exterior night lighting installed on the project site would be of low intensity, low glare design, and would be hooded to direct light downward onto the subject parcel and prevent spillover onto adjacent parcels. All proposed lighting would be required to obtain approval from the Board of Architectural Review.

Mitigation: With incorporation of the following mitigation, impacts would be reduced to less than significant.

Mitigation Measure #1: Prior to approval of any Land Use and/or Building Permits, the Board of Architectural Review shall approve the architectural design, materials, and colors, of all new residential and accessory structures.

Mitigation Measure #2: All exterior night lighting installed on the project site shall be of low intensity, low glare design, and shall be hooded to direct light downward onto the subject parcel and prevent spill-over onto adjacent parcels. All proposed lighting shall be reviewed and approved by the Board of Architectural Review.

Mitigation Measure #3: The retaining walls shall be in tones compatible with surrounding terrain using textured materials or construction methods, which create a textured effect. The wall shall be designed to include pilasters, capping and proper architectural transitioning due to the varying grade heights. Native vegetation to screen retaining walls shall be planted and maintained by the homeowner.

4.2 AGRICULTURAL RESOURCES: Would the project:	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?			X	
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
c) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?			X	

Discussion:

(a,c) The property is identified on Solvang’s General Plan Prime Agricultural Soils Map as having “prime soils”. These soils are typically Class I or II soils, which can support a variety of agricultural crops. Although the property has historically been farmed off and on in the past, it is zoned 20-R-1 (Single-Family Residential, 20,000 s.f. minimum lot size) and shown on the General Plan for residential development. The property is relatively small for agricultural use (9.24 acres), therefore the conversion from farmland to residential use would be considered as less than significant. Smaller parcels may be considered viable for high value crops, however, agricultural productivity on parcels of less than 10 acres is generally not considered as agriculturally viable.

(b) Although the property has historically been farmed periodically in the past, the agricultural productivity was low due to the small size of the parcel. The project parcel is not within the Agricultural Preserve Program under the Williamson Act.

Mitigation: Impacts are less than significant.

4.3 AIR QUALITY: Would the project:	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?				X
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?			X	
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions, which exceed quantitative thresholds for ozone precursors)?				X
d) Expose sensitive receptors to substantial pollutant concentrations?				X
e) Create objectionable odors affecting a substantial number of people?				X

Discussion:

(a-e) This project would require construction of eight (8) dwellings and a private access road. Future construction activities related to the proposed new dwellings and road would most likely not exceed quantitative air quality thresholds due to short-term construction. Implementation of standard dust control measures, including limiting construction activities to the hours of 7:30 AM to 5:30 PM Monday through Friday, (with no construction activities permitted on the weekends, or State or National holidays), and standard erosion control methods and re-vegetation would insure that short-term air quality impacts were less than significant. Standard erosion control and re-vegetation would be required and monitored through the building and grading permit process.

Mitigation: Impacts are less than significant.

4.4 BIOLOGICAL RESOURCES: Would the project:	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				X
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service?	X			

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c)	Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				X
d)					
e)	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?			X	
f)					
g)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	X			
h)					
i)	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				X
j)					

Discussion:

(a). No species have been identified within the project area, which have been identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

(b,e.) The project site is located on and adjacent to Alamo Pintado Creek, which is known to possess "wetlands vegetation" as identified on the General Plan Biological Sensitivity Map. The proposed tentative tract maps shows the placement of the retaining wall less than five (5) feet from the riparian canopy. Potentially significant impacts could occur to sensitive riparian area species and vegetation by the ground disturbance created by the construction of the wall and by the filling of the flood plain for the eight (8) residential building pads. All creeks, wetlands and minor sub-drainages should be reviewed by the Department of Fish and Game. Alamo Pintado Creek traverses the parcel its entire length from north to south. An existing water well, which currently serves the project parcel, is located along the eastern boundary of creek within the riparian habitat. This well is proposed to be maintained for agricultural use only. The Open Space and Conservation Element of the General Plan inventories Alamo Pintado Creek as a biological wetland resource (Section 2.5.2, Pg. 27). The wetlands are considered to be "*of paramount concern, because they represent diverse habitats supporting a wide variety of plant and animal life and are very sensitive to adverse effects associated with land development*". Areas of concern indicated in the Conservation Element include the area southeast of the Mission Santa Ines and a vacant area located south of State Highway 246 and east of Old Mill Road. The Open Space Element indicates that "*The riparian vegetation in this area could be removed or disturbed by the extension of Alamo Pintado Road to Elverhoy*".

(c-d) No development would occur within any federally protected wetlands.

(f) The project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Mitigation: Impacts are potentially significant (Class I).

4.5 CULTURAL RESOURCES – Would the project:	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in SGC 15064.5?	X			
b). Cause an increased potential for trespassing, vandalizing, or sabotaging archaeological and/or historical resources.	X			
c) Cause a substantial adverse change in the significance of an archaeological resource pursuant to SGC 15064.5?	X			
d) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				X
e) Disturb any human remains, including those interred outside of formal cemeteries?				X

Discussion:

(a-e) The project parcel is within close proximity to the Chumash Indian Reservation and several historic resources (Mission Santa Ines, the Grist Mill and Fulling Mill). This proximity would locate all of the proposed parcels within an area of historic and archaeological significance. The Open Space/Conservation Element of the General Plan (Page 30) states that: "...*unknown archaeological resources could be found throughout much of Solvang. The areas most likely to contain such resources are considered as "areas of high sensitivity" and are located primarily along the banks and terraces overlooking the Santa Ynez River, Alisal Creek, Alamo Pintado Creek and Adobe Creek. Most of the remaining area within Solvang is considered to be of 'moderate sensitivity' in that the potential for locating archeological resources is not as high as it is for area in the immediate vicinity of major watercourses.*" Objective 5.0 of the Conservation Element further states "Prevent the loss of important historical, archeological, and paleontological resources". Policy 5.b of that objective adds the following: "The City shall require that sites proposed for future development are to be evaluated by certified archaeologists and/or paleontologists in accordance with the California Environmental Quality Act." Archaeological resources could be uncovered during grading activities for any future development of the project. Flooding due to creek disturbance, construction ground disturbance and the potential for increased traffic, trespassing and vandalism could result in potentially significant impacts to the Gristmill, Fulling Mill and the Mission Complex, which are federally protected "unique and historic" areas. The applicant elected not to prepare a cultural resource study of the parcel at this time, therefore the cultural resource value of the property and the potential impacts are unknown at this time.

Mitigation: Impacts are potentially significant (Class I).

4.6 GEOLOGY AND SOILS: Would the project:	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant	No Impact
Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: i). Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.			X	
ii). Strong seismic ground shaking?			X	
iii). Seismic-related ground failure, including liquefaction?			X	
iv). Landslides?			X	
b) Result in substantial soil erosion or the loss of topsoil?		X		
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?		X		
d) Be located on expansive soil, as defined in Table 18- 1-B of the Uniform Building Code (1994), creating substantial risks to life or property?		X		
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				X

Discussion:

(a,i-iv) The parcel is not located in an area of known active faults. The closest faults are located south of the Santa Ynez River.

(b,c,d) Based on the Preliminary Soils Investigation provided with this project, the native soils are very expansive, very conducive to differential settlement, and highly erodable. However, it appears these problems can be mitigated based on recommendations in the Soils Report.

(e) All proposed parcels would be connected to the City waste water system.

Mitigation: With incorporation of the following mitigation, impacts would be reduced to less than significant.

Mitigation Measure #4

The Applicant/Property Owner shall incorporate and implement all the recommendations outlined in the Soils Engineering Report prepared by Earth Systems Pacific, dated November 29, 2004, including but not limited to site preparation, grading, utility trenches, foundations, slab-on-grade and exterior flatwork, retaining walls, pavement sections and drainage around improvements. Additional conditions may be imposed by the City Engineer.

4.7 HAZARDS AND HAZARDOUS MATERIALS: Would the project:	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				X
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				X
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				X
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X
e) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				X
f) Expose people or structures to a significant risk of loss, injury or death involving wild land fires, including where wild lands are adjacent to urbanized areas or where residences are intermixed with wild lands?				X

Discussion:

(a-f) No storage or use of hazardous materials is planned, nor will the future residential development of the parcels expose people to known hazardous risks or wild land fires, as defined in the City's adopted General Plan.

Mitigation: No impact.

4.8 HYDROLOGY AND WATER QUALITY – Would the project:	Potentially Significant <u>Impact</u>	Less than Significant with <u>Mitigation</u>	Less than <u>Significant</u>	No <u>Impact</u>
a) Violate any water quality standards or waste discharge requirements?			X	
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?			X	
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner, which would result in substantial erosion or siltation on- or off-site?			X	
d) Change currents or the course or direction of water movements, in either marine or fresh water?	X			
e) Create or contribute runoff water, which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?		X		
f) Discharge, directly or through a storm drain system, into surface waters (including but not limited to wetlands, riparian areas, ponds, springs, creeks, streams, rivers, lakes, estuaries, tidal areas, bays, ocean, etc.) or alteration of surface water quality, including but not limited to temperature, dissolved oxygen, turbidity, or thermal water pollution?	X			
g) Introduce storm water pollutants (e.g., oil, grease, pesticides, nutrients, sediments, pathogens, etc.) into groundwater or surface water?		X		
h) Exposure of people or property to water related hazards, such as flooding (placement of project in 100-yr flood plain), accelerated runoff or tsunamis,; or place within a 100-year flood hazard area, structures, which would impede or redirect flood flows?	X			
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	X			
j) Inundation by seiche, tsunami, or mudflow?				

Discussion:

(a,b,c) While this project may contribute to depleting water supplies, groundwater recharge, or altering drainage patterns, it would be on a cumulative basis. Standing alone as a project, it would be less than significant.

(d) The project will be placing fill within the floodplain of Alamo Pintado Creek. With the displacement of the floodplain by the project, due to the placement of the fill, there will be a rise in the 100-yr Base Flood Elevation (BFE). As such, it will impact the watercourse to some extent, which should be further studied.

(e,g) The project will contribute additional water runoff as well as possible polluted runoff as a result of proposed street drainage. However, this could be brought to less than significant by mitigation measures (i.e. storm water filtering systems).

(f) The project will drain directly into Alamo Pintado Creek via a storm drain system. There is no mitigating measure.

(h,i) The project will be constructed in the 100 year floodplain as well as have a hard banked wall to protect structures from rising flood waters in Alamo Pintado Creek. These issues should be evaluated.

(j) Not applicable to this project.

Mitigation: Impacts are potentially significant (Class I) and less than significant with the mitigation (Class II).

With the following mitigation measures, the Class II impacts (e. and g.) would be reduced to less than significant.

Mitigation Measure #5

The applicant shall submit proof of exemption or a copy of the Notice of Intent to obtain coverage under the Construction General Permit of the National Pollutant Discharge Elimination System issued by the California Regional Water Quality Control Board. **Plan Requirements and Timing:** Prior to approval of Land Use Permits the applicant shall submit proof of exemption or a copy of the Notice of Intent and shall provide a copy of the required Storm Water Pollution Prevention Plan (SWPPP) to P&D. A copy of the SWPPP must be maintained on the project site during grading and construction activities. **MONITORING:** The City Engineer shall review the documentation prior to approval of Land Use Permits. The City Engineer shall site inspect during construction for compliance with the SWPPP.

4.9 LAND USE AND PLANNING: Would the project:	Potentially Significant <u>Impact</u>	Less than Significant with <u>Mitigation</u>	Less than <u>Significant</u>	No <u>Impact</u>
a) Physically divide an established community?				X
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?			X	
c) Structures and/or land uses inconsistent with General plan and/or Zoning Ordinance?				X
d) Conflict with any applicable habitat conservation plan or natural community conservation plan?			X	

Discussion:

(a) The project would not divide an established community.

(b-d) Alamo Pintado Creek traverses the parcel its entire length from north to south. The creek area of the parcel is designated as within the Wetlands Vegetation Zone on the City's General Plan Biological Sensitivity Map. The Open Space and Conservation Element of the General Plan inventories Alamo Pintado Creek as a biological wetland resource (Section 2.5.2, Pg. 27). The wetlands are considered to be *"of paramount concern, because they represent diverse habitats supporting a wide variety of plant and animal life and are very sensitive to adverse effects associated with land development"*. A conservation easement was recorded with the original Parcel Map, 30061, which granted a Conservation and Flood Control Easement, to the City of Solvang, which was depicted on the final parcel map. The easement runs parallel, along both sides of Alamo Pintado Creek for the full length of the property, for the regulated flood way, and is dedicated for the primary purpose of open space, habitat, and native plant preservation.

(c) Currently, all structures on the parcel are permitted and are consistent with the City's Zoning Ordinance and the General Plan.

Mitigation: Impacts are less than significant.

4.10 MINERAL RESOURCES: Would the project:	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				X
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				X

Discussion: (a, b) The project would not impact any known mineral resources, as defined in the City's adopted Conservation Element.

Mitigation: No impact.

4.11 NOISE --Would the project result in:	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant	No Impact
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			X	
b) Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?			X	
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?			X	
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?		X		

Discussion:

(a-c) The project would not have the potential to expose people to noise levels exceeding City or County thresholds. The parcels created would remain consistent with existing surrounding land use activities, the City's adopted General Plan of Land Use and Zoning District.

(d) Future development of the single-family residences and access road, could create some temporary conditions that would exceed adopted noise thresholds for construction noise, would be subject to the following mitigation measure addressing short-term construction noise. Standard hours of construction of 7:30 A.M. to 5:30 P.M. would apply.

Mitigation: With incorporation of the following mitigation, impacts would be reduced to less than significant.

Mitigation Measure #6

Hours of construction shall be limited to 7:30 am to 5:30 pm weekdays. No construction shall be allowed on Saturday, Sunday, State or National holidays except as approved in writing by the Public Works Director, or his designee, or in the case of an emergency for the immediate preservation of life, health, or property. Notwithstanding the foregoing, an individual property owner or tenant solely, (not including any volunteer or paid construction crew) in addition to the above permissible hours of construction may also construct, repair, or remodel his or her real property or any structure on such property, pursuant to obtaining the required permits, during the hours 5:30 p.m. to 8:00 p.m. on weekdays and 8:00 a.m. to 8:00 p.m. on Saturday, Sunday and National legal holidays. All noise or sounds associated with the construction, gardening and/or maintenance activities of said property shall not create any inconvenience or annoyance to the general public beyond the boundary lines of the property.

4.12 POPULATION AND HOUSING: Would the project:	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant	No Impact
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	X			
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				X
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				X

Discussion:

(a) The proposed access road for the eight (8) new single-family dwellings is within the County's jurisdiction and could have growth inducing impacts. A future extension of the road could create access to the properties beyond the project parcel. City water and sewer services would be extended under Alamo Pintado Creek to serve the new parcels. All of these factors could have growth inducing impacts triggering future annexations of adjacent land for housing development.

(b-c) There is only one (1) residence existing on the lot and it would remain. No displacement would occur and no replacement housing would be necessary.

Mitigation: Impacts are potentially significant and less than significant (Class I and III).

4.13 PUBLIC SERVICES: Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant	No Impact
a) Fire protection?			X	
b) Police protection?			X	
c) Schools?			X	
d) Parks?			X	
e) Other public facilities?			X	
f) Will the proposal result in the construction of new storm water drainage or water quality control facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?		X		

Discussion:

(a-e) The project would not result in a significant increased demand on public services.

(f) New private storm drain facilities are proposed with this project, to convey project flows to Alamo Pintado Creek. Proper maintenance of the private drainage system will be required by a homeowner's association or other mechanism in order to maintain a level of less than significant impact.

Mitigation: With incorporation of the following mitigation measures, impacts would be reduced to less than significant.

Mitigation Measure #7

The project shall provide for an onsite private drainage system to convey storm flows to Alamo Pintado Creek. Feasibility shall be determined by the Public Works Department. The storm drain system shall be maintained for the life of the project by the Homeowners' Association. **Plan Requirements:** A drainage plan showing the location and design of the storm drain system shall be submitted to Planning and Public Works for review and approval. Installation shall be ensured through a performance security provided by the applicant. Long-term maintenance requirements shall be specified in the Homeowner Association CC&R's. **Timing:** Onsite drainage system shall be installed prior to occupancy clearance. **Monitoring:** Public Works shall site inspect for installation of drainage system. Public Works sign-off is required on final grading/drainage plans, and Planning Department sign-off is required for release of the performance security.

4.14 RECREATION: Would the project:	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			X	
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?			X	

Discussion: (a-b) The Parks and Recreation Element of the General Plan requires developers of residential land to pay fees for park and recreation purposes. This requirement is contingent upon a Quimby Ordinance, which the City has not established as yet. The project would result in eight (8) new single-family residences. The impact to existing City parks would be less than significant.

Mitigation: Impacts are less than significant.

4.15 TRANSPORTATION/CIRCULATION: Would the project:	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant	No Impact
a) Cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?			X	
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?			X	
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				X
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	X			
e) Result in inadequate emergency access?			X	
f) Result in inadequate parking capacity?				X
g) Conflict with adopted policies, plans, or programs,				

including supporting alternative transportation.				X
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Discussion:

(a-b) The proposed residential development is expected to generate seventy-seven (77) Average Daily Trips (ADT's) with eight (8) Peak Hour Trips (PHT) during the afternoon. Based on the existing conditions, plus the expected project generated traffic, all of the roadways and intersections in the vicinity of the project are expected to continue to operate at the City's acceptable level of service. The project falls below the Santa Barbara County Congestion Management Plan Traffic Analysis Threshold, which is 50 Peak Hour Trips. (*Traffic Study, Penfield & Smith, November 24, 2004*).

(c) The project would not result in a change in air traffic patterns.

(d) Access to the project would be from State Highway 246 to High Meadow Road. From High Meadow Road, the access road connects onto a private easement obtained on a parcel adjacent to the project parcel, which is owned by the Santa Barbara Trust for Historic Preservation. The easement portion of the access road is located within Santa Barbara County's jurisdiction. High Meadow Road currently serves a total of 18 residences (fourteen (14) residences within the County and four (4) under construction within the City). The intersection of High Meadow Road and State Highway 246 poses a safety hazard for vehicles entering and leaving the project. The entrance is very close to the intersection of Alamo Pintado Road and State Highway 246. Additionally, the bridge over Alamo Pintado Creek is narrow and the adjacent riparian vegetation limits sight visibility. Traveling east, vehicular speeds through the Alamo Pintado Road and State Highway 246 intersection can be in excess of 45 mph. After passing through the intersection, speeds begin increasing to 55 mph in the vicinity of the project entrance road. Traffic coming west along Hwy 246 is traveling at 55 mph or greater. This forces vehicles waiting to enter the highway from the project, to dart quickly across oncoming traffic to turn left, or into the line of traffic going east. The impacts are increased when the cumulative effects of adding the existing residents (18 homes) to the proposed project (8 homes) impacts.

(e-g) The project would not result in an inadequate emergency access; however, the easement portion of the project access is located within the County's jurisdiction. Driveways to the individual lots would turn off of the County road into the residences. LAFCO (Local Agency Formation Commission) was contacted regarding a private access road within the County's jurisdiction, which serves City parcels. LAFCO's concern was that there could be confusion on which jurisdiction should respond if an accident, involving a homeowner occurred on the road that was located within the County.

Mitigation: Impacts are potentially significant (Class I) and less than significant (Class III).

4.16 UTILITIES AND SERVICE SYSTEMS: Would the project:	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				X
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			X	
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			X	
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?			X	
e) Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the projects projected demand in addition to the providers existing commitments?				X
f) Be served by a landfill with sufficient permitted capacity to accommodate the projects solid waste disposal needs?				X
g) Comply with federal, state, and local statutes and regulations related to solid waste?				X

Discussion: (a-g) The proposed residential development (8 single-family residences) would be served by existing City wastewater and water services, which complies with all government regulations. The impacts would be insignificant.

Mitigation: Impacts are less than significant.

5.0 PROJECT SPECIFIC IMPACTS SUMMARY:

Class I – Potentially Significant Impacts

- *Biological Resources: Potential impacts to Alamo Pintado Creek riparian habitat*
- *Cultural Resources: Potential impacts to historical and/or archaeological resources*
- *Hydrology/Water Quality: Potential impacts to directional flow and exposure to residuals.*
- *Population and Housing: Potential for growth inducing impacts.*
- *Transportation/Circulation: Increased traffic hazard and cumulative effects.*

Class II – Significant Impacts That Can Be Mitigated to Less than Significant

- *Aesthetics: Impacts to scenic vistas and visual character; Impacts from light sources.*
- *Geology/Soils: Expansive and erodable soils.*
- *Noise: Temporary increase in ambient noise levels during construction*
- *Public Services: New storm drain facilities*

Class III – Less Than Significant Impacts

- *Agricultural Resources: Conversion of farmland to residential use.*
- *Air Quality: Impacts to air quality during construction*
- *Land Use Planning: Conservation of riparian habitat of Alamo Pintado Creek*
- *Recreation: Impacts to recreational facilities*
- *Utilities and Service Systems*

6.0 MITIGATION MEASURES:

The following mitigation measures shall be required to avoid potentially significant Class II environmental impacts

AESTHETICS:

Mitigation Measure #1: Prior to approval of any Land Use and/or Building Permits, the Board of Architectural Review shall approve the architectural design, materials, and colors, of all new residential and accessory structures.

Mitigation Measure #2: All exterior night lighting installed on the project site shall be of low intensity, low glare design, and shall be hooded to direct light downward onto the subject parcel and prevent spill-over onto adjacent parcels. All proposed lighting shall be reviewed and approved by the Board of Architectural Review.

Mitigation Measure #3: The retaining walls shall be in tones compatible with surrounding terrain using textured materials or construction methods, which create a textured effect. The wall shall be designed to include pilasters, capping and proper architectural transitioning due to the varying grade heights. Native vegetation to screen retaining walls shall be planted and maintained by the homeowner.

GEOLOGY:

Mitigation Measure #4

The Applicant/Property Owner shall incorporate and implement all the recommendations outlined in the Soils Engineering Report prepared by Earth Systems Pacific on November 29, 2004, including but not limited to site preparation, grading, utility trenches, foundations, slab-on-grade and exterior flatwork, retaining walls, pavement sections and drainage around improvements.

HYDROLOGY

Mitigation Measure #5

The applicant shall submit proof of exemption or a copy of the Notice of Intent to obtain coverage under the Construction General Permit of the National Pollutant Discharge Elimination System issued by the California Regional Water Quality Control Board. **Plan Requirements and Timing:** Prior to approval of Land Use Permits the applicant shall submit proof of exemption or a copy of the Notice of Intent and shall provide a copy of the required Storm Water Pollution Prevention Plan (SWPPP) to P&D. A copy of the SWPPP must be maintained on the project site during grading and construction activities. **MONITORING:** The City Engineer shall review the documentation prior to approval of Land Use Permits. The City Engineer shall site inspect during construction for compliance with the SWPPP.

NOISE:

Mitigation Measure #6: Hours of construction shall be limited to 7:30 am to 5:30 pm weekdays. No construction shall be allowed on Saturday, Sunday, State or National holidays except as approved in writing by the Public Works Director, or his designee, or in the case of an emergency for the immediate preservation of life, health, or property. Notwithstanding the foregoing, an individual property owner or tenant solely, (not including any volunteer or paid construction crew) in addition to the above permissible hours of construction may also construct, repair, or remodel his or her real property or any structure on such property, pursuant to obtaining the required permits, during the hours 5:30 p.m. to 8:00 p.m. on weekdays and 8:00 a.m. to 8:00 p.m. on Saturday, Sunday and National legal holidays. All noise or sounds associated with the construction, gardening and/or maintenance activities of said property shall not create any inconvenience or annoyance to the general public beyond the boundary lines of the property.

PUBLIC SERVICES:

Mitigation Measure #7

The project shall provide for an onsite private drainage system to convey storm flows to Alamo Pintado Creek. Feasibility shall be determined by the Public Works Department. Storm drain system shall be maintained for the life of the project by the Homeowners' Association. **Plan Requirements:** A drainage plan showing the location and design of the

storm drain system shall be submitted to P&D and Public Works for review and approval. Installation shall be ensured through a performance security provided by the applicant. Long-term maintenance requirements shall be specified in the Homeowner Association CC&R's. **Timing:** Onsite drainage system shall be installed prior to occupancy clearance. **Monitoring:** Public Works shall site inspect for installation of drainage system. Public Works sign-off is required on final grading/drainage plans, and Planning Department sign-off is required for release of the performance security.

7.0 MANDATORY FINDINGS OF SIGNIFICANCE -	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant	No Impact
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?				X
b) Does the project have impacts that are individually limited, but cumulatively considerable? (cumulatively considerable means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	X			
c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?				X

Discussion:

b) The intersection of High Meadow Road and State Highway 246 poses a safety hazard for vehicles entering and leaving the project. The impacts are increased with the cumulative effects of adding the existing residents on High Meadow Road (18 homes) to the proposed project impacts.

The proposed project may be satisfactorily designed or conditioned to mitigate adverse impacts, but a comprehensive project EIR is being required to determine the possibility and suitability of mitigation measures.

8.0 PROJECT ALTERNATIVES

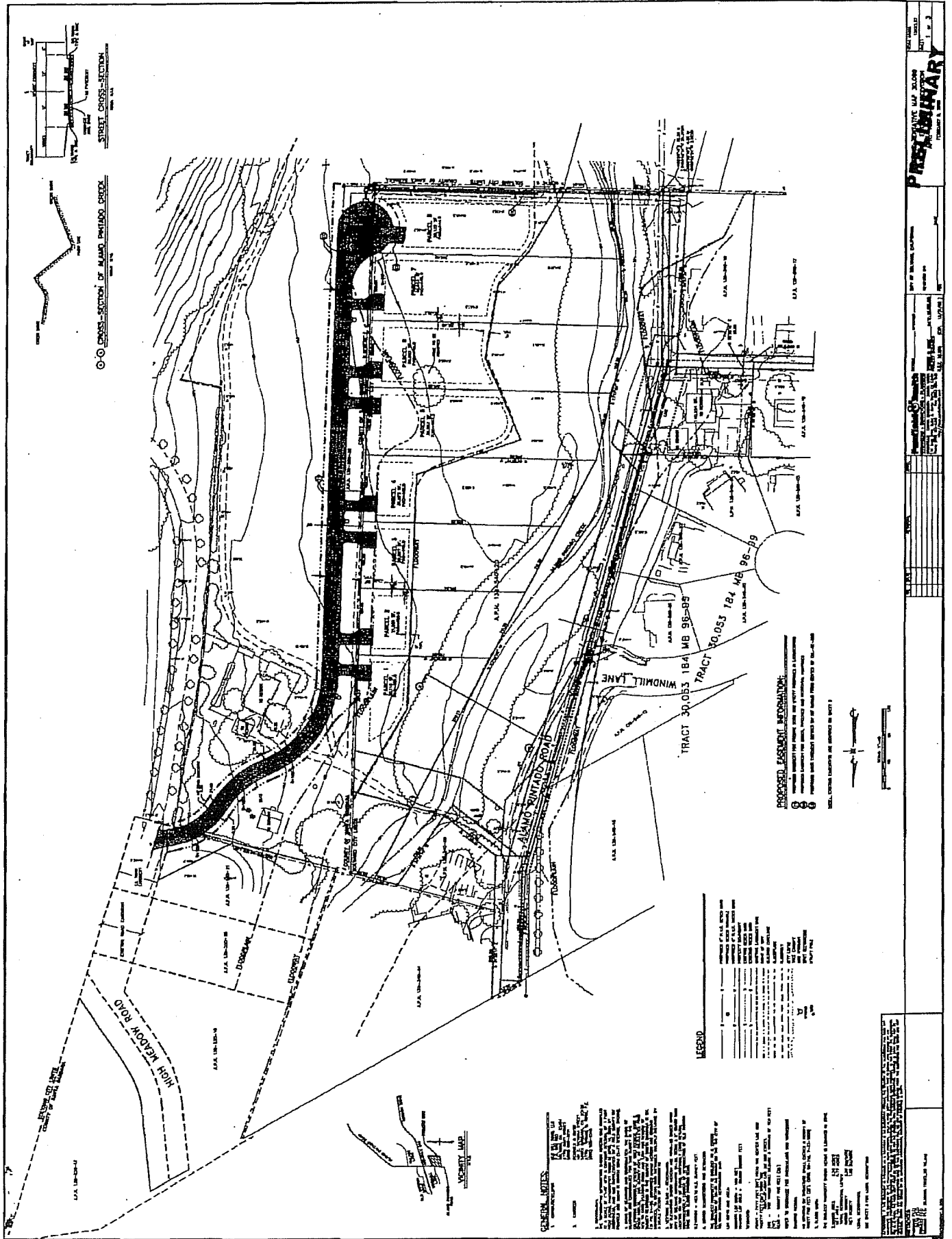
If potentially significant, adverse unmitigable impacts would result; identify potential project alternatives to minimize these effects (reduced project, alternative use, alternative site locations, etc).

No project alternatives have been identified. The No-Project Alternative (no division of property) would avoid the impacts.

ATTACHMENTS:

- A. Proposed Tentative Parcel Map

ATTACHMENT A: Proposed Vesting Tentative Map



Received
8/19/05

**CITY OF SOLVANG
STATE OF CALIFORNIA**

**NOTICE OF PUBLIC
ENVIRONMENTAL IMPACT REPORT
SCOPING MEETING**

NOTICE IS HEREBY GIVEN THAT THE CITY OF SOLVANG WILL HOLD AN INFORMAL PUBLIC ENVIRONMENTAL IMPACT REPORT (EIR) SCOPING MEETING IN THE COUNCIL CHAMBERS, SOLVANG MUNICIPAL CENTER, 1644 OAK STREET, SOLVANG, CALIFORNIA, ON AUGUST, 31, 2005 AT 7:00 P.M. OR AS SOON THEREAFTER AS THE MATTER MAY BE HEARD.

THE SCOPING MEETING WILL DISCUSS:

**The ENVIRONMENTAL IMPACT REPORT for the
OLD MILL ROAD VESTING TENTATIVE TRACT MAP**

APN: 139-540-020; 1945 Old Mill Road

Location: Located at the southern terminus of Alamo Pintado Road, at the intersection of Old Mill Road and Alamo Pintado Road.

Project Description: The applicant proposes to divide a 9.24-acre parcel into nine (9) single-family residential lots in the 20-R-1 Zone District.

The Initial Environmental Study has identified the following EIR issues:

- **Biological Resources:** Potential impacts to Alamo Pintado Creek and riparian habitat.
- **Cultural Resources:** Potential impacts to historical and/or archaeological resources.
- **Flooding/Hydrology Water Quality:** Potential impacts to directional flow and residuals.
- **Population and Housing:** Potential for growth inducing impacts.
- **Transportation and Circulation:** Increased traffic hazards.
- **Cumulative Effects**

This informal meeting will discuss the scope, focus, environmental issues and effects, mitigation measures, alternatives, and methods of assessment of the project. The EIR consultant will be present to hear comments from the community. All interested parties are invited to attend said Public Scoping Meeting and express opinions regarding the item outlined above. Written comments will also be accepted. If a verbal presentation is given at the public meeting, please have a written copy of comments to give staff at the meeting for inclusion into the records. Information on the Old Mill Vesting Tentative Tract Map will be available at the City Hall offices located at the Municipal Center Annex, 411 Second Street, Solvang, for public review.

Shelley Stahl
Planning/Community Development Director



STATE OF CALIFORNIA

Governor's Office of Planning and Research
State Clearinghouse and Planning Unit



Arnold
Schwarzenegger
Governor

Sean Walsh
Director

Notice of Preparation

August 19, 2005

To: Reviewing Agencies
Re: Old Mill Road VTTM
SCH# 2005081109

Attached for your review and comment is the Notice of Preparation (NOP) for the Old Mill Road VTTM draft Environmental Impact Report (EIR).

Responsible agencies must transmit their comments on the scope and content of the NOP, focusing on specific information related to their own statutory responsibility, within 30 days of receipt of the NOP from the Lead Agency. This is a courtesy notice provided by the State Clearinghouse with a reminder for you to comment in a timely manner. We encourage other agencies to also respond to this notice and express their concerns early in the environmental review process.

Please direct your comments to:

Shelley Stahl
City of Solvang
1644 Oak Street
Solvang, CA 93464

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

If you have any questions about the environmental document review process, please call the State Clearinghouse at (916) 445-0613.

Sincerely,

for Sean Morgan
for Scott Morgan
Associate Planner, State Clearinghouse

Attachments
cc: Lead Agency

Document Details Report
State Clearinghouse Data Base

SCH# 2005081109
Project Title Old Mill Road VTTM
Lead Agency Solvang, City of

Type NOP Notice of Preparation
Description Single family residential lot subdivision.

Lead Agency Contact

Name Shelley Stahl
Agency City of Solvang
Phone 805-688-4414
email
Address 1644 Oak Street
City Solvang
State CA **Zip** 93464
Fax

Project Location

County Santa Barbara
City Solvang
Region
Cross Streets Santa Barbara
Parcel No. 139-540-020
Township **Range** **Section** **Base**

Proximity to:

Highways 246
Airports
Railways
Waterways
Schools
Land Use SF Res.

Project Issues Archaeologic-Historic; Flood Plain/Flooding; Traffic/Circulation; Vegetation; Wetland/Riparian; Wildlife; Growth Inducing

Reviewing Agencies Resources Agency; Department of Parks and Recreation; Department of Water Resources; Department of Fish and Game, Region 5; Department of Health Services; Native American Heritage Commission; State Lands Commission; California Highway Patrol; Caltrans, District 5; Regional Water Quality Control Board, Region 3

Date Received 08/19/2005 **Start of Review** 08/19/2005 **End of Review** 09/19/2005

Resources Agency

- Resources Agency
Nadell Gayou
- Dept. of Boating & Waterways
David Johnson
- California Coastal Commission
Elizabeth A. Fuchs
- Colorado River Board
Gerald R. Zimmerman
- Dept. of Conservation
Roseanne Taylor
- California Energy Commission
Roger Johnson
- Dept. of Forestry & Fire Protection
Allen Robertson
- Office of Historical Preservation
Wayne Donaldson
- Dept. of Parks & Recreation
Environmental Stewardship Section
- Reclamation Board
DeeDee Jones
- S.F. Bay Conservation & Dev't. Comm.
Steve McAdam
- Dept. of Water Resources
Resources Agency
Nadell Gayou

- Fish & Game Region 3
Robert Floerke
- Fish & Game Region 4
Mike Mulligan
- Fish & Game Region 5
Don Chadwick
- Fish & Game Region 6
Gabrina Gatchel
- Fish & Game Region 6 I/M
Tarryn Allen
- Dept. of Fish & Game M
George Isaac

- Other Departments
- Food & Agriculture
Steve Shaffer
- Dept. of General Services
Public School Construction
- Dept. of General Services
Environmental Services Section
Robert Sleppy
- Dept. of Health Services
Veronica Ramerz
- Dept. of Health/Drinking Water

- Public Utilities Commission
Ken Lewis
- State Lands Commission
Jean Sarino
- Tahoe Regional Planning Agency (TRPA)
Cherry Jacques
- Business, Trans & Housing
- Caltrans - Division of Aeronautics
Sandy Hesnard
- Caltrans - Planning
Teri Pencovic
- California Highway Patrol
John Olejnik
- Office of Special Projects
- Housing & Community Development
Lisa Nichols
- Housing Policy Division

- Dept. of Transportation
- Caltrans, District 1
Rex Jackman
- Caltrans, District 2
Marcelino Gonzalez
- Caltrans, District 3
Katherine Eastham
- Caltrans, District 4
Tim Sable
- Caltrans, District 5
David Murray
- Caltrans, District 6
Marc Birnbaum
- Caltrans, District 7
Cheryl J. Powell

- Caltrans, District 8
Dan Kopulsky
- Caltrans, District 9
Gayle Rosander
- Caltrans, District 10
Tom Dumas
- Caltrans, District 11
Mario Orso
- Caltrans, District 12
Bob Joseph
- Air Resources Board
- Airport Projects
Jim Lerner
- Transportation Projects
Kurt Karperos
- Industrial Projects
Mike Tollstrup
- California Integrated Waste Management Board
Sue O'Leary
- State Water Resources Control Board
Jim Hockenberry
- State Water Resources Control Board
Division of Financial Assistance
- State Water Resources Control Board
Student Intern, 401 Water Quality Certification Unit
Division of Water Quality
- State Water Resources Control Board
Steven Herrera
Division of Water Rights
- Dept. of Toxic Substances Control
CEQA Tracking Center
- Department of Pesticide Regulation

- Fish & Game Region 1
Donald Koch
- Fish & Game Region 2
Banky Curtis

Regional Water Quality Control Board (RWQCB)

- RWQCB 1
Cathleen Hudson
North Coast Region (1)
- RWQCB 2
Environmental Document Coordinator
San Francisco Bay Region (2)
- RWQCB 3
Central Coast Region (3)
- RWQCB 4
Jonathan Bishop
Los Angeles Region (4)
- RWQCB 5S
Central Valley Region (5)
- RWQCB 5F
Central Valley Region (5)
Fresno Branch Office
- RWQCB 5R
Central Valley Region (5)
Redding Branch Office
- RWQCB 6
Lahontan Region (6)
- RWQCB 6V
Lahontan Region (6)
Victorville Branch Office
- RWQCB 7
Colorado River Basin Region (7)
- RWQCB 8
Santa Ana Region (8)
- RWQCB 9
San Diego Region (9)

Other _____

State of California - The Resources Agency

ARNOLD SCHWARZENEGGER, Governor



DEPARTMENT OF FISH AND GAME

http://www.dfg.ca.gov
 4949 Viewridge Avenue
 San Diego, CA 92123
 (858) 467-4201



TO:
DAVID FOOTE

September 19, 2005

Shelley Stahl
 City of Solvang
 1644 Oak St.
 Solvang, CA 93464

**Notice of Preparation of a Draft Environmental Impact Report
 For the Old Mill Road Vesting Tentative Tract Map Project
 SCH #2005081109**

The Department of Fish and Game (Department) appreciates this opportunity to comment on the above-referenced project, relative to impacts to biological resources. The proposed project involves the sub-division of a 9.24 acre parcel into 9 residential lots at 1045 Old Mill Road, in the City of Solvang. Eight single-family residences are proposed for construction on the east bank of Alamo Pintado Creek.

To enable Department staff to adequately review and comment on the proposed project we recommend the following information, **where applicable**, be included in the Draft Environmental Impact Report:

1. A complete, **recent** assessment of flora and fauna within and adjacent to the project area, with particular emphasis upon identifying endangered, threatened, and locally unique species and sensitive habitats.
 - a. A thorough **recent** assessment of rare plants and rare natural communities, following the Department's Guidelines for Assessing Impacts to Rare Plants and Rare Natural Communities (attachment).
 - b. A complete, **recent** assessment of sensitive fish, wildlife, reptile, and amphibian species. Seasonal variations in use of the project area should also be addressed. Recent, focused, species-specific surveys, conducted at the appropriate time of year and time of day when the sensitive species are active or otherwise identifiable, are required. Acceptable species-specific survey procedures should be developed in consultation with the Department and U.S. Fish and Wildlife Service.
 - c. **Rare, threatened, and endangered species to be addressed should include all those which meet the California Environmental Quality Act (CEQA) definition (see CEQA Guidelines, § 15380).**
 - d. The Department's California Natural Diversity Data Base in Sacramento should be contacted at (916) 324-3812 to obtain current information on any previously

Ms. Shelley Stahl
September 19, 2005
Page 2 of 4

reported sensitive species and habitats, including Significant Natural Areas identified under Chapter 12 of the Fish and Game Code. Also, any Significant Ecological Areas (SEAs), Significant Natural Areas (SNAs), or Environmentally Sensitive Habitats (ESHs) or any areas that are considered sensitive by the local jurisdiction located in or adjacent to the project area must be addressed.

2. A thorough discussion of direct, indirect, and cumulative impacts expected to adversely affect biological resources, with specific measures to offset such impacts. This discussion should focus on maximizing avoidance, and minimizing impacts.
 - a. CEQA Guidelines, § 15125(a), direct that knowledge of the regional setting is critical to an assessment of environmental impacts and that special emphasis should be placed on resources that are rare or unique to the region.
 - b. Project impacts should also be analyzed relative to their effects on off-site habitats and populations. Specifically, this should include nearby public lands, open space, adjacent natural habitats, and riparian ecosystems. Impacts to and maintenance of wildlife corridor/movement areas, including access to undisturbed habitat in adjacent areas, should be fully evaluated and provided. The analysis should also include a discussion of the potential for impacts resulting from such effects as increased vehicle traffic and outdoor artificial night lighting.
 - c. A cumulative effects analysis should be developed as described under CEQA Guidelines, § 15130. General and specific plans, as well as past, present, and anticipated future projects, should be analyzed relative to their impacts on similar plant communities and wildlife habitats.
 - d. Impacts to migratory wildlife affected by the project should be fully evaluated. This can include such elements as migratory butterfly roost sites and neo-tropical bird and waterfowl stop-over and staging sites. All migratory nongame native bird species are protected by international treaty under the Federal Migratory Bird Treaty Act (MBTA) of 1918 (50 C.F.R. Section 10.13). Sections 3503, 3503.5 and 3513 of the California Fish and Game Code prohibit take of birds and their active nests, including raptors and other migratory nongame birds as listed under the MBTA.
 - e. Impacts to all habitats from City or County required Fuel Modification Zones (FMZ). Areas slated as mitigation for loss of habitat shall not occur within the FMZ.
 - f. Proposed project activities (including disturbances to vegetation) should take place outside of the breeding bird season (February 1- August 15) to avoid take (including disturbances which would cause abandonment of active nests containing eggs and/or young). If project activities cannot avoid the breeding bird season, nest surveys should be conducted and active nests should be avoided and provided with a minimum buffer as determined by a biological monitor (the Department recommends a minimum 500 foot buffer for all active raptor nests).

Ms. Shelley Stahl
September 19, 2005
Page 3 of 34

3. An EIR shall describe feasible measures which could minimize significant adverse impacts (CEQA Guidelines §15126.4(a)(1)). Mitigation measures for project impacts to sensitive plants, animals, and habitats should emphasize evaluation and selection of alternatives which avoid or otherwise minimize impacts. Compensation for unavoidable impacts through acquisition and protection of high quality habitat elsewhere should be addressed.
 - a. The Department considers Rare Natural Communities as threatened habitats having both regional and local significance. Thus, these communities should be fully avoided and otherwise protected from project-related impacts. The List of California Terrestrial Natural Communities is available on request or may be viewed and downloaded online by visiting the Department's website at http://www.dfg.ca.gov/whdab/html/natural_communities.html.
 - b. The Department generally does not support the use of relocation, salvage, and/or transplantation as mitigation for impacts to rare, threatened, or endangered species. Department studies have shown that these efforts are experimental in nature and largely unsuccessful.
4. A range of alternatives should be analyzed to ensure that alternatives to the proposed project are fully considered and evaluated. A range of alternatives which avoid or otherwise minimize impacts to sensitive biological resources including wetlands/riparian habitats, alluvial scrub, coastal sage scrub, native woodlands, etc. should be included. Specific alternative locations should also be evaluated in areas with lower resource sensitivity where appropriate.
5. A California Endangered Species Act (CESA) Permit must be obtained, if the project has the potential to result in "take" of species of plants or animals listed under CESA, either during construction or over the life of the project. CESA Permits are issued to conserve, protect, enhance, and restore State-listed threatened or endangered species and their habitats. Early consultation is encouraged, as significant modification to the proposed project and mitigation measures may be required in order to obtain a CESA Permit. Revisions to the Fish and Game Code, effective January 1998, require that the Department issue a separate CEQA document for the issuance of a CESA permit unless the project CEQA document addresses all project impacts to listed species and specifies a mitigation monitoring and reporting program that will meet the requirements of a CESA permit. For these reasons, the following information is requested:
 - a. Biological mitigation monitoring and reporting proposals should be of sufficient detail and resolution to satisfy the requirements for a CESA Permit.
 - b. A Department-approved Mitigation Agreement and Mitigation Plan are required for plants listed as rare under the Native Plant Protection Act.
6. The Department opposes the elimination of watercourses and/or their channelization or conversion to subsurface drains. All wetlands and watercourses, whether intermittent,

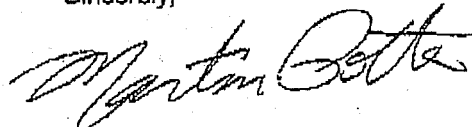
Ms. Shelley Stahl
September 19, 2005
Page 4 of 4

ephemeral, or perennial, must be retained and provided with substantial setbacks which preserve the riparian and aquatic habitat values and maintain their value to on-site and off-site wildlife populations.

- a. The Department requires a streambed alteration agreement, pursuant to Section 1800 et seq. of the Fish and Game Code, with the applicant prior to any direct or indirect impact to a lake or stream bed, bank or channel or associated riparian resources. The Department's issuance of a stream bed alteration agreement may be a project that is subject to CEQA. To facilitate our issuance of the agreement when CEQA applies, the Department as a responsible agency under CEQA may consider the local jurisdiction's (lead agency) document for the project. To minimize additional requirements by the Department under CEQA the document should fully identify the potential impacts to the lake, stream or riparian resources and provide adequate avoidance, mitigation, monitoring and reporting commitments for issuance of the agreement. Early consultation is recommended, since modification of the proposed project may be required to avoid or reduce impacts to fish and wildlife resources.

The Department suggests a pre-project or early consultation planning meeting for all projects. To make an appointment, please call Martin Potter, Wildlife Biologist, at (805) 640-3677. Thank you for this opportunity to provide comment.

Sincerely,



For Morgan Wehtje
Environmental Scientist IV

attachment

cc: Mr. Martin Potter
Department of Fish and Game
Ojai, California

Mr. Scott Morgan
State Clearinghouse
Sacramento, California

Guidelines for Assessing the Effects of Proposed Projects on Rare, Threatened, and Endangered Plants and Natural Communities

State of California
THE RESOURCES AGENCY
Department of Fish and Game
December 9, 1983
Revised May 8, 2000

The following recommendations are intended to help those who prepare and review environmental documents determine when a botanical survey is needed, who should be considered qualified to conduct such surveys, how field surveys should be conducted, and what information should be contained in the survey report. The Department may recommend that lead agencies not accept the results of surveys that are not conducted according to these guidelines.

1. Botanical surveys are conducted in order to determine the environmental effects of proposed projects on all rare, threatened, and endangered plants and plant communities. Rare, threatened, and endangered plants are not necessarily limited to those species which have been "listed" by state and federal agencies but should include any species that, based on all available data, can be shown to be rare, threatened, and/or endangered under the following definitions:

A species, subspecies, or variety of plant is "endangered" when the prospects of its survival and reproduction are in immediate jeopardy from one or more causes, including loss of habitat, change in habitat, over-exploitation, predation, competition, or disease. A plant is "threatened" when it is likely to become endangered in the foreseeable future in the absence of protection measures. A plant is "rare" when, although not presently threatened with extinction, the species, subspecies, or variety is found in such small numbers throughout its range that it may be endangered if its environment worsens.

Rare natural communities are those communities that are of highly limited distribution. These communities may or may not contain rare, threatened, or endangered species. The most current version of the California Natural Diversity Database's List of California Terrestrial Natural Communities may be used as a guide to the names and status of communities.

2. It is appropriate to conduct a botanical field survey to determine if, or to the extent that, rare, threatened, or endangered plants will be affected by a proposed project when:
 - a. Natural vegetation occurs on the site, it is unknown if rare, threatened, or endangered plants or habitats occur on the site, and the project has the potential for direct or indirect effects on vegetation; or
 - b. Rare plants have historically been identified on the project site, but adequate information for impact assessment is lacking.
3. Botanical consultants should possess the following qualifications:
 - a. Experience conducting floristic field surveys;
 - b. Knowledge of plant taxonomy and plant community ecology;
 - c. Familiarity with the plants of the area, including rare, threatened, and endangered species;
 - d. Familiarity with the appropriate state and federal statutes related to plants and plant collecting; and,
 - e. Experience with analyzing impacts of development on native plant species and communities.
4. Field surveys should be conducted in a manner that will locate any rare, threatened, or endangered species that may be present. Specifically, rare, threatened, or endangered plant surveys should be:
 - a. Conducted in the field at the proper time of year when rare, threatened, or endangered species are both evident and identifiable. Usually, this is when the plants are flowering.

When rare, threatened, or endangered plants are known to occur in the type(s) of habitat present in the project area, nearby accessible occurrences of the plants (reference sites) should be observed to determine that the species are identifiable at the time of the survey.

- b. Floristic in nature. A floristic survey requires that every plant observed be identified to the extent necessary to determine its rarity and listing status. In addition, a sufficient number of visits spaced throughout the growing season are necessary to accurately determine what plants exist on the site. In order to properly characterize the site and document the completeness of the survey, a complete list of plants observed on the site should be included in every botanical survey report.
 - c. Conducted in a manner that is consistent with conservation ethics. Collections (voucher specimens) of rare, threatened, or endangered species, or suspected rare, threatened, or endangered species should be made only when such actions would not jeopardize the continued existence of the population and in accordance with applicable state and federal permit requirements. A collecting permit from the Habitat Conservation Planning Branch of DFG is required for collection of state-listed plant species. Voucher specimens should be deposited at recognized public herbaria for future reference. Photography should be used to document plant identification and habitat whenever possible, but especially when the population cannot withstand collection of voucher specimens.
 - d. Conducted using systematic field techniques in all habitats of the site to ensure a thorough coverage of potential impact areas.
 - e. Well documented. When a rare, threatened, or endangered plant (or rare plant community) is located, a California Native Species (or Community) Field Survey Form or equivalent written form, accompanied by a copy of the appropriate portion of a 7.5 minute topographic map with the occurrence mapped, should be completed and submitted to the Natural Diversity Database. Locations may be best documented using global positioning systems (GPS) and presented in map and digital forms as these tools become more accessible.
5. Reports of botanical field surveys should be included in or with environmental assessments, negative declarations and mitigated negative declarations, Timber Harvesting Plans (THPs), EIR's, and EIS's, and should contain the following information:
- a. Project description, including a detailed map of the project location and study area.
 - b. A written description of biological setting referencing the community nomenclature used and a vegetation map.
 - c. Detailed description of survey methodology.
 - d. Dates of field surveys and total person-hours spent on field surveys.
 - e. Results of field survey including detailed maps and specific location data for each plant population found. Investigators are encouraged to provide GPS data and maps documenting population boundaries.
 - f. An assessment of potential impacts. This should include a map showing the distribution of plants in relation to proposed activities.
 - g. Discussion of the significance of rare, threatened, or endangered plant populations in the project area considering nearby populations and total species distribution.
 - h. Recommended measures to avoid impacts.
 - i. A list of all plants observed on the project area. Plants should be identified to the taxonomic level necessary to determine whether or not they are rare, threatened or endangered.
 - j. Description of reference site(s) visited and phenological development of rare, threatened, or endangered plant(s).
 - k. Copies of all California Native Species Field Survey Forms or Natural Community Field Survey Forms.
 - l. Name of field investigator(s).
 - j. References cited, persons contacted, herbaria visited, and the location of voucher specimens.

DEPARTMENT OF TRANSPORTATION

50 HIGUERA STREET
SAN LUIS OBISPO, CA 93401-5415
PHONE (805. 549-3101)
FAX (805. 549-3077
TDD (805. 549-3259
<http://www.dot.ca.gov/dist05/>



*Flex your power!
Be energy efficient!*

September 13, 2005

SB-246-PM29.88
SCH#2005081109

David Foote
City of Solvang
P. O. Box 107
Solvang CA 93464-0107

OLD MILL ROAD VESTING TENTATIVE TRACT MAP-NOP

Dear Mr. Foote:

The California Department of Transportation (Department) District 5, Development Review, has reviewed the above-referenced documents and offers the following comments for your consideration:

1. Page 21 Item (d) of the initial study states, "The intersection of High Meadow Road and State Route 246 poses a safety hazard for vehicles entering and leaving the project. The entrance is very close to the intersection of Alamo Pintado Road and State Highway 246". The EIR needs to provide a detailed discussion on this topic including mitigation measures. The EIR also needs to include a detailed Traffic Study. The current photolog shows the intersection of SR 246 & High Meadow Road does not have left or right turn channelization. Traffic Operations recommends that this project construct left turn channelization or functional equivalent as a condition of approval.
2. In order to ensure the traffic study in the Draft EIR includes the information needed by the Department to analyze impacts (both cumulative and project-specific), it is recommended that the analysis be prepared in accordance with the *Department's "Guide for the Preparation of Traffic Impact Studies."* A copy of the guidelines is available on the Caltrans Website at http://www.dot.ca.gov/hq/tpp/offices/ocp/ier_guidelines_procedures.htm.
3. Because the Department is responsible for the safety, operations, and maintenance of the State transportation system, our Level of Service (LOS) standards should be used to determine the significance of the project's impact. We endeavor to maintain a target LOS at the transition between LOS C and LOS D on all State transportation facilities. In cases where a State facility is already operating at an unacceptable LOS, *any* additional trips added should be considered a significant cumulative traffic impact, and should be mitigated accordingly.

"Caltrans improves mobility across California"

Old Mill Road Vesting Tentative Tract Map-NOP-Foote

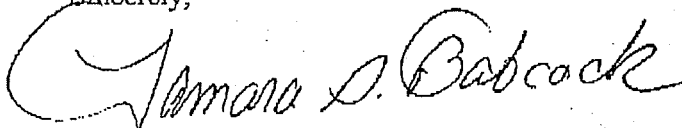
September 13, 2005

Page 2

4. The City of Solvang is proposing to widen Alamo Pintado Creek Bridge (Bridge # 51-130) as part of a project to improve operations at the Alamo Pintado/Route 256 intersection. The LOS of this intersection should agree for both the proposed development and the City sponsored highway project.
5. As acknowledged in the OP, A CLOMR from FEMA will be required before the project can be built. The Department has no concerns as long as the CLOMR is obtained.
6. Due to the preliminary nature of the information describing this project some items may not have been identified in this review. Significant mitigation measures such as left turn channelization, sight distance benches, and state highway geometric cross section standards while not identified at this point may be required as a condition of the encroachment permit for any work within the State Highway System. Detailed information such as complete engineering drawings, traffic studies, hydraulic calculations and environmental reports outlining impacts to environmental resources (biological, cultural, visual, etc.) within the state R/W may need to be identified, quantified and submitted for the Encroachment Permit review. These as well as other documents may need to be submitted and reviewed as part of the encroachment permit application before the Department can make a final determination as to the appropriateness of the mitigation measures within the State Highway System. The recommendations made in this review should be considered preliminary and subject to change based on more detailed review of the applicants final engineered construction level plans, final engineered traffic studies and actual field review of the proposed project site. In all cases, any deviation from the Departments Design standards should not be considered to be a viable option until the applicant has been issued an approved exception to Design Standards.

District 5 staff has been, and will continue to be, committed to working very closely with you to achieve a shared vision of how the transportation system should and can accommodate interregional and local travel. Please don't hesitate to call me at (805) 549-3615.

Sincerely,



TAMARA S. BABCOCK
Associate Transportation Planner
District 5 Development Review Coordinator

cc: Roger Barnes (D5)
David M. Murray (D5)
Tim Rochte (D5)
Lyn Wickham (D5)
Pat Mickelson (D5)
Paul Martinez (D5)
Michael Powers (SBCAG)
File

Received
9-14-05

September 12, 2005

Shelley Stahl
Community Development Director
Planning & Community Director Dept.
City of Solvang
PO Box 107
Solvang, CA 93464

RE: Notice Of Preparation of a Draft Environmental Impact Report
Old Mill Road Vesting Tentative Tract Map

Dear Mrs. Stahl:

We were out of town and unable to attend the scoping meeting regarding this project. However, we read a report of the meeting in the *Santa Ynez Valley News* and would like to add our comments to the record.

We have concerns regarding the historic flow of the Alamo Pintado Creek in flood times and how a project of this magnitude with fill and a wall would potentially affect it. Specifically, we are concerned that the project would put the properties to the west and downstream of the project at risk. We ask you to research the events from the storms of 1969 to the present day and chronicle how the Alamo Pintado Creek flooded roads and nearby fields. If this project should go forward as proposed, we shall insist that the City of Solvang agree in writing that should there be any flooding of the west side of the proposed project that the City will assume full liability and pay for any and all property and/or road damage.

Second, since the new owners purchased the land, there has been alteration of the wetlands surrounding this project. Willows have been cut, mature trees stripped of limbs and branches, and some removed. If you compare aerial photographs of the area as it existed before 2002 with the present day, you will see the changes that have occurred. As a mitigation measure, the City should list all plants and trees in the wetlands and require that they not be disturbed in any way. Further, the agreement should be included in all permitting associated with the transfer of ownership of the properties. There is ample evidence of agreements broken with the development of the previous Aaron Petersen development on Old Mill Road. For documentation of the Conditions of Approval requiring that mature trees and vegetation be protected and undisturbed and the changes in the property as it exists today, see aerial photos and city records and compare these with a site visit.

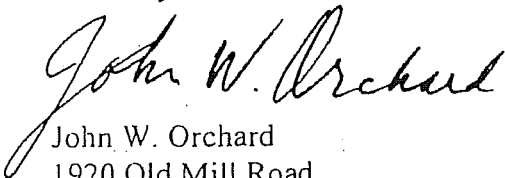
Third, the property is adjacent to the National Historic Landmark District. As such, the City is required to notify the Dept. of the Interior, National Parks Service in Washington D.C. to give it an opportunity to comment on how the project may impact the National Historic Landmark designation.

Comments of Nancy and John Orchard
Notice of Preparation EIR Old Mill Road Vesting Tentative Tract Map
September 12, 2005
Page 2

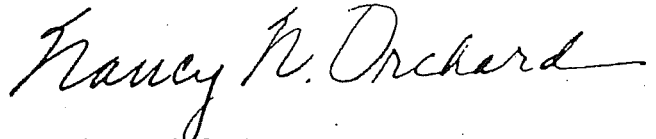
If you should have any questions regarding this project or if you would like historical data concerning the area surrounding the proposed project, please contact us at your earliest convenience.

Thank you for the opportunity to voice our concerns and comment on this project.

Sincerely,



John W. Orchard
1920 Old Mill Road
Solvang, CA 93463
805-688-8356
805-925-9501
e-mail NNOrchard@aol.com



Nancy N. Orchard

CC: David Foote, Firma, 849 Monterey Street, San Luis Obispo, CA 93401
Faxed and Mailed to respective parties on September 12, 2005

Appendix B –Traffic Worksheets

Old Mill Road Residential Project Traffic Analysis

Prepared For:

firma
849 Monterey Street, Suite 205
San Luis Obispo, CA 93401

Prepared By:

Orosz Engineering Group, Inc
1627 Calzada Avenue
Santa Ynez, CA 93460

Stephen A. Orosz, PE, PTOE
Traffic Engineer – CA 1209

OEG Ref 60305

December 16, 2005

Location Description	Rate Group (RUS)	No. of Accidents / Significance Multi	No. of Accidents / Significance			Pers Kld Inj	ADT Main X-St	Total MV+ or MVM	Actual		Accident Rates Average			
			Tot	Fat	Inj				F+I	Fat	F+I	Tot	Fat	F+I
SB 246 030 360 HIGH MEADOW RD	I 16	4	0	0	0	0	17.7	19.41 +	0.000	.00	.21	0.003	.06	.14
01-0001 2001-10-01	R	36 mo.				0	.0							

Accident Rates expressed as: # of accidents / Million vehicle miles

+ denotes that Million Vehicles (MV) used in accident rates instead (for Intersections and ramps).

For Ramps RUS only considers R(Rural) U(Urban)

Intersection Capacity Utilization
2: Mission Drive/ Highway 246 & Alamo Pintado Road

12/16/2005

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	287	491	42	14	506	166	38	29	31	150	11	279
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			No			No			No
Ideal Flow	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120											
Volume Combined (vph)	287	491	42	14	506	166	38	60	0	150	11	279
Lane Utilization Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.92	0.85	0.95	1.00	0.85
Saturated Flow (vph)	1710	1800	1530	1710	1800	1530	1710	3162	0	1710	1800	1530
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	20.1	32.7	3.3	1.0	33.7	13.0	2.7	2.3	0.0	10.5	0.7	21.9
Adj Reference Time (s)	24.1	36.7	8.0	8.0	37.7	17.0	8.0	8.0	0.0	14.5	8.0	25.9
Permitted Option												
Adj Saturation A (vph)	114	1800		114	1800		114	1581		114	1800	
Reference Time A (s)	302.1	32.7		14.7	33.7		40.0	2.3		157.9	0.7	
Adj Saturation B (vph)	NA	NA		NA	NA		0	3162		0	1800	
Reference Time B (s)	NA	NA		NA	NA		10.7	2.3		18.5	0.7	
Reference Time (s)		302.1			33.7			10.7			18.5	
Adj Reference Time (s)		306.1			37.7			14.7			22.5	
Split Option												
Ref Time Combined (s)	20.1	32.7		1.0	33.7		2.7	2.3		10.5	0.7	
Ref Time Seperate (s)	20.1	32.7		1.0	33.7		2.7	1.1		10.5	0.7	
Reference Time (s)	32.7	32.7		33.7	33.7		2.7	2.7		10.5	10.5	
Adj Reference Time (s)	36.7	36.7		37.7	37.7		8.0	8.0		14.5	14.5	
Summary	EB:WB		NB:SB		Combined							
Protected Option (s)	61.9		22.5									
Permitted Option (s)	306.1		22.5									
Split Option (s)	74.5		22.5									
Minimum (s)	61.9		22.5		84.4							
Right Turns	EBR		WBR		SBR							
Adj Reference Time (s)	8.0		17.0		25.9							
Cross Thru Ref Time (s)	8.0		8.0		37.7							
Oncoming Left Ref Time (s)	8.0		24.1		8.0							
Combined (s)	24.0		49.2		71.6							

Intersection Summary

Intersection Capacity Utilization 70.3% ICU Level of Service C
Reference Times and Phasing Options do not represent an optimized timing plan.

Intersection Capacity Utilization

2: Mission Drive/ Highway 246 & Alamo Pintado Road

12/16/2005

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	287	495	42	14	507	167	38	29	31	151	11	279
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			No			No			No
Ideal Flow	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120											
Volume Combined (vph)	287	495	42	14	507	167	38	60	0	151	11	279
Lane Utilization Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.92	0.85	0.95	1.00	0.85
Saturated Flow (vph)	1710	1800	1530	1710	1800	1530	1710	3162	0	1710	1800	1530
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	20.1	33.0	3.3	1.0	33.8	13.1	2.7	2.3	0.0	10.6	0.7	21.9
Adj Reference Time (s)	24.1	37.0	8.0	8.0	37.8	17.1	8.0	8.0	0.0	14.6	8.0	25.9
Permitted Option												
Adj Saturation A (vph)	114	1800		114	1800		114	1581		114	1800	
Reference Time A (s)	302.1	33.0		14.7	33.8		40.0	2.3		158.9	0.7	
Adj Saturation B (vph)	NA	NA		NA	NA		0	3162		0	1800	
Reference Time B (s)	NA	NA		NA	NA		10.7	2.3		18.6	0.7	
Reference Time (s)		302.1			33.8			10.7			18.6	
Adj Reference Time (s)		306.1			37.8			14.7			22.6	
Split Option												
Ref Time Combined (s)	20.1	33.0		1.0	33.8		2.7	2.3		10.6	0.7	
Ref Time Seperate (s)	20.1	33.0		1.0	33.8		2.7	1.1		10.6	0.7	
Reference Time (s)	33.0	33.0		33.8	33.8		2.7	2.7		10.6	10.6	
Adj Reference Time (s)	37.0	37.0		37.8	37.8		8.0	8.0		14.6	14.6	
Summary		EB-WB		NB-SB		Combined						
Protected Option (s)		61.9		22.6								
Permitted Option (s)		306.1		22.6								
Split Option (s)		74.8		22.6								
Minimum (s)		61.9		22.6		84.5						
Right Turns		EBR		WBR		SBR						
Adj Reference Time (s)		8.0		17.1		25.9						
Cross Thru Ref Time (s)		8.0		8.0		37.8						
Oncoming Left Ref Time (s)		8.0		24.1		8.0						
Combined (s)		24.0		49.2		71.7						
Intersection Summary												
Intersection Capacity Utilization			70.4%			ICU Level of Service					C	
Reference Times and Phasing Options do not represent an optimized timing plan.												

Intersection Capacity Utilization
 2: Mission Drive/ Highway 246 & Alamo Pintado Road

12/16/2005



























Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	320	601	50	20	633	178	41	31	35	159	13	320
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			No			No			No
Ideal Flow	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120											
Volume Combined (vph)	320	601	50	20	633	178	41	66	0	159	13	320
Lane Utilization Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.92	0.85	0.95	1.00	0.85
Saturated Flow (vph)	1710	1800	1530	1710	1800	1530	1710	3155	0	1710	1800	1530
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	22.5	40.1	3.9	1.4	42.2	14.0	2.9	2.5	0.0	11.2	0.9	25.1
Adj Reference Time (s)	26.5	44.1	8.0	8.0	46.2	18.0	8.0	8.0	0.0	15.2	8.0	29.1
Permitted Option												
Adj Saturation A (vph)	114	1800		114	1800		114	1577		114	1800	
Reference Time A (s)	336.8	40.1		21.1	42.2		43.2	2.5		167.4	0.9	
Adj Saturation B (vph)	NA	NA		NA	NA		0	3155		0	1800	
Reference Time B (s)	NA	NA		NA	NA		10.9	2.5		19.2	0.9	
Reference Time (s)		336.8			42.2			10.9			19.2	
Adj Reference Time (s)		340.8			46.2			14.9			23.2	
Split Option												
Ref Time Combined (s)	22.5	40.1		1.4	42.2		2.9	2.5		11.2	0.9	
Ref Time Seperate (s)	22.5	40.1		1.4	42.2		2.9	1.2		11.2	0.9	
Reference Time (s)	40.1	40.1		42.2	42.2		2.9	2.9		11.2	11.2	
Adj Reference Time (s)	44.1	44.1		46.2	46.2		8.0	8.0		15.2	15.2	
Summary	EB-WB		NB-SB		Combined							
Protected Option (s)	72.7		23.2									
Permitted Option (s)	340.8		23.2									
Split Option (s)	90.3		23.2									
Minimum (s)	72.7		23.2		95.8							
Right Turns	EBR		WBR		SBR							
Adj Reference Time (s)	8.0		18.0		29.1							
Cross Thru Ref Time (s)	8.0		8.0		46.2							
Oncoming Left Ref Time (s)	8.0		26.5		8.0							
Combined (s)	24.0		52.4		83.3							
Intersection Summary												
Intersection Capacity Utilization	79.8%		ICU Level of Service		B C							
Reference Times and Phasing Options do not represent an optimized timing plan.												

Intersection Capacity Utilization

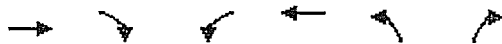
2: Mission Drive/ Highway 246 & Alamo Pintado Road

12/16/2005

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	320	605	50	20	634	179	41	31	35	160	13	320
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			No			No			No
Ideal Flow	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120											
Volume Combined (vph)	320	605	50	20	634	179	41	66	0	160	13	320
Lane Utilization Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.92	0.85	0.95	1.00	0.85
Saturated Flow (vph)	1710	1800	1530	1710	1800	1530	1710	3155	0	1710	1800	1530
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	22.5	40.3	3.9	1.4	42.3	14.0	2.9	2.5	0.0	11.2	0.9	25.1
Adj Reference Time (s)	26.5	44.3	8.0	8.0	46.3	18.0	8.0	8.0	0.0	15.2	8.0	29.1
Permitted Option												
Adj Saturation A (vph)	114	1800		114	1800		114	1577		114	1800	
Reference Time A (s)	336.8	40.3		21.1	42.3		43.2	2.5		168.4	0.9	
Adj Saturation B (vph)	NA	NA		NA	NA		0	3155		0	1800	
Reference Time B (s)	NA	NA		NA	NA		10.9	2.5		19.2	0.9	
Reference Time (s)		336.8			42.3			10.9			19.2	
Adj Reference Time (s)		340.8			46.3			14.9			23.2	
Split Option												
Ref Time Combined (s)	22.5	40.3		1.4	42.3		2.9	2.5		11.2	0.9	
Ref Time Seperate (s)	22.5	40.3		1.4	42.3		2.9	1.2		11.2	0.9	
Reference Time (s)	40.3	40.3		42.3	42.3		2.9	2.9		11.2	11.2	
Adj Reference Time (s)	44.3	44.3		46.3	46.3		8.0	8.0		15.2	15.2	
Summary		EB, WB		NB, SB		Combined						
Protected Option (s)		72.7		23.2								
Permitted Option (s)		340.8		23.2								
Split Option (s)		90.6		23.2								
Minimum (s)		72.7		23.2		96.0						
Right Turns		EBR	WBR	SBR								
Adj Reference Time (s)		8.0	18.0	29.1								
Cross Thru Ref Time (s)		8.0	8.0	46.3								
Oncoming Left Ref Time (s)		8.0	26.5	8.0								
Combined (s)		24.0	52.5	83.4								
Intersection Summary												
Intersection Capacity Utilization		80.0%				ICU Level of Service						
Reference Times and Phasing Options do not represent an optimized timing plan.												

HCM Unsignalized Intersection Capacity Analysis
 3: Mission Drive/ Highway 246 & High Meadow Road

12/16/2005



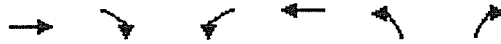
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↕		↕		↕	
Sign Control	Free		Free		Stop	
Grade	0%		0%		0%	
Volume (veh/h)	665	7	5	682	4	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	723	8	5	741	4	2
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			730			727
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			730			727
tC, single (s)			4.1			6.2
tC, 2 stage (s)						
tF (s)			2.2			3.3
p0 queue free %			99			99
cM capacity (veh/h)			874			424

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	730	747	7
Volume Left	0	5	4
Volume Right	8	0	2
cSH	1700	874	178
Volume to Capacity	0.43	0.01	0.04
Queue Length 95th (ft)	0	0	3
Control Delay (s)	0.0	0.2	26.0
Lane LOS		A	D
Approach Delay (s)	0.0	0.2	26.0
Approach LOS			D

Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	49.9%	ICU Level of Service	A
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis
 3: Mission Drive/ Highway 246 & High Meadow Road

12/16/2005



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↕		↕		↕	
Sign Control	Free			Free	Stop	
Grade	0%		0%		0%	
Volume (veh/h)	665	12	8	682	6	3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	723	13	9	741	7	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			736		1488	729
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			736		1488	729
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		95	99
cM capacity (veh/h)			870		135	423

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	736	750	10
Volume Left	0	9	7
Volume Right	13	0	3
cSH	1700	870	175
Volume to Capacity	0.43	0.01	0.06
Queue Length 95th (ft)	0	1	4
Control Delay (s)	0.0	0.3	26.8
Lane LOS		A	D
Approach Delay (s)	0.0	0.3	26.8
Approach LOS			D

Intersection Summary			
Average Delay	0.3		
Intersection Capacity Utilization	52.3%		ICU Level of Service A
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis
 3: Mission Drive/ Highway 246 & High Meadow Road

12/16/2005

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	↘	
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	788	7	5	826	4	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	857	8	5	898	4	2
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			864		1769	860
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			864		1769	860
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		95	99
cM capacity (veh/h)			779		91	355

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	864	903	7
Volume Left	0	5	4
Volume Right	8	0	2
cSH	1700	779	121
Volume to Capacity	0.51	0.01	0.05
Queue Length 95th (ft)	0	1	4
Control Delay (s)	0.0	0.2	36.4
Lane LOS		A	E
Approach Delay (s)	0.0	0.2	36.4
Approach LOS			E

Intersection Summary			
Average Delay		0.2	
Intersection Capacity Utilization		57.4%	ICU Level of Service
Analysis Period (min)		15	B

HCM Unsignalized Intersection Capacity Analysis
 3: Mission Drive/ Highway 246 & High Meadow Road

12/16/2005

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	↑	
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	788	12	8	826	6	3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	857	13	9	898	7	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			870		1778	863
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			870		1778	863
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		93	99
cM capacity (veh/h)			775		90	354

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	870	907	10
Volume Left	0	9	7
Volume Right	13	0	3
cSH	1700	775	119
Volume to Capacity	0.51	0.01	0.08
Queue Length 95th (ft)	0	1	7
Control Delay (s)	0.0	0.3	37.9
Lane LOS		A	E
Approach Delay (s)	0.0	0.3	37.9
Approach LOS			E

Intersection Summary			
Average Delay		0.4	
Intersection Capacity Utilization		59.8%	ICU Level of Service B
Analysis Period (min)		15	

HCM Unsignalized Intersection Capacity Analysis
 3: Mission Drive/ Highway 246 & High Meadow Road

12/16/2005

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔		↖	↗	↖	↗
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	788	12	8	826	6	3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	857	13	9	898	7	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				TWLTL		
Median storage (veh)				4		
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			870		1778	863
vC1, stage 1 conf vol					863	
vC2, stage 2 conf vol					915	
vCu, unblocked vol			870		1778	863
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)					5.4	
tF (s)			2.2		3.5	3.3
p0 queue free %			99		98	99
cM capacity (veh/h)			775		336	354

Direction, Lane #	EB 1	WB 1	WB 2	NB 1
Volume Total	870	9	898	10
Volume Left	0	9	0	7
Volume Right	13	0	0	3
cSH	1700	775	1700	342
Volume to Capacity	0.51	0.01	0.53	0.03
Queue Length 95th (ft)	0	1	0	2
Control Delay (s)	0.0	9.7	0.0	15.8
Lane LOS		A		C
Approach Delay (s)	0.0	0.1		15.8
Approach LOS				C

Intersection Summary

Average Delay		0.1		
Intersection Capacity Utilization		53.5%	ICU Level of Service	A
Analysis Period (min)		15		