SCH # 2000041146
EA #07-195800

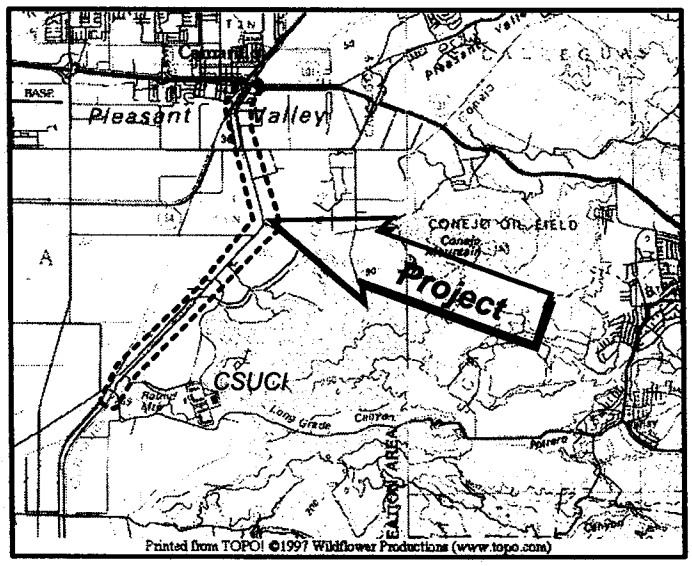
DRAFT

ENVIRONMENTAL IMPACT REPORT/ ENVIRONMENTAL ASSESSMENT (EIR/EA)

LEWIS ROAD WIDENING PROJECT

Ventura Boulevard to Hueneme Road Bridge
Ventura County, California

Submitted Pursuant to Public Resources Code 42 U.S.C.4332(2)(c)



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June 2001

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ABSTRACT

This Environmental Impact Report/Environmental Assessment addresses the environmental consequences of widening Lewis Road over a 5.75-kilometer (3.57-mile) segment between Ventura Boulevard (KP 20.56/PM 12.78) and the Hueneme Road on the south. Two alternative alignments are considered for the segment north of Pleasant Valley Road (R 21.79/R 13.54) that is under Caltrans jurisdiction and three alignment alternatives are considered for the portion south of Pleasant Valley Road that is under Ventura County jurisdiction.

No major environmental impacts were identified under the National Environmental Policy Act (NEPA). Major impacts due to farmland loss were identified under the California Environmental Quality Act (CEQA).

Public comments on the proposed project are due by 11/19/01.

EXECUTIVE SUMMARY

This section summarizes the characteristics of the proposed project, identifies the environmental impacts, mitigation measures, and residual impacts associated with each Project Design Alternative.

PROJECT SYNOPSIS

Project Sponsor

The project sponsors are the County of Ventura Public Works Agency, the California Department of Transportation - Caltrans District 7, and the Federal Highway Administration (FHWA).

Major Actions by Other Governmental Agencies in Project Area

Development of the California State University, Channel Islands (CSUCI)

Major Unresolved Issues With Other Agencies

None

Other Federal and Local Actions Required for the Proposed Action

- Section 404 permit from the U.S. Army Corps of Engineers
- State Historic Preservation Office (SHPO) approval
- Streambed alteration agreement from the California Department of Fish and Game
- National Pollution Discharge Elimination System (NPDES) permit from the Regional Water Quality Control Board; Section 401 Certification

Other Local Actions Required for the Proposed Action

This environmental document will also be used as the CEQA-mandated informational document for a General Plan Amendment to modify the designation of Lewis Road from a two-lane to a four-lane road under the County of Ventura General Plan. After certification of the Lewis Road Widening Project EIR/EA, the Board of Supervisors could implement the required General Plan Amendment and make any necessary findings under CEQA.

Description of Project Alternatives

The project involves widening of an approximately 5.75-km (3.57-mile) segment of Lewis Road between the Hueneme Road/Calleguas Creek Bridge on the south and Ventura Boulevard on the north in order to accommodate regional growth, in part from the new California State University, Channel Islands (CSUCI) campus.

A " No Action" Alternative, a Traffic System Management (TSM), and five Project Design Alternatives were considered as discussed in Chapter 2. The five project design alternatives are analyzed in detail in this document and are summarized below.

The project is divided into two principal segments. The Caltrans Segment is the northernmost portion of Lewis Road that is designated as State Route 34 and extends from Ventura Boulevard to Pleasant Valley Road. The Ventura County Segment extends from south of Pleasant Valley Road to the Hueneme Road Bridge within unincorporated Ventura County and is not designated as part of State Route 34.

Within the Caltrans Segment, two alignment alternatives are considered. Due to the potential of the existing Union Pacific Railroad (UPRR) Overhead to be impacted by a fault within the project corridor, three bridge variations for the treatment of this overhead are considered for both Caltrans Alternatives (Figures 2.1 to 2.4).

The two Caltrans alternatives and their primary differences are as follows:

- **Caltrans Alternative 1- Widen Lewis Road With 6 m Clear Recovery Zone.** Under this alternative Lewis Road would be widened from two to four lanes; provided with 2.4 meter paved shoulders and a 3.6-meter clear unpaved clear area beyond the shoulders; and involve more extensive conversion of the Ventura County Flood Control District Channel (VCFCD). The estimated cost of Caltrans Alternative 1 ranges between 10.8 to 14.6 million dollars.
- **Caltrans Alternative 2 - Widen Lewis Road With 2.4 m Wide Shoulders** – Under this alternative Lewis Road would be widened from two to four lanes; provided with 2.4 meter paved shoulders and no additional recovery zone; involve a less extensive conversion of the VCFCD channel; and install a metal beam guard rail between Dawson Place and Pleasant Valley Road. The estimated cost of Caltrans Alternative 2 ranges between 10.2 to 14.0 million dollars.

The three variations for the UPRR Overhead considered for both Caltrans alternatives and are as follows:

- **Variation A - Widen Existing Railroad Overhead.** Under this bridge variation the UPRR Overhead would be widened from 2- to 4-lanes along its eastern edge. The estimated cost of Caltrans Alternative 1 with this bridge variation is 10.8 million dollars, while Caltrans Alternative 2 is estimated at 10.2 million dollars.
- **Variation B - Remove and Replace Existing Railroad Overhead.** Under this bridge variation the UPRR Overhead would be removed and replaced with a new 4-lane structure. The estimated cost of Caltrans Alternative 1 with this bridge variation is 14.6 million dollars, while Caltrans Alternative 2 is estimated at 14.0 million dollars.
- **Variation C - Retain Existing Overhead and Build New Parallel "Twin" Structure.** Under this bridge variation the UPRR Overhead would be left in place and would service two lanes of southbound traffic along Lewis Road. A separate and parallel "twin" structure would be constructed to the east of the existing overhead and would service two lanes of northbound traffic along Lewis Road. The estimated cost of Caltrans Alternative 1 with this bridge variation is 12.3 million dollars, while Caltrans Alternative 2 is estimated at 11.7 million dollars.

Within the Ventura County Segment, three alignment alternatives are considered. These are:

- **Ventura County Alternative 1** – Widening Lewis Road and the existing Lewis Road Bridge over Calleguas Creek. The estimated cost for this alternative is 13.5 million dollars.
- **Ventura County Alternative 2** – Widening Lewis Road, eliminating the "s"- curve, and replacing the Lewis Road Bridge over Calleguas Creek. The estimated cost for this alternative is 16.9 million dollars.
- **Ventura County Alternative 3** – Widening Lewis Road and constructing a new roadway west of Calleguas Creek. The estimated cost for this alternative is 17.2 million dollars.

In addition to the above alignment alternatives, the no project alternative is evaluated herein.

Summary of Responses to the Notice of Preparation of an Environmental Impact Report and Areas of Known Public Controversy

Responses to the Notice of Preparation (NOP) of the EIR/EA included a total of 16 letters, all of which are contained in Appendix C. Principal issues raised include: biological resources including wetlands; traffic, circulation, access and traffic safety; water quality; agricultural resources including conflicts with agricultural uses and consistency with agricultural land use policies; cultural resources impacts; and cumulative growth inducing impacts. A matrix detailing key comments and their inclusion within the document is found in Chapter 5, *Comments and Coordination.*

Based on the response to the NOP and input received during the public scoping process, the project does not appear to involve substantial public controversy at this time.

SUMMARY OF IMPACTS AND MITIGATION MEASURES

As required by Section 15126.6 of the *State CEQA Guidelines*, 40 CFR 1508.9(b), and FHWA and Caltrans guidelines, this EIR/EA examines a range of reasonable alternatives to the proposed project that could feasibly achieve similar objectives. The alternatives are analyzed at an equal level of detail within Chapter 4, as required under NEPA. Impacts specific to each alternative are identified and the relative magnitude of impacts between the different alternatives are analyzed.

Impacts categorized as significant and that cannot be avoided or substantially lessened (U) through mitigation require a statement of overriding considerations to be issued per Section 15093 of the *State CEQA Guidelines* if the project is approved. In addition, significant impacts that can be feasibly mitigated to less than significant levels (M) require findings to be made under Section 15091 of the *State CEQA Guidelines,* in order for project approval. Less than significant impacts (L), and beneficial impacts (B) are also identified.

It is noted that since this document is intended to serve as the environmental document for federal as well as state and local actions, it must comply with both the National Environmental Policy Act (NEPA) for federal actions and the California Environmental Quality Act (CEQA) for state and local actions. In some instances described herein, local impact thresholds are more stringent than federal impact criteria. Therefore, it is possible for an issue to be significant based on one set of criteria and less than significant based on another. Based on federal criteria, it has been determined that the project would not result in any adverse unavoidable impacts under NEPA. However, per local criteria, the project would result in one significant and unavoidable impact due to farmland loss under the Ventura County policies implementing CEQA.

a. Categories With No Impact.

As discussed in the Initial Study (Appendix A) and Chapter 4, *Environmental Effects and Mitigation Measures*, the proposed project was determined not to impact or be exposed to the following:

- Aviation Hazards
- Law Enforcement/Emergency Services

- Education
- Energy Resources
- Fire Hazards
- Fire Protection
- Housing
- Coastal Beaches and Sand Dunes
- Mineral Resources
- Paleontological Resources
- Recreation
- Social and Economic Effects
- Stream Location and Meander Patterns
- Utilities

b. Categories With Impacts.

Table ES-1 summarizes potential impacts and required mitigation of the Project Design Alternatives for the Caltrans and County Segments. These issues and impacts are analyzed in detail in Chapter 4 - Environmental Effects and Mitigation Measures.

Table ES.1 Summary of Impacts and Associated Mitigation

Impacts	Caltrans		County			Mitigation
	ALT 1	ALT 2	ALT 1	ALT 2	ALT 3	
Aesthetics:						
Wall construction and tree removal along eligible and designated Scenic Highway (AE-1)	M	M	L	L	L	Break up monolithic effect of walls with vegetation. Replacement of trees at a ratio of 1:1 and maintenance
Agriculture:						
Conversion of Farmland under NEPA (AG-1)	N	N	L	L	L	No mitigation required.
Impacts to Farmland under CEQA (AG-2)	N	N	U	U	U	No feasible mitigation exists.
Impacts to agricultural tree rows (AG-3)	N	N	M	M	M	Replacement with equivalent windbreak.
Conflicts with agricultural use (AG-4)	N	N	M	L	M	Replacement of impacted access gate.
Conflicts with local agricultural land use policies (AG-5)	N	N	L	L	L	No mitigation required.
Air Quality:						
Construction emissions (AQ-1)	M	M	M	M	M	Fugitive dust control and minimization of fugitive dust and ozone emissions during construction
CO hotspots (AQ-2)	L	L	L	L	L	No mitigation required.
Conformance with Clean Air Plan programs (AQ-3)	L, B	L, B	L, B	L, B	L, B	No mitigation required.
Biological Resources:						
Impacts to upland habitats (BIO-1)	L	L	M	M	M	Replacement of Baccharis and Venturan Coastal Sage Scrubs at 1:1 ratio and removal of invasive species within the project corridor.
Impacts to wildlife corridors (BIO-2)	L	L	L	L	L	No mitigation required.
Impacts to special-status species (BIO-3)	M	M	M	M	M	Preconstruction surveys for special-status species.
Impacts to waters of the U.S./wetlands (BIO-4)	L	L	M	M	M	Replacement of wetland habitats at a 1:1 ratio, avoidance of impacts to robust emergent vegetation, stockpiling and respreading of wetland soils.
Impacts to farmed wetlands (BIO-5)	N	N	L	L	L	No mitigation required.

Impacts	Caltrans		County			Mitigation
	ALT 1	ALT 2	ALT 1	ALT 2	ALT 3	
Cultural Resources:						
Impacts to unknown cultural resources (CR-1)	M	M	M	M	M	Implement procedures established by the Advisory Council on Historic Preservation in the event buried cultural resources are uncovered
Impacts to human remains (CR-2)	M	M	M	M	M	Contact County Coroner. Contact Native American Heritage Commission as appropriate.
Drainage/Hydrology:						
Impacts to surface water quality (D-1)	M, B	M, B	M, B	M, B	M, B	Inclusion of a maintained storm water control and filtering system along the length of the roadway in final project design. Limitation of pesticide, herbicide, and inorganic fertilizer use as feasible.
Construction impacts to water quality (D-2)	L	L	L	L	L	No additional mitigation required beyond NPDES permit requirements.
Location in flood-zone (D-3)	N	N	L	L, B	L, B	No mitigation required at this time.
Impacts of surface run-off and flooding (D-4)	M	M	M	M	M	Preparation of hydrological study for the final alternative selected in order to re-route storm flows such that local peak flows are not increased and no additional flooding is created by the new drainage system. Address flooding characteristics of the Calleguas Creek and establish appropriate bridge design measures to mitigate against scouring and other flood related impacts to the bridge structure.
Geology/Soils [1]:						
Exposure to ground-shaking (GH-1)	M	M	M	M	M	Performance of detailed geotechnical and seismic studies prior to final roadway design and consideration of ground shaking. Compliance with Uniform Building Code (UBC) and Caltrans building/design codes. Implementation of all measures identified in subsequent design studies.
Exposure to fault rupture (GH-2) [1]	M	M	M	M	M	No additional mitigation required.
Exposure to liquefaction (GH-3)	M	M	M	M	M	Site-specific geotechnical study to assess liquefaction potential. Comply with UBC and Caltrans standards.
Exposure to seismically induced settlement or failure of fill slopes (GH-4)	M	M	M	M	M	No additional mitigation required.
Exposure to expansive soils (GH-5)	M	M	M	M	M	No additional mitigation required.
Exposure to settlement and subsidence (GH-6)	L, M	L, M	L, M	L, M	L, M	No additional mitigation required.
Hazardous Materials:						
Aerially-deposited lead (HM-1)	M	M	L	L	L	Soils with hazardous waste concentrations of lead will be handled in accordance with all provisions of the Caltrans/DTSC variance for re-use on-site. The contractor will complete a Lead Compliance Plan and take appropriate safety precautions.
Lead and chromium in thermoplastic paint striping (HM-2)	M	M	M	M	M	Lead and chromium in the existing thermoplastic paint stripes and pavement markers shall be handled, removed, and disposed of in strict accordance with Caltrans standards.
High concentration of pesticides in soil (HM-3)	L	L	M	M	M	Identify areas of high pesticide concentrations. Remove and dispose of contaminated soils in Class 1 facility as required.
Presence of properties associated with hazardous materials (HM-4)	L	L	L	L	L	No mitigation required.

Impacts	Caltrans		County			Mitigation
	ALT 1	ALT 2	ALT 1	ALT 2	ALT 3	
Discovery of unanticipated contamination(HM-5)	M	M	M	M	M	Subsurface testing and/or contingency planning for the unanticipated discovery of petroleum hydrocarbon contamination.
Land Use and Planning:						
Land use compatibility conflicts (LU-1)	M	M	M	M	M	Mitigation measures in Sections 4.2, *Agriculture,* 4.11, *Traffic and Circulation*, 4.10, *Noise* and 4.3 *Air Quality* would mitigate land use compatibility conflicts.
Impacts to visual character (LU-2)	M	M	M	M	M	Mitigation measures in Section 4.1, *Aesthetics*, are recommended to minimize the visual effects and associated changes in land use character and to ensure land use policy consistency. No further mitigation is required.
Compatibility with land use guidelines and regional programs (LU-3)	L	L	L	L	L	No mitigation required.
Noise:						
Temporary construction noise (N-1)	L/M	L/M	L/M	L/M	L/M	Under CEQA the following mitigation is needed: Operation of diesel engines with closed doors and installed mufflers; Use of an electrical power source for construction equipment when available; Limitation of work period to weekdays between 8 AM - 5 PM.
Traffic Noise (N-2)	L	L	M	M	M	No mitigation required by FHWA/Caltrans; noise attenuation features provided through outside funding.
Traffic and Circulation:						
Impacts to Level of Service standards (T-1)	L, B	L, B	L, B	L, B	L, B	No mitigation required
Impacts to intersection operation (T-2)	L, B	L, B	L, B	L, B	L, B	No mitigation required
Disruption of circulation during construction (T-3)	M	M	M	M	M	Implementation of Traffic Management Plan per Caltrans standards. Coordination with the public and relevant agencies.
Promote Bicycle use with bicycle lanes (T-4)	B	B	B	B	B	No mitigation required.
Pedestrian and Bicycle Facilities:						
Provide bicycle lanes (PB-1)	B	B	B	B	B	No mitigation required.
Construction:						
Construction related impacts to traffic (CON-1)	L	L	L	L	L	No mitigation required.
Construction related impacts to air and quality, and noise (CON-2)	M	M	M	M	M	No additional mitigation beyond measures AQ-1(a-d) and N-1(a-c), and as required by NPDES regulations.
Expose workers to contaminated soils or materials (CON-3)	M	M	M	M	M	No additional mitigation required beyond those outlined in measures HM-1(a) and (b) and HM-2.
Growth and Irreversible Effects:						
Increased growth	L	L	L	L	L	Mitigation provided in the 1998 CSUCI EIR, no additional mitigation required.
Irreversible effects	L, B	L, B	U, L, B	U, L, B	U, L, B	No mitigation required. Agricultural impacts are considered significant and unavoidable under CEQA; all other irreversible effects are less than significant.

Notes:
U=Impacts would be adverse and unavoidable (NEPA)/significant and unavoidable (CEQA);
M=Impacts would be less than significant with mitigation;
L=Impacts would be less than significant;
B=Some beneficial effects;

Impacts	Caltrans		County			Mitigation
	ALT 1	ALT 2	ALT 1	ALT 2	ALT 3	

N=No impact would occur;
X,B=project would also result in a beneficial impact in the future compared to the "No Action" Alternative;
/=NEPA/CEQA
1=Implementation of Bridge Variations A, B, or C would not change the level of project impacts for either Caltrans Alternatives 1 or 2. The single exception is to the geology and soils category. In the event fault rupture conditions are found under the existing railroad overhead, Variations B or C would have to be implemented to mitigate potential impacts.

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Chapter 1 Purpose and Need

1.1 Introduction

Within the County of Ventura, Lewis Road is a two-lane conventional highway and roadway that extends north from Hueneme Road, runs past the proposed California State University, Channel Islands (CSUCI) campus and becomes Somis Road, north of the City of Camarillo. Between Pleasant Valley Road and Los Angeles Avenue (State Route 118), Lewis Road/Somis Road is identified as State Route (SR) 34 and crosses Union Pacific Railroad and U.S. 101 freeway. South of Pleasant Valley Road, Lewis Road is a Ventura County arterial (Figure 1.1).

This section identifies and describes the purpose and need of the proposed project by providing background information and evaluating the existing and future conditions of the project corridor in relation to area development and adopted level of service standards. In addition, it identifies the specific deficiencies and safety issues along the project corridor.

1.2 Purpose Of The Project

The proposed project involves the widening of Lewis Road between the Hueneme Road bridge on the south to Ventura Boulevard on the north as shown in Figure 1.2. For discussion purposes, the project is divided into two principal segments:

- the Caltrans Segment (SR 34) is the northernmost portion of the project from Ventura Boulevard to Pleasant Valley Road within the City of Camarillo; and
- the Ventura County Segment is the portion of the road improvement south of Pleasant Valley Road to the Hueneme Road Bridge.

The purpose of the proposed project is to achieve the following goals:

- Ensure continued mobility of the public;
- Facilitate the efficient flow of goods and services through this area;
- Improve future safety in the area; and
- Conform to state, regional, and local plans and policies.

1.3 Need for the Project

The existing Lewis Road is considered inadequate to serve anticipated future traffic for several reasons:

- Future volumes are expected to exceed acceptable roadway and intersection Level of Service (LOS);
- The existing Union Pacific Railroad (UPRR) overhead bridge within the Caltrans Segment may not be adequately designed to withstand fault "rupture" conditions;
- The accident rate within the Caltrans Segment of the roadway is above the state average;

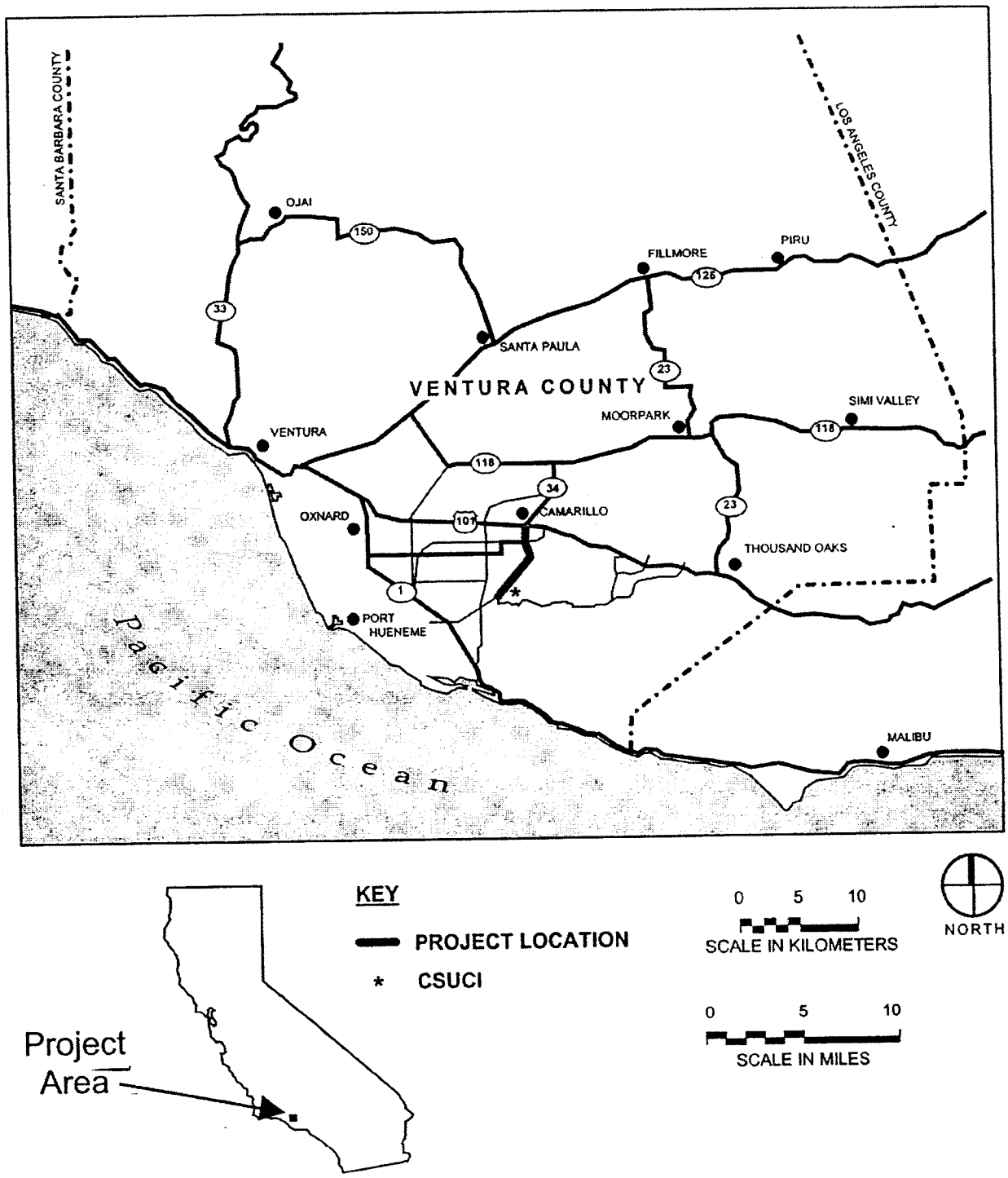


Figure 1.1 Regional Location

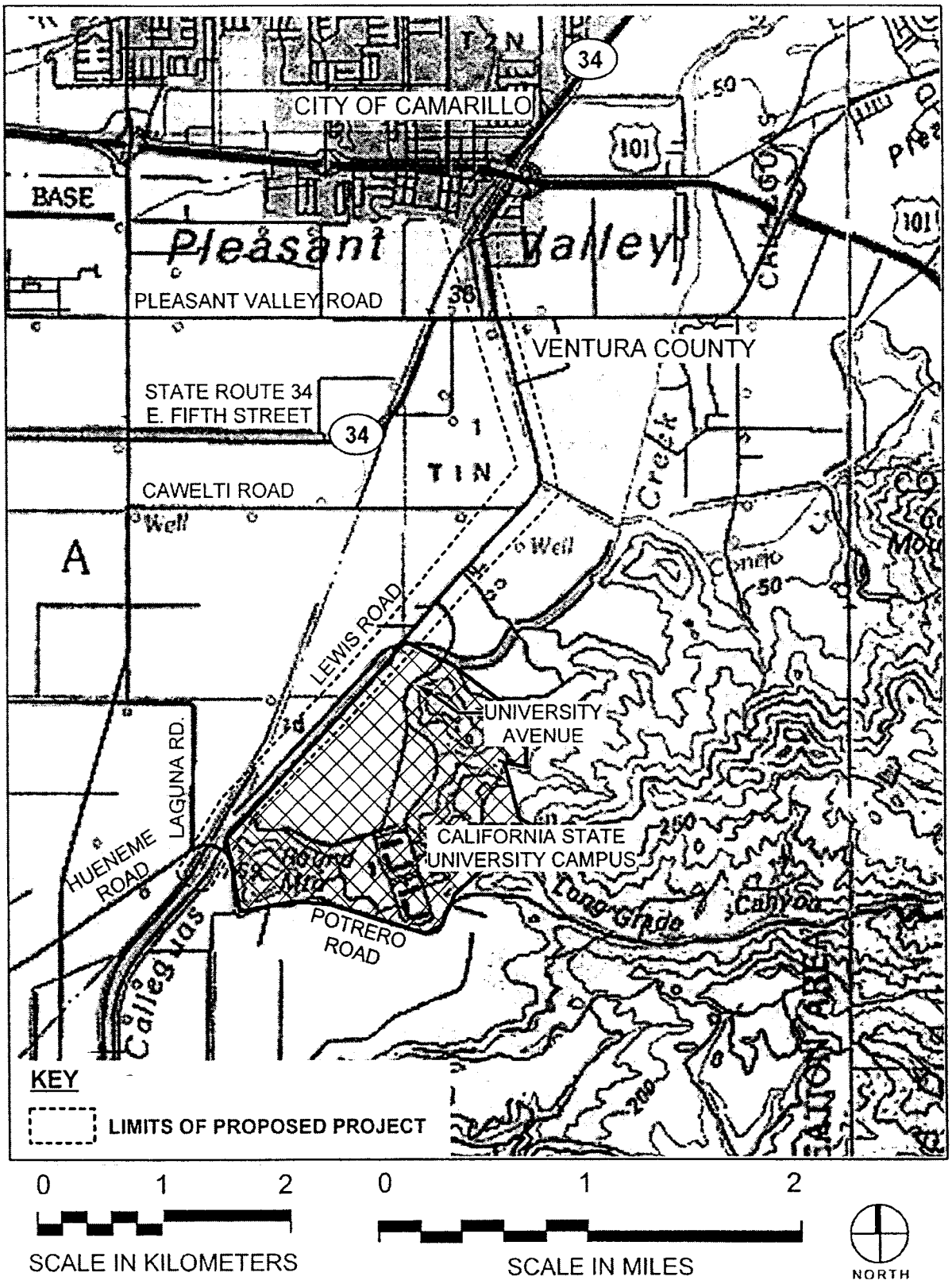


Figure 1.2 Project Vicinity

- Two curves within the Ventura County Segment were not designed to handle anticipated vehicular speeds of 60 miles per hour (mph); and
- Adequate space for bicycle lanes does not exist along the shoulders of Lewis Road.

1.3.1 Existing Facilities

Lewis Road functions as a primary north-south linkage for traffic between Camarillo, southern Ventura County, and Port Hueneme (Figure 1.1). The project corridor is the primary roadway utilized to access the CSUCI campus, farmland and residential area south of Pleasant Valley Road and to access commercial and industrial areas north of Pleasant Valley Road.

The study-area consists of a circulation system comprised of highways, arterial streets and roadways. Lewis Road intersects with Ventura Boulevard, Dawson Place, Pleasant Valley Road, Cawelti Road, University Avenue (Camarillo Drive) and Potrero Road (see Figure 1.2). Within the project corridor, Lewis Road is a two-lane minor roadway with narrow shoulders between 0.3 to 0.6 meters (1 to 2 feet) and flat grades ranging from 0.4 to 0.8 percent.

Ditches, power poles, or tree rows almost continuously flank the roadway. The majority of Lewis Road follows a straight alignment. There are two curves found along the project corridor: a curve with a 245-meter (800-foot) radius north of Cawelti Road and a "s" shaped curve where the Lewis Road Bridge crosses Calleguas Creek.

Two bridges are present along the project corridor: a Union Pacific Railroad (UPRR) Overhead within the Caltrans Segment and the Lewis Road Bridge over Calleguas Creek within the County of Ventura Segment. Both structures have the capacity for two traffic lanes.

The Ventura County Regional Trails and Pathways map list SR 34 as Type 4 bikeway facility. There are four types of bikeways in Ventura County, which provide access in cities and scenic areas throughout the County:

- Type 1 – designated off-road bike paths,
- Type 2 – on-street signed and striped bike lanes,
- Type 3 – on-street signed preferred bike routes, and
- Type 4 – ~~un~~signed state routes.

The Type 4 designation allows bicycles to use the State highways; however, signs are not posted or roadways are not striped as would be for Type 2 or 3 classifications. There is no bikeway designation for Lewis Road south of Pleasant Valley Road.

1.3.2 Capacity Issues

The ability of a roadway to accommodate traffic is typically measured in terms of level of Service (LOS). Bases on the ratio of traffic volume to the design capacity of the facility, LOS is expressed as a range from LOS A (free traffic flow with low volumes) to LOS F (traffic volumes exceed capacity resulting in forced flow operations). See Figure 1.3 on the following pages.

LEVELS OF SERVICE

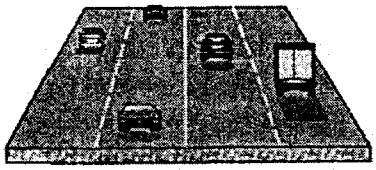
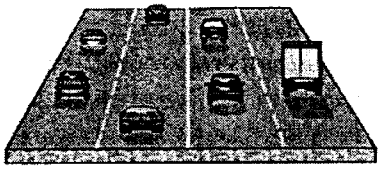
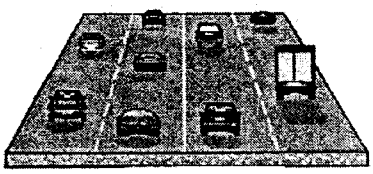
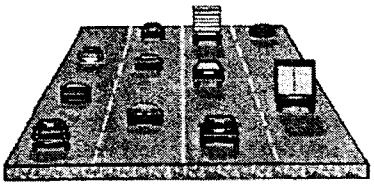
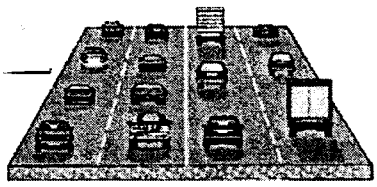
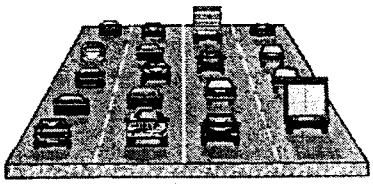
Level of Service	Flow Conditions	Operating Speed (mph)	Technical Descriptors
A		**55+**	Highest quality of service. Free traffic flow, low volumes and densities. Little or no restriction on maneuverability or speed. **No delays.**
B		**50**	Stable traffic flow, speed becoming slightly restricted. Low restriction on maneuverability. **No delays.**
C		**45**	Stable traffic flow, but less freedom to select speed, change lanes, or pass. Density increasing. **Minimal delays.**
D		**40**	Approaching unstable flow. Speeds tolerable, but subject to sudden and considerable variation. Less maneuverability and driver comfort. **Minimal delays.**
E		**35**	Unstable traffic flow with rapidly fluctuating speeds and flow rates. Short headways, low maneuverability and low driver comfort. **Significant delays.**
F		**25**	Forced traffic flow. Speed and flow may drop to zero with high densities. **Considerable delays.**

Figure 1.3 Level of Service (LOS) Categories

City of Camarillo LOS Criteria - The City of Camarillo allows for LOS D for short intervals of the peak hour period.

County of Ventura LOS Criteria - Ventura County has established LOS D as the design standard for regional roadways and intersections located in the County. Lewis Road is classified as a regional roadway on the County's system.

The Average Daily Traffic (ADT) volumes in 1997 on Lewis Road within the project limits varied from 13,000 at Ventura Boulevard to 6,000 at Potrero Road. The roadway presently operates at LOS D near Ventura Boulevard and LOS C from Pleasant Valley Road south to Potrero Road. The intersections currently operate in the LOS A-C range. All fall within the City and County thresholds of LOS D for the project corridor. Table 1.1 shows the existing (1997) and projected (2025) LOS and ADT for the corridor. Table 1.2 shows the existing and projected (2025) LOS roadway intersections along Lewis Road. Ventura County's population is expected to increase by 30% according to SCAG projections with corresponding increases in traffic volume. The 1998 FEIR for the CSUCI campus clearly demonstrated that with the development of the new university campus and the regional build-out of the surrounding area in accordance with the County's approved General Plan, future (Year 2025) traffic volumes are projected to be up to 41,000 ADT. These projected traffic volumes are more than twice the County's maximum 16,000 ADT (at LOS D) for the existing roadway. In addition, the LOS for the intersections will substantially increase.

Table 1.1 Traffic Volumes and LOS for Lewis Road (Existing & Year 2025)

Lewis Road (Corridor)	Existing (2 Lanes)		Year 2025 Projection		
				No Build (2 Lanes)	Build (4 Lanes)
	ADT	LOS	ADT	LOS (2)	LOS (4)
Ventura Blvd to Pleasant Valley Road	13,000	D	32,000	F	C
Pleasant Valley Road to Cawelti Road	8,000	C	38,000	F	C
Cawelti Road to University Avenue *	6,000	C	41,000	F	D
University Ave * to Santa Barbara Avenue (future)	6,000	C	24,000	E	B
Santa Barbara Avenue (future) to Potrero Road	6,000	C	8,000	C	n/a

** = aka. Camarillo Drive*
n/a = not available

Table 1.2 Intersection LOS for Lewis Road (Existing & Year 2025)

Intersections	Existing (2 Lanes)		Year 2025 Projection			
			No Build (2 Lanes)		Build (4 Lanes)	
	AM	PM	AM	PM	AM	PM
Lewis Road/Ventura Blvd.	A	A	B	A	C	C
Lewis Road/Dawson Place	n/a	n/a	n/a	n/a	C	B
Lewis Road/Pleasant Valley Road	A	C	F	F	C	B
Lewis Road/University Avenue *	n/a	n/a	D	E	A	A
Lewis Road/Santa Barbara Avenue (future)	n/a	n/a	D	D	A	A
Lewis Road/Potrero Road	A	A	D	D	A	A

** = aka. Camarillo Drive*
n/a = not available

The data shows that Lewis Road should be upgraded to a 4-lane conventional highway, which would bring the future LOS along the project corridor to within acceptable City and County standards. Traffic flows would range from LOS B to D along Lewis Road and from LOS A to C at intersections within the project corridor.

1.3.3 Safety Issues

The Traffic Accident and Surveillance and Analysis System (TASAS) records for the three-year period from January 1, 1997, through December 31, 1999, show a total of recorded accidents on the Caltrans Segment of Lewis Road (see Table 1.3). The post miles 12.78 and 13.54 correspond to kiloposts 20.56 and 21.79, respectively, which are the limits for Caltrans Segment of this project.

Table 1.3 TASAS Accident Data – Caltrans Segment

Location	Total			Actual Rates (per mvm)			Average Rates (per per mvm)		
Postmiles (kilopost)	A	F	Injury	F	F+I	Total*	F	F+I	Total*
12.78/13.54 (20.56/21.79)	22	0	5	0.000	0.57	2.50	0.021	0.89	1.90

mvm = million vehicle miles
A = Accidents
F = Fatalities
F+I = Fatalities plus injuries
** = All reported accidents*

No fatalities were recorded. A comparison of the actual versus average accident data indicates that the actual rate of fatalities and fatalities plus injuries is lower than the statewide average for similar facilities. However, the total actual accident rate is slightly above the statewide average.

The TASAS Accident Summary (see Table 1.4) also indicates that 60% of the accidents occurred within intersections. It appears that one of the significant causes of the accidents is vehicle movement at intersections. 16 of the 22 accidents are the types seen at intersections: sideswipes, rear-end, and broadside collisions. The remainder of the accidents, outside of the intersections, is due to a number of causes including speeding and other violations. Almost all of the accidents occurred during good driving conditions during daylight hours with dry payment.

Table 1.4 TASAS Collision Data – Caltrans Segment

Primary Collision Factor	Number of Collisions	Type of Collision	Number of Collisions
Following too closely	1	Head on	1
Failure to yield	7	Sideswipe	4
Improper turn	1	Rear end	6
Speeding	3	Broadside	6
Other Violations	9	Hit object (sign/post)	2
Influence of alcohol	1	Other	3
TOTAL ACCIDENTS	**22**	**TOTAL ACCIDENTS**	**22**

Implementation of the proposed project is anticipated to decrease the accident rate within the Caltrans Segment by:

- Adding additional lanes to increase the LOS for Lewis Road and related intersections;
- Providing longer turn pockets at each intersection for queue storage outside of the through- traffic lanes;
- Providing full shoulders along both sides of the roadway, which provides a refuge area outside of the traveled way; and
- Shielding obstructions or providing a 6-meter (20-foot) wide clear recovery zone to enhance safety.

1.3.4 Operational Deficiencies

The existing 245-meter (800-foot) radius curve located between Cawelti and Pleasant Valley Road and the "s" curve located at the Lewis Road Bridge over Calleguas Creek were not designed to meet the anticipated traffic speeds of up to 60 mph. Upgrading the curve north of Cawelti Road to an approximately 460-meter (1,500-foot) radius and modification of the "s" curve as outlined under any of the project alternatives would enhance traffic safety.

Substantial bicycle use is anticipated along Lewis Road as students and staffs access the CSUCI campus. As discussed above, there is not sufficient room within the existing narrow shoulders along Lewis Road for safe bicycle use. Under the proposed project, the shoulder of Lewis Road would be widened to 2.4-meter (8-foot) to provide a Class II bicycle lane in either direction. As bicycle traffic would be separated from motorized traffic because of the proposed project, bicycle safety would be improved. The provision of bicycle lanes would in part mitigate traffic impacts related to development of CSUCI.

1.3.5 Structural Deficiencies

The existing Union Pacific Railroad (UPRR) Overhead Bridge is believed to span the Camarillo fault and may be exposed to "rupture" conditions. Caltrans has a new draft policy regarding designing bridges for this condition, which did not apply when the existing structure was designed. The proposed widening option for the existing UPPR Overhead may not be sufficient to meet Caltrans policies. In the event rupture conditions are identified, an alternative option, replacement of the overhead, would be required. These options for improvement of the UPPR Overhead Bridge are discussed in more detail in Chapter 2, *Description of Project Alternatives.*

1.4 Lead, Responsible, and Trustee Agencies

In conformance with Section 15050 and 15367 of the CEQA Guidelines, the County of Ventura and Caltrans are designated as "co-lead agencies" which is defined as the "public agency which has the principal responsibility for carrying out or approving the project. The Federal Highway Administration is the federal lead agency for the purposes of NEPA.

Responsible Agencies are those agencies, which have discretionary approval over one, or more actions involved with development of the proposed project site. The following discretionary approvals may be required from these agencies before project construction:

- Section 404 permit from the U.S. Army Corps of Engineers;
- State Historic Preservation Office (SHPO) approval;
- National Pollution Discharge Elimination System (NPDES) permit from the Regional Water Quality Control Board, Section 401 Certification; and
- U.S. Fish and Wildlife Service approval.

Trustee Agencies are state agencies having discretionary approval or jurisdiction by law over natural resources affected by a project. The California Department of Fish and Game is one of four trustee agencies defined by CEQA affected by the proposed project. A Streambed Alteration agreement maybe required from this agency.

1.5 Intended Uses of the EIR/EA

The EIR/EA is intended to be used as an information document that discloses the environmental consequences associated with the discretionary and other actions required to implement the proposed project. The County of Ventura, Caltrans, FHWA and other reviewing agencies and the public will use this EIR/EA in their evaluation of the proposed project.

In addition, the proposed environmental document will also be used as the CEQA mandated informational document for a General Plan Amendment to modify the designation of Lewis Road from a two-lane to four-lane road under the County of Ventura General Plan. After certification of the Lewis Road Widening Project EIR/EA, the Board of Supervisors could implement the required General Plan Amendment and make any necessary findings under CEQA.

Chapter 2 Description of Project Alternatives

2.1 Project Applicants/Sponsoring Agency

County of Ventura
Public Works Agency
800 S. Victoria Avenue
Ventura, CA 93009
(805) 654-2048

Caltrans District 7
120 South Spring Street
Los Angeles, CA 90012-3606
(213) 897-6017

Project Engineer
Boyle Engineering Corporation
5851 Thille St # 201
Ventura, CA 93003
(805) 644-9704

2.2 Project Location

The proposed project involves the widening of Lewis Road between the Hueneme Road Bridge on the south and Ventura Road on the north. The project is located partially in unincorporated south central Ventura County and partially in the City of Camarillo, south of U.S. Highway 101. Figure 1.1 shows the site's regional location in Ventura County. Figure 1.2 shows the immediate site vicinity location.

2.3 Project Alternatives

As required by Section 15126.6 of the *State CEQA Guidelines*, 40 CFR 1508.9(b), and the Federal Highway Administration (FHWA) and Caltrans guidelines, this EIR/EA examines a range of reasonable alternatives to the proposed project that could feasibly achieve similar objectives. Since the project involves widening of an existing road, alternatives that are available to accomplish the project objectives are relatively limited. The following is a discussion of the project alternatives analyzed in this document: the No Action Alternative, the Transportation System Management Alternative, and the five Project Design Alternatives.

2.3.1 No Action Alternative

This option assumes that no roadway widening would occur along either segment of the project corridor and that Lewis Road would remain in its current condition. Lewis Road would be maintained in its two-lane configuration without a change in alignment and bridges within the project area would not be improved or replaced. This alternative would not meet the proposed project objectives.

2.3.2 Transportation System Management (TSM) Alternative

The goal of the TSM Alternative is to maximize the efficiency of the existing system by providing options such as ridesharing, fringe parking, traffic-signal optimization, and etc.

This alternative was not evaluated in detail, as it is only relevant for major projects proposed in urbanized areas with a population over 200,000. In addition, the proposed Project Design Alternatives discussed below function in part toward the goal of the TSM Alternative by providing bike lanes along the length of Lewis Road.

2.3.3 Proposed Project Design Alternatives

The project involves widening of an approximately 5.75-km (3.57-mile) segment of Lewis Road between the Hueneme Road Bridge on the south and Ventura Boulevard (Kilopost 20.56/ Post Mile 12.78) on the north in order to accommodate increased traffic resulting from area growth. The proposed Project Design Alternatives would conform to the American Disabilities Act (ADA) of 1990, as required.

The project is divided into two principal segments. The Caltrans Segment is the northernmost portion of Lewis Road that is designated as State Route 34 and extends from Ventura Boulevard to Pleasant Valley Road. The Ventura County Segment extends from south of Pleasant Valley Road to the Hueneme Road Bridge within unincorporated Ventura County and is not designated as part of State Route 34.

Within the Caltrans Segment, two alignment alternatives are considered. Due to the potential of the existing Union Pacific Railroad (UPRR) Overhead to be impacted by a fault within the project corridor, three bridge variations for the treatment of this overhead are considered for both Caltrans Alternatives (Figures 2.1 to 2.4). The two Caltrans alternatives and their primary differences are as follows:

- **Caltrans Alternative 1- Widen Lewis Road With 6 m Clear Recovery Zone.** Under this alternative Lewis Road would be widened from two to four lanes; provided with 2.4 meter paved shoulders and a 3.6-meter clear unpaved clear area beyond the shoulders; and involve more extensive conversion of the Ventura County Flood Control District Channel (VCFCD). The estimated cost of Caltrans Alternative 1 ranges between 10.8 to 14.6 million dollars.
- **Caltrans Alternative 2 - Widen Lewis Road With 2.4 m Wide Shoulders.** Under this alternative Lewis Road would be widened from two to four lanes; provided with 2.4 meter paved shoulders and no additional recovery zone; involve a less extensive conversion of the VCFCD channel; and install a metal beam guard rail between Dawson Place and Pleasant Valley Road. The estimated cost of Caltrans Alternative 2 ranges between 10.2 to 14.0 million dollars.

The three variations for the UPRR Overhead considered for both Caltrans alternatives and are as follows:

- **Bridge Variation A - Widen Existing Railroad Overhead.** Under this bridge variation the UPRR Overhead would be widened from 2- to 4-lanes along its eastern edge. The estimated cost of Caltrans Alternative 1 with this bridge variation is 10.8 million dollars, while Caltrans Alternative 2 is estimated at 10.2 million dollars;
- **Bridge Variation B - Remove and Replace Existing Railroad Overhead.** Under this bridge variation the UPRR Overhead would be removed and replaced with a new 4-lane structure. The estimated cost of Caltrans Alternative 1 with this bridge variation is 14.6 million dollars, while Caltrans Alternative 2 is estimated at 14.0 million dollars; and

- **Bridge Variation C - Retain Existing Overhead and Build New Parallel "Twin" Structure.** Under this bridge variation the UPRR Overhead would be left in place and would service two lanes of southbound traffic along Lewis Road. A separate and parallel "twin" structure would be constructed to the east of the existing overhead and would service two lanes of northbound traffic along Lewis Road. The estimated cost of Caltrans Alternative 1 with this bridge variation is 12.3 million dollars, while Caltrans Alternative 2 is estimated at 11.7 million dollars.

Within the Ventura County Segment, three alignment alternatives are considered. These are:

- **Ventura County Alternative 1** – Widening Lewis Road and the existing Lewis Road Bridge over Calleguas Creek. The estimated cost for this alternative is 13.5 million dollars;
- **Ventura County Alternative 2** – Widening Lewis Road, eliminating the "s"- curve, and replacing the Lewis Road Bridge over Calleguas Creek. The estimated cost for this alternative is 16.9 million dollars; and
- **Ventura County Alternative 3** – Widening Lewis Road and constructing a new roadway west of Calleguas Creek. The estimated cost for this alternative is 17.2 million dollars.

These alignments are shown on Figures 2.5 through 2.8 for Ventura County Alternative 1, Figure 2.9 for Ventura County Alternative 2, and Figures 2.10 and 2.11 for Ventura County Alternative 3. It is noted that except for those areas shown on Figure 2.9 for Ventura County Alternative 2 and Figures 2.10 and 2.11 for Ventura County Alternative 3, all other portions of the widening project are the same as shown for Ventura County Alternative 1.

The primary difference between the Ventura County alternatives is the treatment of the creek crossing at Calleguas Creek. Ventura County Alternative 1 (Figures 2.6) involves widening of the existing bridge crossing at Calleguas Creek; Ventura County Alternative 2 (Figure 2.9) involves replacement of the existing bridge structure with a new structure in the same general location as the existing bridge and also involves straightening of both the north bound and south bound approaches to the bridge. Ventura County Alternative 3 (Figures 2.10 and 2.11) involves a new road segment west of Calleguas Creek with a new bridge that would cross Calleguas Creek at the proposed Santa Barbara Street entrance to California State University Channel Islands. This alternative would also involve a new section of road west of the creek connecting with a realigned Laguna Road to the south. Under Ventura County Alternatives 1 and 2 improvements planned for that portion of Lewis Road between the bridge improvement areas and the Hueneme Road Bridge over Calleguas Creek would be the same. Under all of the Ventura County Alternatives improvements from Pleasant Valley Road and the start of the bridge improvements or realignment (for Alternative 3) would be the same.

The following describes the two principal road segments:

a. Caltrans Segment.

Ventura Boulevard to Dawson Place. This segment of roadway would consist of four 3.6-meter (12-foot) lanes and two 2.4-meter (8-foot) shoulders for a total right-of-way width of 19 meters (62 feet). A median separates opposing flows of traffic along the length of this section. A Class II bicycle lane would also be provided within the shoulder area. Within this

segment of roadway, the road widening will occur from the westerly right-of-way line of the existing Lewis Road toward the east.

Because of a separation of the roadway due to the columns at the U.S. 101 undercrossing, Lewis Road will overlie a portion of the existing Metrolink Station parking lot immediately east of the Lewis Road/Ventura Boulevard intersection. This Metrolink Station is owned and operated by the Ventura County Transportation Commission (VCTC)

A retaining wall will be constructed along the east side of the roadway near the Metrolink Station in order to minimize the right-of-way impacts and a new concrete safety-shaped barrier will be placed on top of the wall. A second retaining wall approximately 58 meters (190 feet) in length will be constructed along the west side of Lewis Road. The existing metal beam guardrail (MBGR) in this area will be extended approximately 76 meters (250 feet) northward.

The overhead spanning the Union Pacific Railroad (UPRR) tracks would be widened under Bridge Variation A. As Lewis Road is in a banked curve as it passes over the overhead, with a 6% superelevation crossfall downward to the east; widening would therefore occur on the low, or east, side of the superelevation. Under Variation B, the UPPR overhead would be removed and replaced with a four-lane structure with an 8% superelevation crossfall downward to the east. Variation C would utilize the existing structure for southbound traffic and construct a separate, but parallel, bridge structure to service northbound traffic. Crash cushions would be utilized on the overhead for this Bridge Variation.

As Lewis Road approaches Dawson Place, MBGR would be provided along both the eastern and western edges of the UPRR overhead. A 95-meter (312 feet) retaining wall would be constructed along the western edge of Lewis Road.

Dawson Place to Pleasant Valley Road. This segment of roadway would consist of four 3.6-meter (12-foot) lanes, two 2.4-meter (8-foot) shoulders, and two 3.6-meter (12-foot) parkways that comprise the Caltrans standard 6-meter "clear recovery zone" for driver safety purposes. Road widening would occur to the east. A Class II bicycle lane would also be provided. Total right-of-way width for this section including an extra 1.8 meters (6-feet) of right-of-way would be approximately 28.2 meters (93 feet). A 45 meter (150 feet) long retaining wall would also be located along the eastern edge of this area.

A 115 meter (317 foot) retaining wall with safety shaped barrier would be constructed on the west side of Lewis Road jus t south of Dawson Place. A row of about 29 eucalyptus trees would be removed along the western edge of the right-of-way. An existing flood control channel is adjacent to this segment on the east and belongs to the Ventura County Flood Control District (VCFCD). Most of this flood control channel between Pleasant Valley Road and Dawson Place would be paved with storm flows passing under the road through a reinforced concrete box. VCFCD will maintain ownership of the covered channel and would be responsible for its hydraulic and structural maintenance. Approximately 9 existing power poles adjacent to the VCFCD channel would be relocated as they fall within the project area of effect.

Two alternatives are being considered for this segment of the road improvement. Under the first alternative, referred to as Caltrans Alternative 1, approximately 563 meters (1,847 feet)

of the VCFCD channel would be converted to a reinforced concrete box. The second alternative for this segment, referred to as Caltrans Alternative 2, would be about 3.6 meters (12 feet) narrower on the east side than Caltrans Alternative 1 and would cover only 421 meters (1,381 feet) of the existing flood control channel.

A retaining wall approximately 23 meters (75 feet) would also be constructed in this area on the east side of Lewis Road. A metal guardrail would be constructed along the western edge of the right-of-way between Dawson Place and Pleasant Valley Road.

A summary of the new right of way (R/W), slope easement, and utility easement requirements for the Caltrans Alternatives is provided in Table 2.1.

Table 2.1 New Right-of-Way and Easement Requirements Caltrans Alternatives (acres)

	New Right of Way	Slope Easement	Utility Easement
Caltrans Alternative 1	1.05	0.00	0.20
Caltrans Alternative 2	0.60	0.00	0.20

b. Ventura County Segment.

Pleasant Valley Road to the Approach to Lewis Road Bridge. For this segment of the proposed road, Lewis Road would be widened to four 3.6-meter (12-foot) travel lanes, a 4.3-meter (14-foot) median, two 2.4-meter (8-foot) shoulders that include a Class II bike lane, and two 2.4-meter (8-foot) parkways. Total right-of-way width for this section would be 28.7 meters (94 feet). The intersection of Lewis Road and Pleasant Valley Road would have an additional 3.6-meter (12 foot) lane to accommodate left turns from both the north and south for a total right-of-way width of 31.7 meters (104 feet). A 38-mm asphaltic (AC) overlay with paving fabric would be applied to the road surface after widening.

The Lewis Road Drain is located adjacent to the road and will be included in the 2.4-meter (8-foot) parkway but will not be altered by the proposed project. The existing curve north of Cawelti Road would be straightened from the existing 130-meter (900-foot) radius to a 457-meter (1,500-foot) radius in order to increase the design speed of the roadway from 50 to 60 mph. Several rows of cottonwood trees along the east and west sides of the roadway will be removed. A row of 22 power poles along the west side of the roadway will require relocation, along with three power poles on the east side of the roadway further to the south.

Under Ventura County Alternative 1, the Lewis Road Bridge over Calleguas Creek would be widened on the west side. This alternative would minimize construction costs and avoid encroachment on vertical clearance over the channel; however, it would not allow for the straightening of the alignment of Lewis Road as it approaches the bridge.

Under Ventura County Alternative 2, Lewis Road Bridge over Calleguas Creek would be removed and replaced with a wider bridge. Parkways and medians would be eliminated over the bridge. The present alignment of Lewis Road makes a large "s" curve at Calleguas Creek because the bridge is nearly perpendicular to the creek channel. The proposed project would lengthen the bridge and orient it at a skew across the creek, allowing for a straightened road alignment. Road widening and right-of-way acquisition will occur on the west side of the

roadway until the southern Lewis Road Bridge approach, whereupon widening and right-of-way acquisition will occur on the east side of the roadway.

Ventura County Alternative 3 would involve construction of a new road west of Calleguas Creek for the segment of Lewis Road between the existing Lewis Road Bridge and Hueneme Road. As shown on Figures 2.10 and 2.11 the alignment departs from existing Lewis Road approximately 1,000 feet (305 m) north of the existing bridge; from that point, the alignment curves southwest until it parallels Calleguas Creek heading south, immediately adjacent and west of Calleguas Creek.

This alternative would involve construction of a new bridge across Calleguas Creek at the extension of Santa Barbara Street to tie the CSUCI campus to Lewis Road. It is presumed that this will be a four-lane road with 8-foot shoulders and 8-foot parkways for bikes and pedestrians. The extension of Santa Barbara Street is shown in the certified supplemental EIR for the CSUCI campus (Rincon, March 2000). The timing for construction of the extension of Santa Barbara Street is not known with certainty and is under the control of the university.

Just south of the existing entrance to CSUCI, the new alignment of Lewis Road shown in Alternative 3 would separate from the existing road toward the southwest. A "t" intersection (existing Lewis Road as it intersects the new Lewis Road) is proposed with the "through" movement being assigned to the new alignment.

Proposed Santa Barbara Street Extension to the Hueneme Road Bridge. Under Ventura County Alternatives 1 and 2, the roadway would narrow to two lanes between the CSU Channel Islands Santa Barbara Street extension and the Hueneme Road Bridge over Calleguas Creek. This section of roadway would consist of two 3.6-meter (12-foot) lanes with two 2.4-meter (8-foot) shoulders and two 3-meter (10-foot) parkways for a total right-of-way width of 18 meters (60 feet). The proposed alignment will skirt the base of Round Mountain, a sensitive cultural resource.

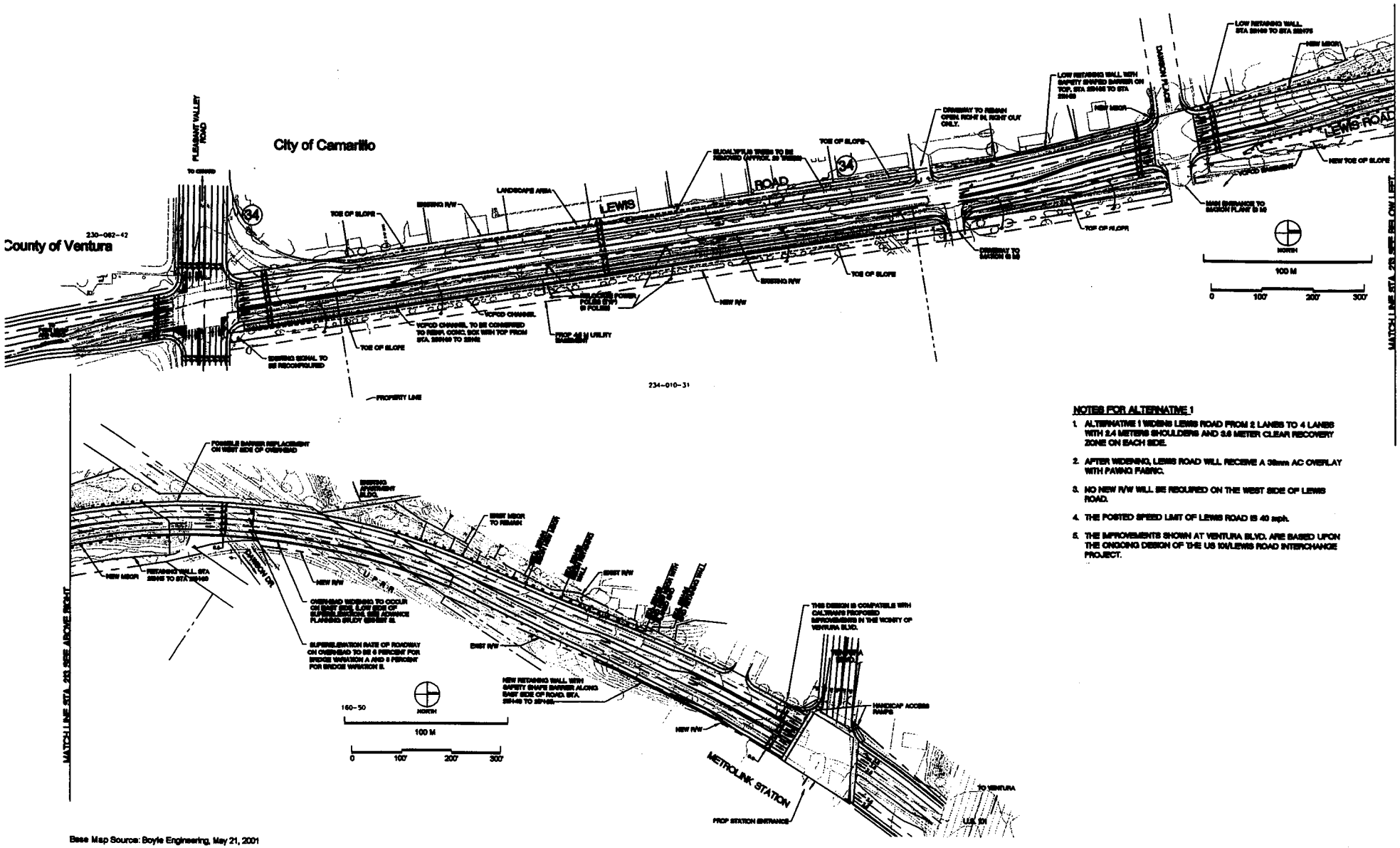
Under Ventura County Alternative 3 the segment of Lewis Road south of Santa Barbara Street narrows to a two-lane road with two 3.6-meter (12-foot) lanes, 2.4-meter (8-foot) shoulders, two 3-meter (10-foot) parkways for a total right-of-way width of 18 meters (60 feet). The southernmost end of Lewis Road would tie into Hueneme Road approximately 300 feet (90 m) west of Laguna Road (realigned). A four-way right angle intersection would be created.

A summary of the new right of way (R/W), slope easement, and temporary construction easement requirements for the Ventura County Alternatives is provided in Table 2.2.

Table 2.2 New Right of Way and Easement Requirements (acres)
Ventura County Alternatives

	New Right of Way	Slope Easement	Temporary Construction Easement
Ventura County Alternative 1	19.54	5.85	3.68
Ventura County Alternative 2	21.82	5.46	3.53
Ventura County Alternative 3	29.19	7.63	4.63

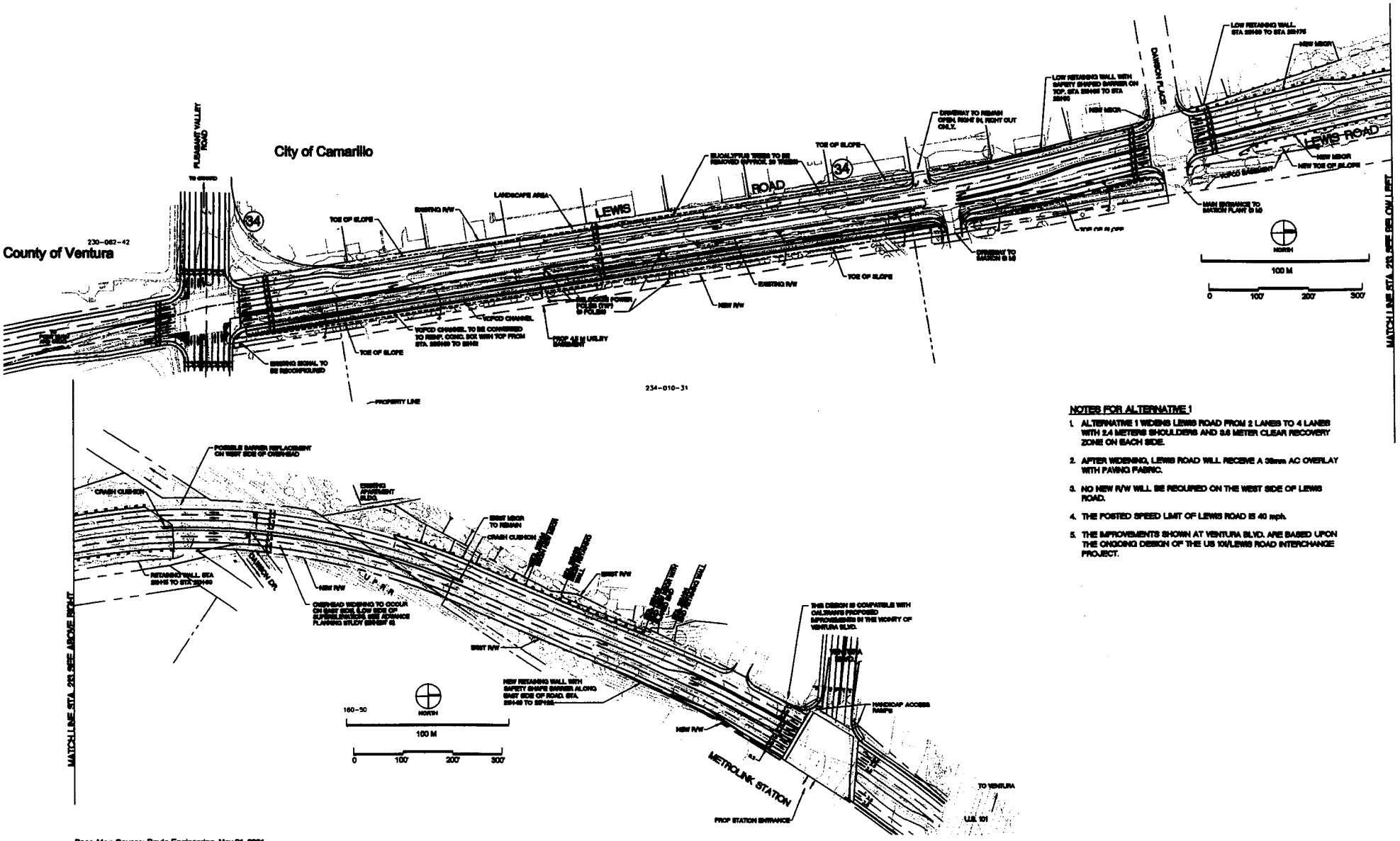
Source: Boyle Engineering Corporation, 2000



Base Map Source: Boyle Engineering, May 21, 2001

Caltrans Alternative 1, Bridge Variations A & B

Figure 2.1



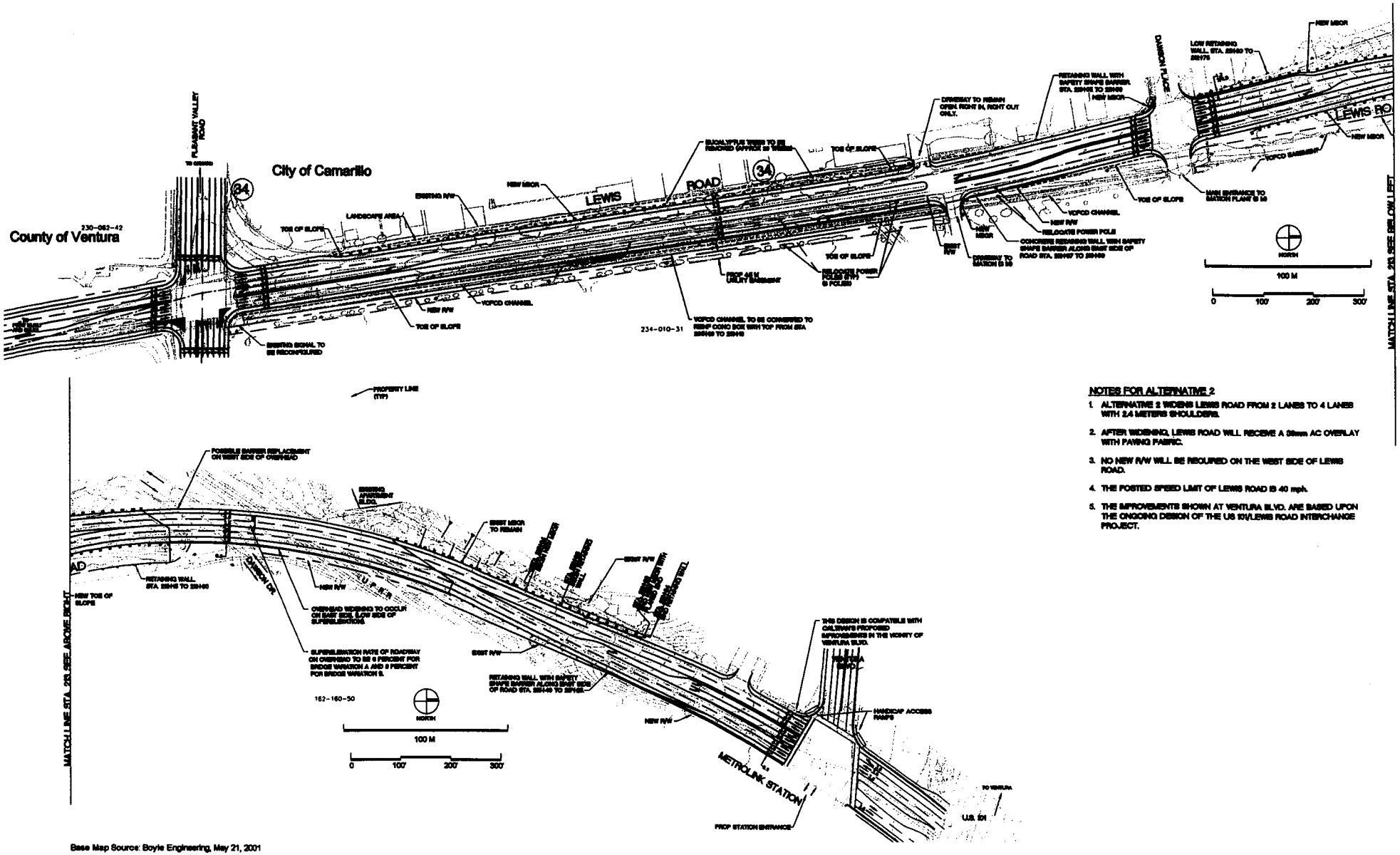
NOTES FOR ALTERNATIVE 1

1. ALTERNATIVE 1 WIDENS LEWIS ROAD FROM 2 LANES TO 4 LANES WITH 2.4 METERS SHOULDERS AND 3.6 METER CLEAR RECOVERY ZONE ON EACH SIDE.
2. AFTER WIDENING, LEWIS ROAD WILL RECEIVE A 38mm AC OVERLAY WITH PAVING FABRIC.
3. NO NEW R/W WILL BE REQUIRED ON THE WEST SIDE OF LEWIS ROAD.
4. THE POSTED SPEED LIMIT OF LEWIS ROAD IS 40 mph.
5. THE IMPROVEMENTS SHOWN AT VENTURA BLVD. ARE BASED UPON THE ONGOING DESIGN OF THE US 101/LEWIS ROAD INTERCHANGE PROJECT.

Base Map Source: Boyle Engineering, May 21, 2001

Caltrans Alternative 1, Bridge Variation C

Figure 2.2



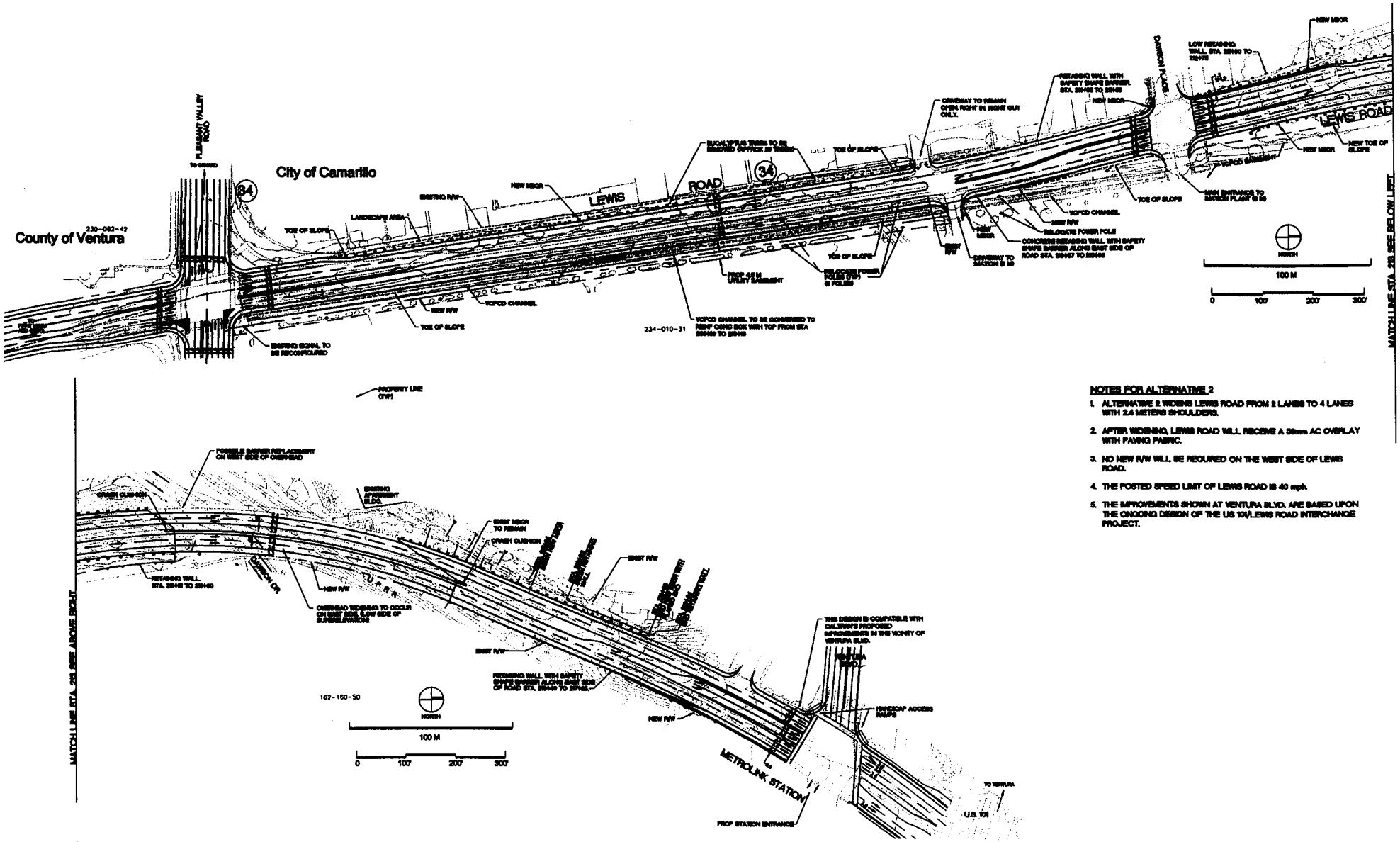
NOTES FOR ALTERNATIVE 2

1. ALTERNATIVE 2 WIDENS LEWIS ROAD FROM 2 LANES TO 4 LANES WITH 2.4 METERS SHOULDERS.
2. AFTER WIDENING, LEWIS ROAD WILL RECEIVE A 38mm AC OVERLAY WITH PAVING FABRIC.
3. NO NEW R/W WILL BE REQUIRED ON THE WEST SIDE OF LEWIS ROAD.
4. THE POSTED SPEED LIMIT OF LEWIS ROAD IS 40 mph.
5. THE IMPROVEMENTS SHOWN AT VENTURA BLVD. ARE BASED UPON THE ONGOING DESIGN OF THE US 101/LEWIS ROAD INTERCHANGE PROJECT.

Base Map Source: Boyle Engineering, May 21, 2001

Caltrans Alternative 2, Bridge Variations A & B

Figure 2.3



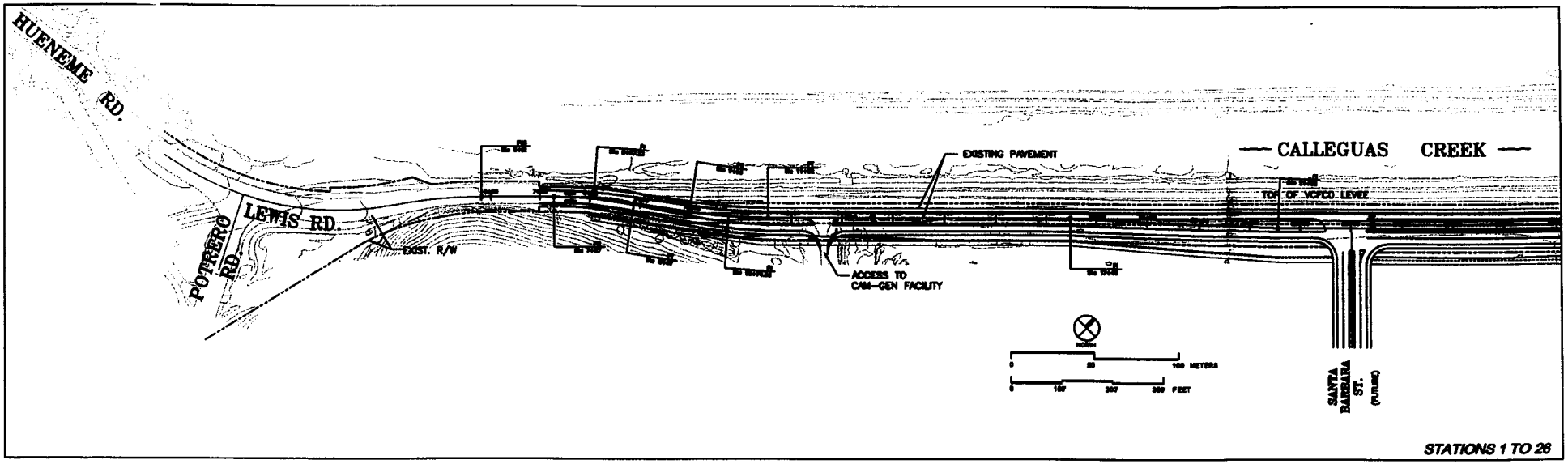
NOTES FOR ALTERNATIVE 2

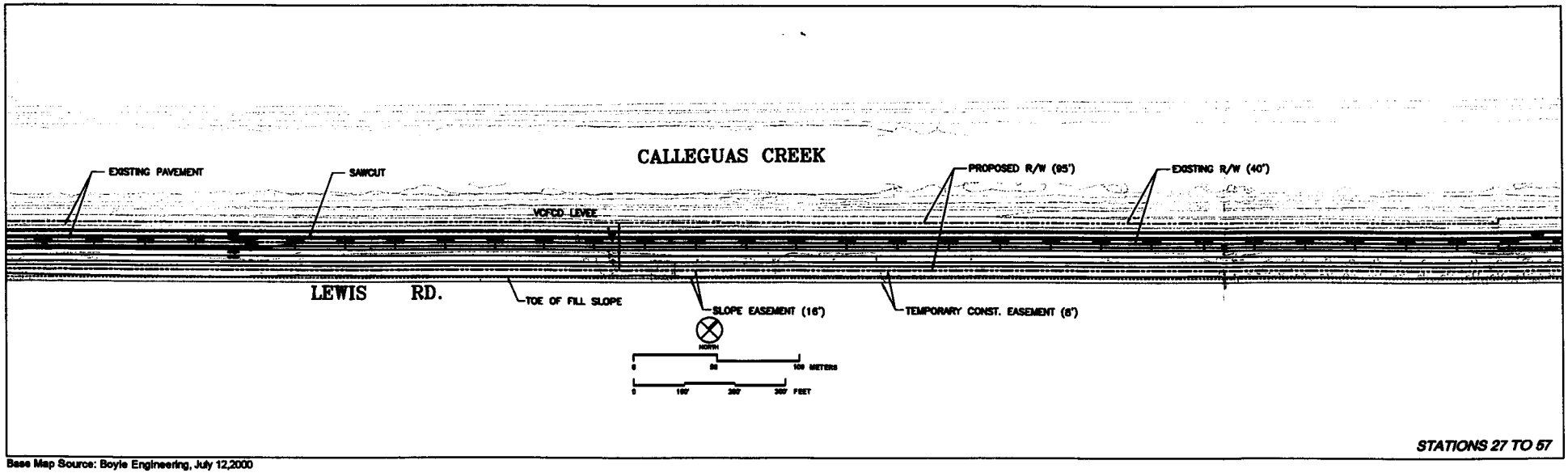
1. ALTERNATIVE 2 WIDENS LEWIS ROAD FROM 2 LANES TO 4 LANES WITH 2.4 METERS SHOULDERS.
2. AFTER WIDENING, LEWIS ROAD WILL RECEIVE A 50mm AC OVERLAY WITH PAVING FABRIC.
3. NO NEW R/W WILL BE REQUIRED ON THE WEST SIDE OF LEWIS ROAD.
4. THE POSTED SPEED LIMIT OF LEWIS ROAD IS 40 mph.
5. THE IMPROVEMENTS SHOWN AT VENTURA BLVD. ARE BASED UPON THE ONGOING DESIGN OF THE US 101/LEWIS ROAD INTERCHANGE PROJECT.

Base Map Source: Boyle Engineering, May 21, 2001

Caltrans Alternative 2, Bridge Variation C

Figure 2.4

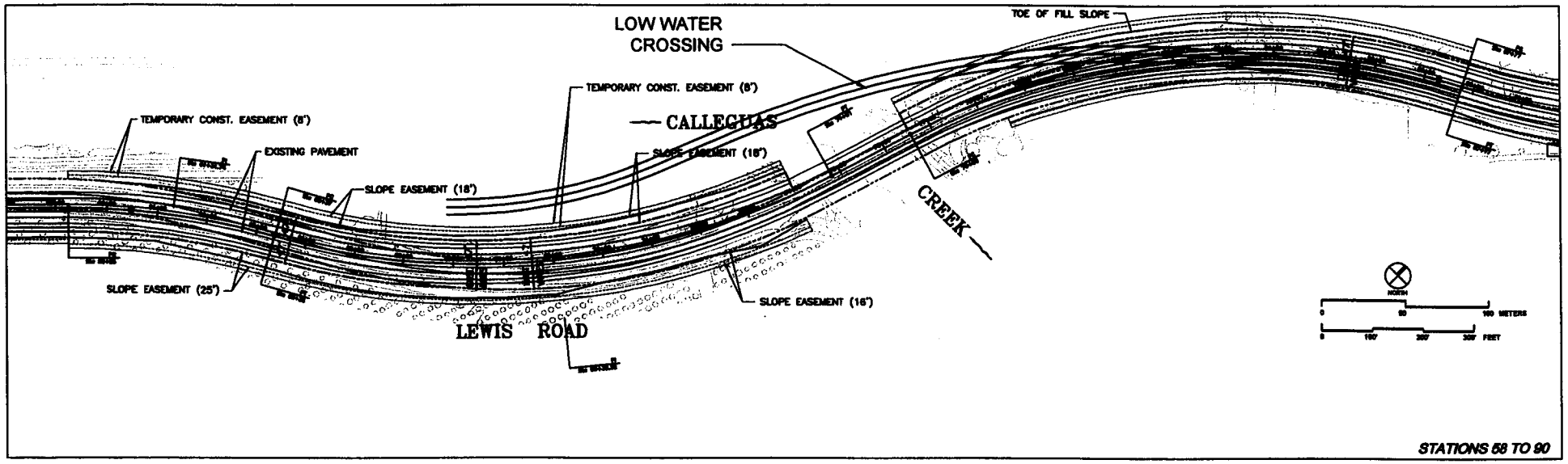


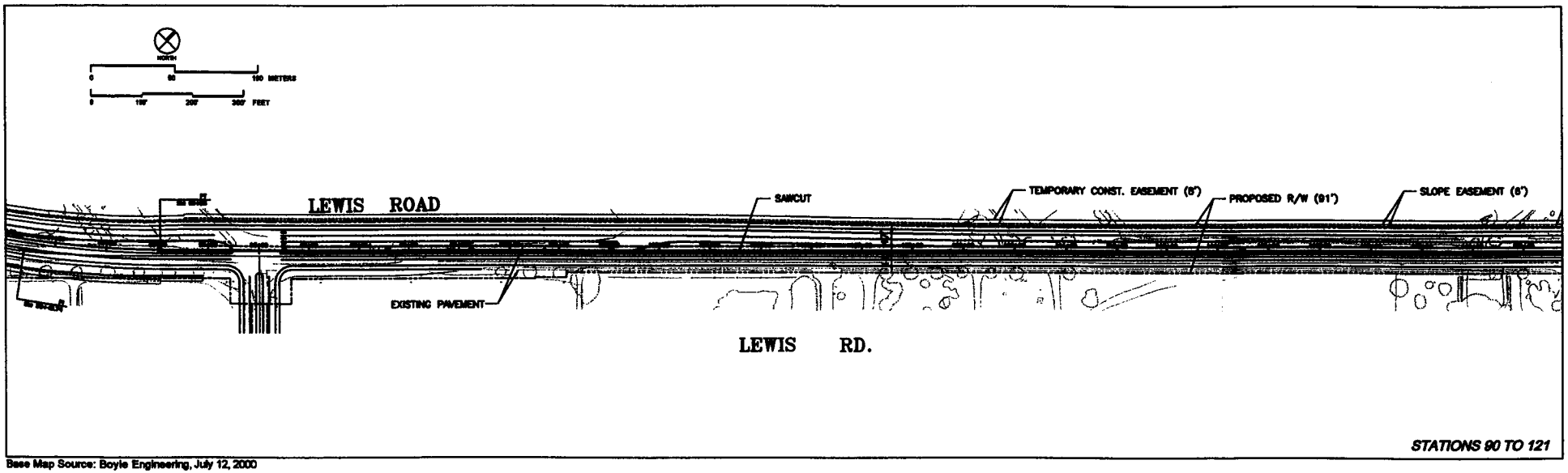


Base Map Source: Boyle Engineering, July 12,2000

Ventura County Alternative 1 (Sheet 1 of 4)

Figure 2.5

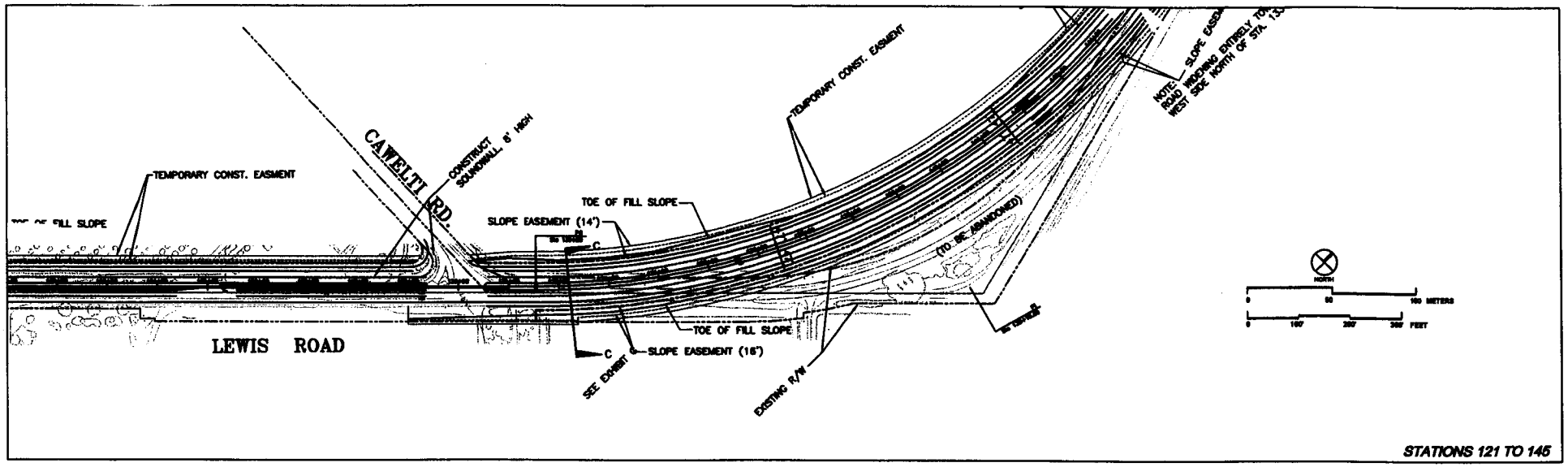




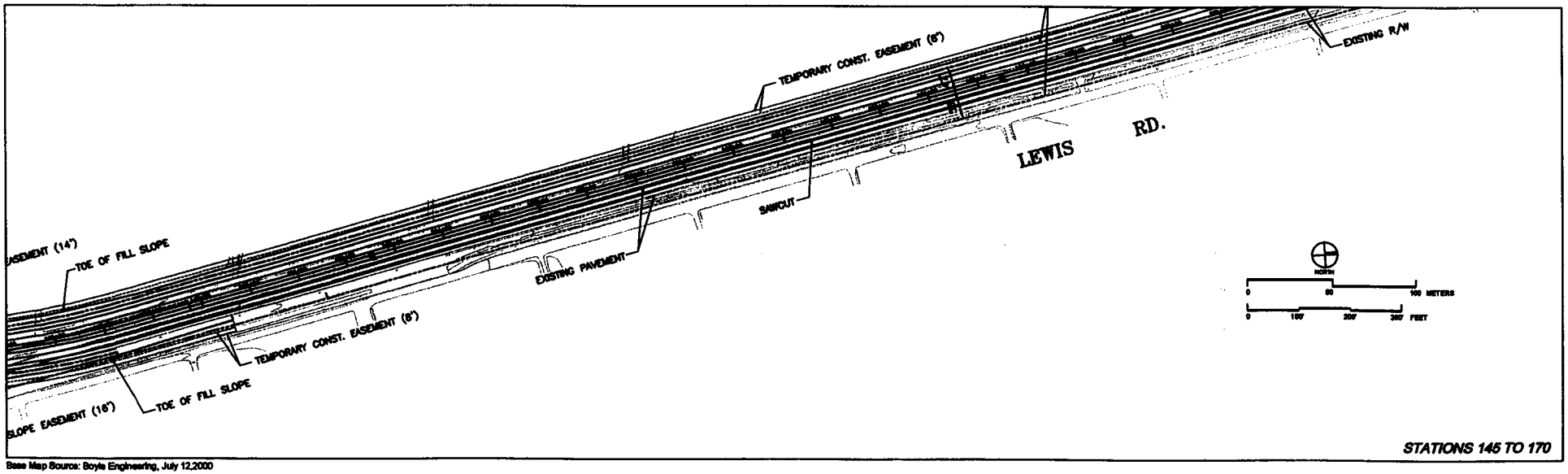
Base Map Source: Boyle Engineering, July 12, 2000

Ventura County Alternative 1 (Sheet 2 of 4)

Figure 2.6



STATIONS 121 TO 145

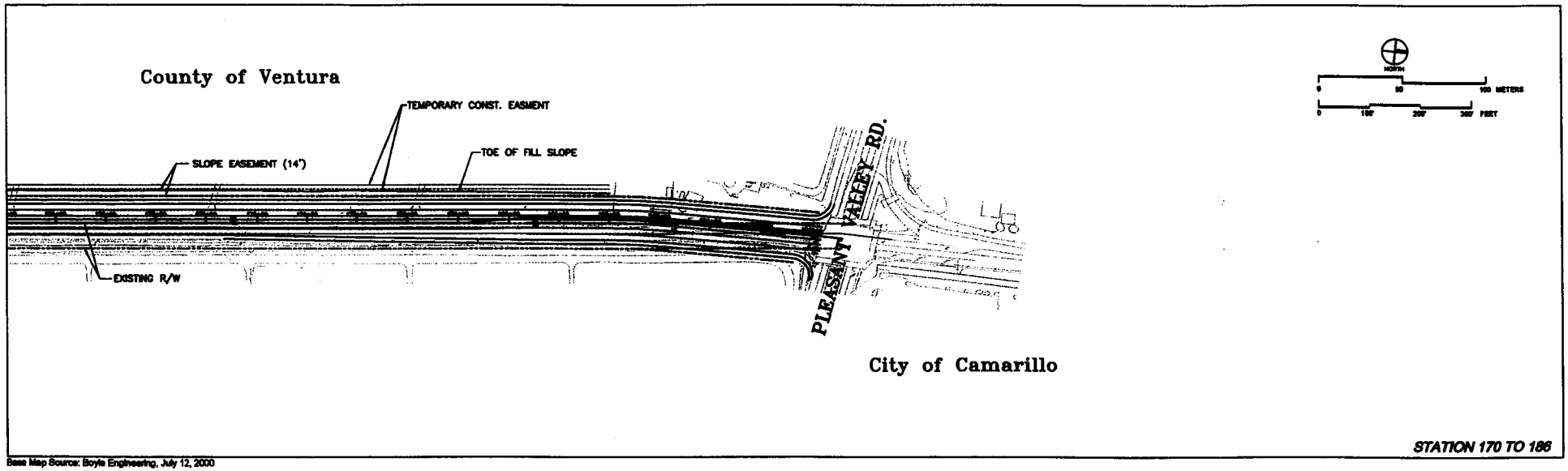


STATIONS 145 TO 170

Base Map Source: Boyle Engineering, July 12,2000

Ventura County Alternative 1 (Sheet 3 of 4)

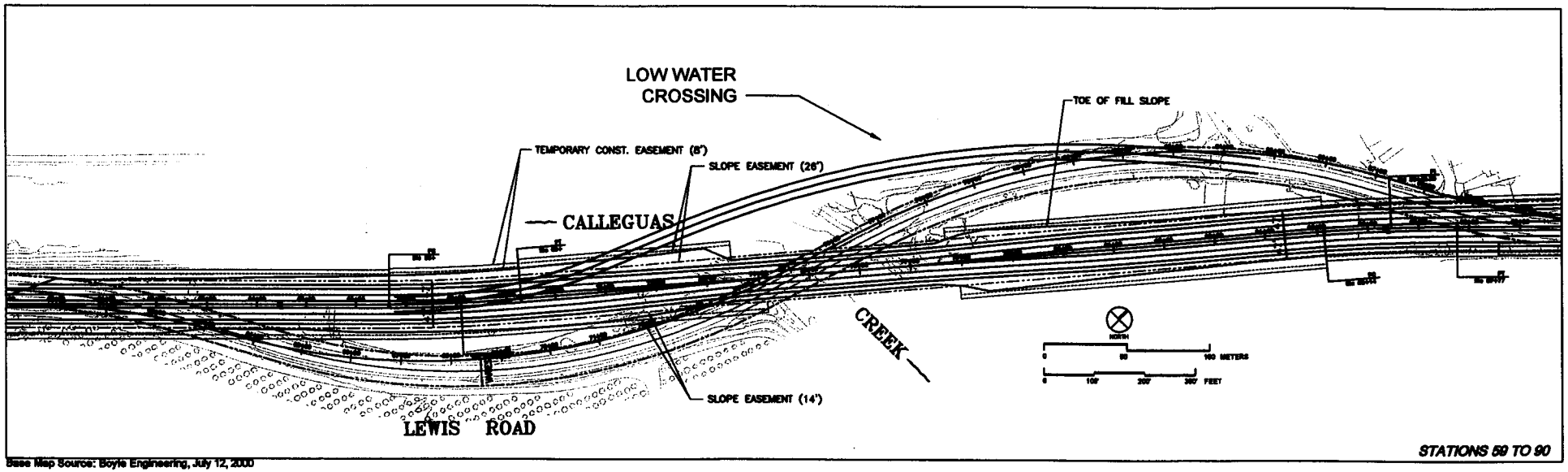
Figure 2.7



Base Map Source: Boyle Engineering, July 12, 2000

Ventura County Alternative 1 (Sheet 4 of 4)

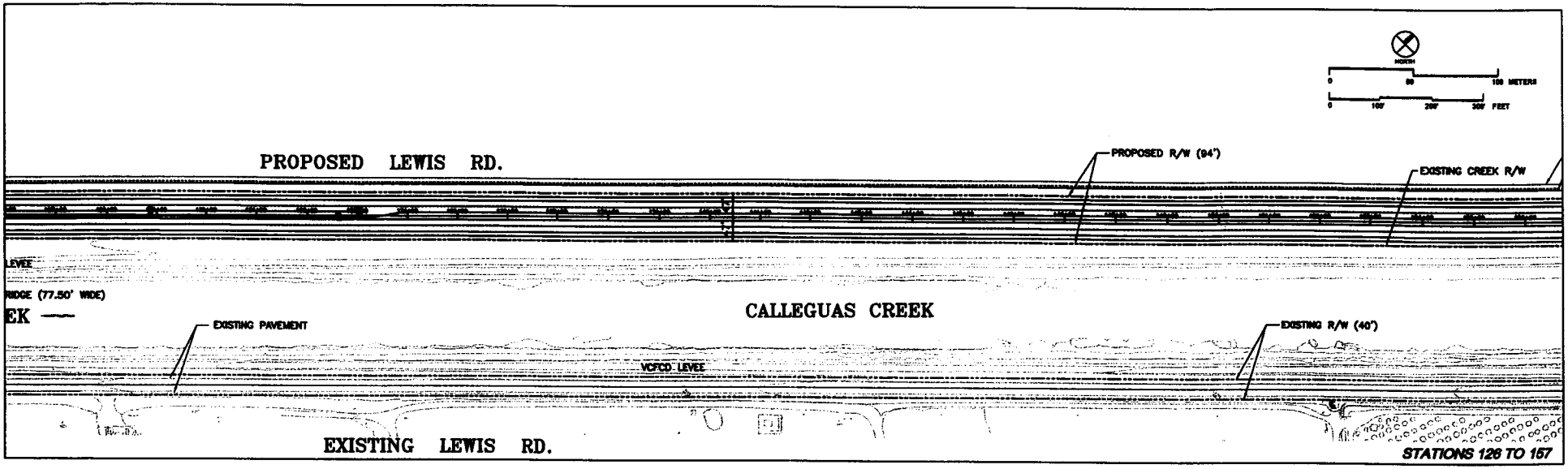
Figure 2.8

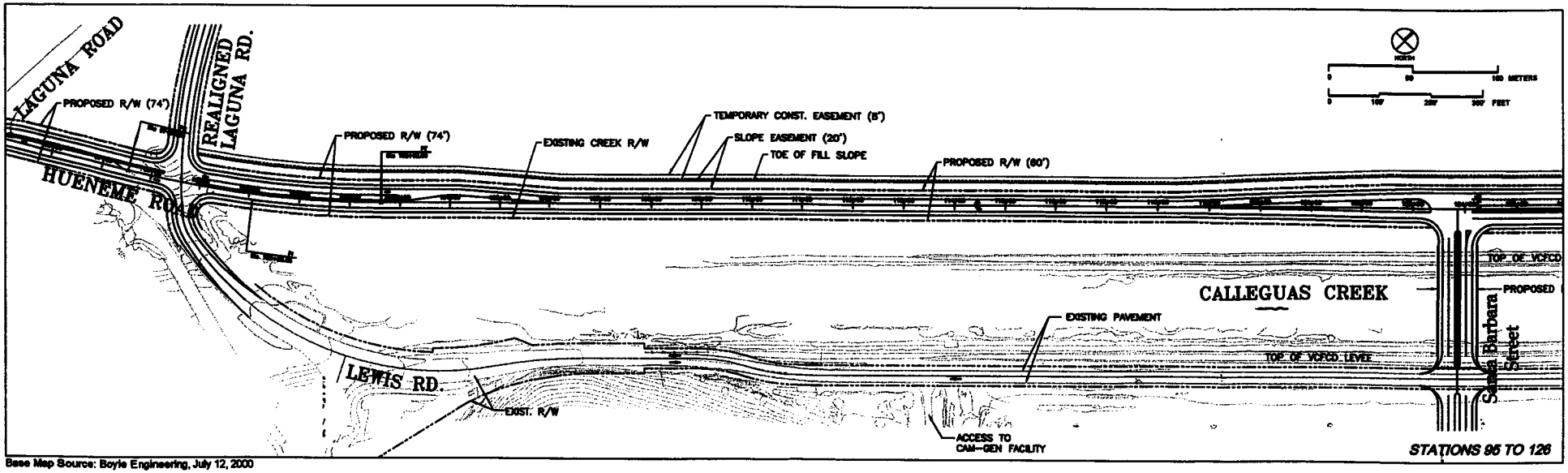


Base Map Source: Boyle Engineering, July 12, 2000

Ventura County Alternative 2

Figure 2.9

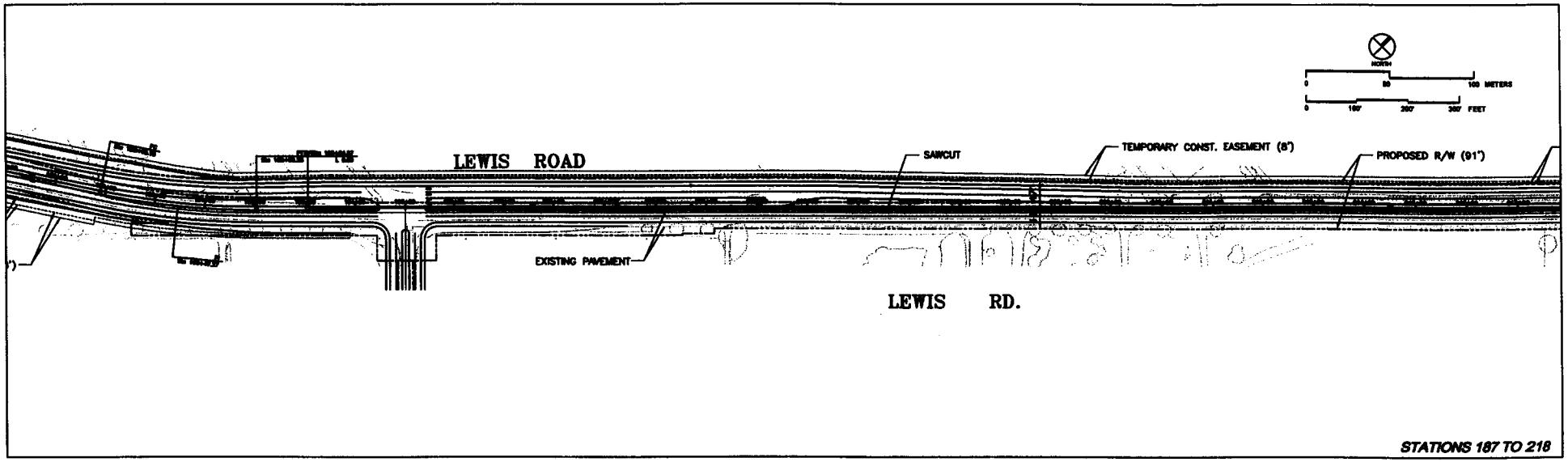


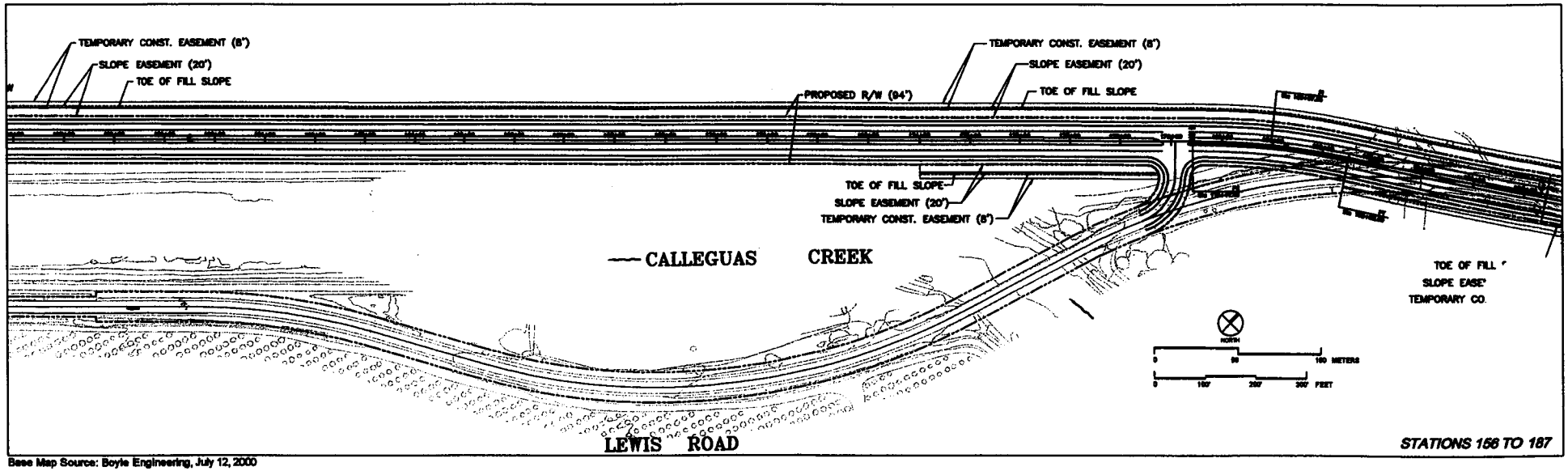


Base Map Source: Boyle Engineering, July 12, 2000

Ventura County Alternative 3 (Sheet 1 of 2)

Figure 2.10





Base Map Source: Boyle Engineering, July 12, 2000

Ventura County Alternative 3 (Sheet 2 of 2)

Figure 2.11

2.4 Construction Phasing

This section describes the construction phasing for both the Caltrans and County segments of the proposed road improvement. It is anticipated that these two components of the road improvement would occur concurrently under two separate and independent construction contracts.

2.4.1 Caltrans Segment

a. Caltrans Alternative 1. Caltrans Alternative 1, which includes a 6-meter (19.7-foot) clear recovery zone (i.e. a 2.4 meter (7.87 foot) right shoulder and a 3.6 meter (11.8 foot) graded area), requires widening Lewis Road on both sides. In general travel lanes on the existing road would remain in service during construction. The following is a discussion of the construction stages for the segment of Lewis Road from Pleasant Valley Road to Dawson Place.

Stage 1: Widen Lewis Road on the southbound (west side). Temporary K-railing would be used to separate the traveling public from the construction area. A reduction in the outside shoulder width and/or minor re-striping may be needed in order to install K-rail.

Stage 2: The second stage would entail installing K-rail and widening the northbound (east side) of the roadway.

Stage 3: After widening both sides of the roadway, traffic would be shifted to the new outside lanes. Then the existing pavement would be overlaid and rehabilitated.

The following is a discussion of the construction stages for the segment of Lewis Road from Dawson Place to Ventura Boulevard. The UPRR Overhead is located within this segment. Treatment of the construction phasing of the overhead under Bridge Variations A, B, and C would vary.

- **Bridge Variation A-Widen Existing Railroad Overhead.**

  Stage 1: Widen Lewis Road on the northbound (east side). Temporary K-railing would be used to separate the traveling public from the construction area. A reduction in the outside shoulder width and/or minor re-striping may be needed in order to install K-rail.

  This stage would also include widening the existing Union Pacific Railroad overhead. Again K-rail would be placed to separate moving traffic from the construction area. A new overhead structure would be constructed on the east side and connected to the existing overhead deck with a closure pour. Careful coordination with the railroad would be required for construction of new overhead footings, columns, superstructure and all work within the railroad right-of-way and along the railroad tracks. A temporary closure of one of the tracks under the overhead, the northern spur may be required. This was done in 1972 when the existing overhead was built.

  Stage 2: After completion of Stage 1, traffic would be shifted to the newly completed northbound lane. One or two traffic lane shifts may be required in order to complete the

overlay work for the existing pavement. However, one lane in each direction and left-turn lanes at signalized intersections would be maintained at all times.

Between Lewis Road, Hueneme Road East (off the end of the existing bridge) Laguna Road (realigned). The existing Lewis Road east of Calleguas Creek would remain in place and continue to be utilized. Removing the existing non-standard railing on the southbound (west side) of the existing Union Pacific Railroad overhead would also be a part of this stage.

- **Bridge Variation B-Remove and Replace Existing Railroad Overhead.** Construction staging for Bridge Variation B would be identical to Bridge Variation A with the exception that during Stage 2, instead of removing the existing non-standard railing on the west (southbound) side of the railroad, the entire existing railroad overhead would be removed and replaced.
- **Bridge Variation C-Retain Existing Overhead and Build New Parallel Twin Structure.** Construction staging for Bridge Variation C would be identical to Bridge Variation A with the exception that during Stage 2, a separate twin structure would be constructed to the east of the existing to service future northbound traffic.

b. Caltrans Alternative 2. Alternative 2, which widens Lewis Road and provides only 2.4 m of outside shoulder (without a 3.6 m graded area), would also require widening the road on both sides. Although the new roadway width for this alternative is narrower than Alternative 1, construction phasing of this alternative would be the same as Alternative 1 for all three Bridge Variations. Again, during construction, traffic lanes on the existing road (i.e., one lane in each direction with left turning lanes at signalized intersections) will remain in service.

2.4.2 Ventura County Segment

a. Ventura County Alternative 1. During construction of Ventura County Alternative 1, which widens the existing roadway and the existing Lewis Road Bridge over Calleguas Creek, traffic lanes on the existing road (i.e., one lane in each direction) will be maintained. Specific phases of construction are described below.

From the intersection of Potrero and Hueneme Road to Santa Barbara Street, widening will occur on the east (northbound) side adjacent to the existing two-lane street; k-railing will be used to separate moving traffic from the construction area.

From Santa Barbara Street to Calleguas Creek, two new northbound lanes will be constructed along the east side but kept separate from the existing two-lane roadway. These lanes can be constructed without disrupting traffic on the existing roadway.

As Lewis Road approaches Calleguas Creek, the widening will shift from the east side of the existing roadway to the west side. As when widening on the east side, construction of the new lanes on the west side can be completed separately from the existing roadway without disrupting traffic. Once the new lanes are completed on both the east and west sides, a tapered transition connecting the new southbound lanes to the existing roadway will be constructed. Traffic (one lane in each direction) will then be diverted to the new southbound lanes allowing construction of a similar tapered transition to connect the new northbound lanes to the existing roadway.

Alternative 1 widens the existing Lewis Road Bridge on the west (or downstream) side. Installation of k-rail to protect the bridge construction area from vehicular traffic on the existing 24-foot wide bridge will require the use of two 10-foot lanes. From Calleguas Creek to Pleasant Valley Road, two new southbound lanes will be constructed along the west side but separately from the existing two-lane roadway. These lanes can be constructed without disrupting traffic on the existing roadway.

b. Ventura County Alternative 2. During construction of Ventura County Alternative 2, which widens the existing roadway, eliminates an "s" curve, and constructs a new Lewis Road Bridge, traffic lanes on the existing road (i.e., one lane in each direction) will be maintained. From the intersection of Potrero and Hueneme Roads to Santa Barbara Street, and from Calleguas Creek to Pleasant Valley Road, Alternatives 1 and 2 are identical; therefore, so will the construction phases. The only difference between these alternatives is at Calleguas Creek where the existing "s" curve alignment is eliminated and the existing creek bridge is replaced. Here, a detour around the bridge site will be constructed. After detouring traffic, the new (straightened) roadway and bridge can be constructed without traffic impacts. After construction, traffic will be shifted to the new roadway and the temporary detour removed.

c. Ventura County Alternative 3. Existing traffic lanes on Lewis Road (i.e., one lane in each direction) will be maintained during construction. With construction of the roadway from Hueneme Road to Calleguas Creek, on a new alignment, no disruption to traffic on the existing roadway would occur.

2.5 Construction Schedule and Workforce

In 1998, $2.5 million in Congestion Management/Air Quality (CMAQ) funds and $4 million in Surface Transportation Program (STP) funds were allocated for improvements to Lewis Road. A cooperative agreement with Ventura County, Ventura County Transportation Commission (VCTC), and the City of Camarillo has been reached in which VCTC has committed to funding the entire project, less local contributions. In addition, the CSU Site Authority has tentatively agreed to fund a fair share of the improvements costs. Because of the projected increase in traffic volumes on Lewis Road, VCTC has added it to its list of important roadways in Ventura County. Specifics of funding for the Caltrans and County segments of Lewis Road are summarized in Table 2.3 on the following page.

Funding for the proposed project is expected to be received in increments over time and will ultimately determine the final project schedule. It is anticipated that the project would begin construction in early 2004 and would be completed by mid-2005. Construction timing for the Caltrans Segment is about 9 months for Bridge Variation A , 12 months for Bridge Variation B, and 10 months for Bridge Variation C with concurrent activities ongoing for the roadway and bridge components of the project. The workforce requirements for this segment of the proposed project are estimated at 15.

Construction of the Ventura County Segment is expected to last about 8 months for Alternatives 1 and 2 and about 10 months for Alternative 3. This also assumes concurrent construction activities for the road surface and bridge construction work. Workforce requirements are estimated at 30 for each of the alternatives.

Table 2.3 Funding Sources

Project #	Description	Authorized	Grant Funds Anticipated	Local Funds	Total
STPDBL-5952(062)	Lewis Road Widening	$4,000,000	$4,000,000	$518,242	$4,518,242
2002 STIP	Lewis Road Widening	$0	$12,000,000	$0	$12,000,000
[TEA-21 - CMAQ]	Bike Lanes (County)	$1,881,262	$1,881,262	$243,737	$2,124,999
[TEA-21 - CMAQ]	Bike Lanes (State)	$700,000	$700,000	$90,692	$790,692
[STIP - 1998 amdm't]	Lewis Road Widening	$3,222,000	$3,222,000	$0	$3,222,000
STP/STIP Swap	Lewis Road Widening	$3,000,000	$3,000,000	$388,682	$3,388,682
Caltrans	Seismic Evaluation of UPPR Bridge	$385,000	$385,000	$0	$385,000
CSUCI Site Authority	Traffic Mitigation	$5,620,000	$0	$5,620,000	$5,620,000
	Totals:	$18,808,262	$25,188,262	$6,861,354	$32,049,616

Source: County of Ventura July 2001

2.6 Transportation Demand

The proposed project is included within the Southern California Association of Governments (SCAG) 2000/01 – 2005/06 Regional Transportation Improvement Program (RTIP) and the VCTC 1999 Ventura County Congestion Management Program/Capital Improvement Program (CMP/CIP) adopted on December 3, 1999. Further, the project is consistent with SCAG's 1998 RTP that was adopted on April 16, 1998 and approved by FHWA on June 9, 1998.

2.7 Legislation

There is no legislation that specifically applies to the proposed project. The project is consistent with the objectives of several legally mandated programs such as the Clean Air Act Amendments (CAAAs) of 1990, the State Implementation Plan (SIP), the Regional Transportation Plan (RTP) and Regional Transportation Improvement Program (RTIP) prepared and updated by the (SCAG) as discussed above.

Chapter 3 Affected Environment

This section briefly describes the current environmental conditions in the County of Ventura in the immediate project area.

a. Physical Setting. The project corridor is located at the western edge of the Santa Monica Mountains, with the broad, flat alluvial Oxnard Plain extending to the west and the Pacific Ocean. The mountains rise relatively abruptly from the Oxnard Plain, offering extensive scenic vistas from viewpoints located throughout the lowlands. In the vicinity of the project site, the hills and mountains are characteristically rounded and steep, reflecting their formation as volcanic hills. The lowlands of the plain west of the project site are extensively used for agriculture, particularly row crops and citrus.

The primary drainage for the area is Calleguas Creek, which is located immediately adjacent to a majority of the corridor. Calleguas Creek has been fully controlled through the use of bank levees in this area, though a substantial rupture in the levee north of the site (now repaired) occurred during the winter of 1997/98. The Calleguas Creek Watershed includes approximately 343 square miles consisting of open space, agricultural land, and urban development. Calleguas Creek empties to Mugu Lagoon, one of the largest remaining salt marshes in southern California. Tributaries of the watershed include Conejo Creek, Arroyo Las Posas, Arroyo Conejo, Arroyo Santa Rosa, Arroyo Simi, and Revolon Slough. The watershed provides habitat for 16 endangered species and 37 species that are candidates for listing. Development of agriculture and urban uses in the watershed has resulted in the degradation of water quality, stream channels, riparian habitat, and wetlands. In part, lack of comprehensive watershed planning has led to the classification of all of the major streams in the watershed as "Impaired" by the Los Angeles Regional Water Quality Control Board (RWQBC).

The City of Camarillo is the nearest urban center to the project corridor and encompasses the entire Caltrans Segment of the corridor north of Pleasant Valley Road. The City has a strong agricultural heritage, which still supports the community in addition to a growing commercial and industrial base. The City incorporated in 1964, and residential growth occurred rapidly from that time through the late 1980s. Most of the developed area of the City lies on the north side of U.S. Highway 101, with a general east-west orientation.

The area's Mediterranean climate is among the mildest in the country, characterized by warm summers (daytime highs usually in the 70s), and pleasant winters (highs usually in the 60s). As in most of California, rainfall peaks during the winter, with most falling between November and April. Annual rainfall averages about 15 inches.

b. Social and Economic Setting. The proposed is intended to accommodate traffic associated with the forecasted future growth of the region.

Executive Order 12898, issued in February 1994, requires that each federal agency administer its programs, policies, and activities that affect human health or the environments so as to identify and avoid disproportionately high and adverse human health and environmental effects on minority or low-income populations. As a result, information on the race, income level, other readily accessible and relevant statistics, and the potential effects of the project on

low-income or minority populations are included within this document and are summarized in Table 3.1 below.

Table 3.1 Age, Ethnicity, and Income of Ventura County Residents

Age Distribution	
Under 18 years old	28.0%
18-64 years	61.5%
65 years old and over	10.5%
Ethnicity	
Black	2.4%
American Indian, Eskimo, or Aleut	0.9%
Asian or Pacific Islander	6.9%
Hispanic	33.4%
White, non-Hispanic	57.7%
Income Distribution	
Median household income	$49,763
Persons below poverty	10.3%
Children below poverty	16.6%

Source: U.S. Census Bureau. Accessed February 2001,<http://quickfacts.census.gov/cgi-bin/county?cnty=0611.htm>

Table 3.2 below summarizes current employment in the Ventura County area. The project would generate short-term employment opportunities during the 8-10 month construction period, but would not affect long-term employment in the area.

Table 3.2 Ventura County Employment(1998 and 2020)

City	Total Jobs	
	1998	2020
Camarillo	29,243	39,444
Fillmore	2,255	6,886
Moorpark	6,727	14,213
Ojai	3,541	4,658
Oxnard	40,467	75,757
Port Hueneme	20,241	21,570
San Buenaventura	56,633	87,957
Santa Paula	6,934	10,718
Simi Valley	32,399	90,731
Thousand Oaks	69,643	94,987
Unincorporated	28,880	38,622
Total:	**296,963**	**485,543**

Source: Southern California Association of Governments and Rincon Consultants, Inc., 1998.
Figures for 1998 were derived through interpolation between 1995 and 2000 estimates.

Southern California Association of Governments (SCAG) provides population projections for a six-county region that includes Ventura County. Population and housing estimates for 1998 and 2020 are shown in Table 3.3. According to SCAG, Ventura County is expected to add about 220,000 residents between 2000 and 2020, which represents a 30% increase in the countywide population.

The project would not generate any new population and would not generate any demand for housing resources. Furthermore, it is not expected to substantially affect the local tax base. By improving the circulation, it could be expected that more people would use the businesses around these intersections, thereby slightly increasing the tax base. Funding for the widening improvements could come from local, state and/or federal funds. It is not likely that the property values would be substantially affected.

Table 3.3 Ventura County Population and Housing (1998 and 2020)

City	Population		Housing Units	
	1998	2020	1998	2020
Camarillo	56,623	72,887	19,845	28,367
Fillmore	13,028	26,525	3,801	8,009
Moorpark	27,291	42,830	8,371	14,365
Ojai	7,925	9,007	3,194	3,893
Oxnard	151,486	185,979	41,720	55,049
Port Hueneme	21,977	36,069	7,518	13,725
San Buenaventura	97,288	137,817	37,848	55,731
Santa Paula	26,942	38,324	8,343	13,471
Simi Valley	103,976	136,929	33,913	46,912
Thousand Oaks	110,304	128,695	39,066	47,185
Unincorporated	94,683	117,264	30,335	39,721
Total:	**711,523**	**932,326**	**233,955**	**326,428**

Source: Southern California Association of Governments and Rincon Consultants, Inc., 1998. Figures for 1998 were derived through interpolation between 1995 and 2000 estimates.

c. Cumulative Setting. Table 3.4 on the following page describes proposed non-residential and residential development in the City of Camarillo, generally north and east of the proposed Lewis Road widening corridor. In all, there are about 1.1 million square feet of non-residential uses in some stage of development in this area. The cumulative residential development includes 1,061 dwelling units under or awaiting construction east of Lewis Road.

3.1 Aesthetics

3.1.1 Visual Character of the Project Site

Lewis and Potrero Roads are considered eligible for scenic highway designation by the County of Ventura. The project corridor consists of two distinct segments divided by Pleasant Valley Road: the Caltrans segment within the City of Camarillo is located to the north, while the Ventura County segment within unincorporated areas of Ventura County lies to the south.

Each segment of the proposed project is identifiably distinct from the other. The Caltrans segment is decidedly urban at its northern end near Ventura Boulevard and Highway 101. A super-elevated overhead spanning Dawson Drive and Union Pacific Railroad line dominates the area visually and industrial buildings and small businesses are found along the length of this segment. Towards the southern portion of the Caltrans segment the area transitions into a more rural character near Pleasant Valley Road as the area opens up and buildings are located at distances farther from the road. Agricultural fields and tree rows are also found in this area (Figure 3.1)

South of Pleasant Valley Road and within the Ventura County segment, agricultural fields dominate the landscape with mountainous areas in the background to the south and east. The roadway alignment tends in a general north-south direction with several large curves along its length. Views to the west of the site are characterized by their sweep in distance and general uniformity in content. Row crops predominate; orchards and scattered structures are also found. Along the southern portion of the project site, Lewis Road crosses over the shallow and slow moving Calleguas Creek via a narrow two lane bridge and follows along the eastern

Table 3.4 Proposed Development in Project Vicinity

Map #	Developer	Land Use	Status[a]	Size/Units
1	Pardee	Residential	A	83 SFR
2	Hever	Residential	A	1 SFR
3	Santa Paula Ent.	Office	A	82,440 SF
4	W.F.	Industrial	A	35,050 SF
5	Harris Dracon	Industrial	A	54,450 SF
6	Unisys	Industrial	A	13,548 SF
7	Ventura Pacific	Commercial	A	14,700 SF
8	Pardee	Residential	A	160 SFR
9	Village Properties	Residential	A	221 SFR
10	Pardee	Residential	A	45 SFR
11	Vista	Residential	A	24 Condos
12	Guyer	Residential	A	36 SFR
13	CGF	Residential	A	16 SFR
14	Pardee	Industrial	A	46,016 SF
15	RT Ent.	Industrial	A	56,500 SF
16	Wollons	Industrial	P	40,600 SF
17	LD 357	Residential	A	4 SFR
18	Garnidale	Residential	A	82 SFR
19	Garnidale	Residential	A	15 SFR
20	Keshmeshian	Residential	P	59 SFR
21	Factory Outlet	Commercial	A	47,497 SF
22	Camarillo Town	Retail Center	A	20,929 SF
23	Carmen Village	Residential	A	76 Condos
24	Greystone	Residential	A	99 SFR
25	Spanish Hills I	Residential	A	57 SFR
26	Palm Colony	Residential	A	56 Condos
27	Moe	Residential	A	9 Condos
28	Cabrillo Bus.	Office	A	112,294
29	Spanish Hills	Residential	A	89 SFR
30	Tract 4679	Residential	A	8 SFR
31	Tract 4945/Golf Course	Residential	A	95 Twnhm
		Residential	A	207 SFR
32	Electronic	Industrial	A	31,520 SF
33	Wolff/IPD-306	Industrial	A	19,589 SF
34	Pelton/IPD-310	Industrial	A	3,992 SF
35	Am. Natl. Oil/IPD	Industrial	A	2,500 SF
36	Wolff/IPD-311	Industrial	A	23,180 SF
37	Spiva Const/IPD	Industrial	A	3,710 SF
38	Cam Ind. Ctr./IPD	Industrial	A	11,725 SF
39	Hinsdale/IPD-318	Industrial	A	29,544 SF
40	Vtr. Co. Str./IPD	Industrial	A	99,000 SF
41	Paris/IPD-320	Industrial	A	19,786 SF
42	Centex/IPD-321	Industrial	A	133,294 SF
43	Goodyear/CPD	Commercial	A	5,410 SF
44	Felus/CPD-193	Commercial	A	3,280 SF
45	Investec./CPD-195	Commercial	A	174,052 SF
46	Auto Club/CPD	Commercial	A	27,072 SF
TOTAL Residential Units				**1,061**
TOTAL Commercial and Industrial SF				**1,111,678**

[a] *A = Approved, P = Pending.*
SF = Square Feet
SFR = Single Family Residence
Twnhm = Townhome
Source: Catellus, February 12, 1999

edge of the Creek and its flanking Ventura County Flood Control District berm. Near the southern terminus of the site the California State Channel Islands Campus is nestled among the sage scrub covered foothills to the east. Lewis Road continues south along the base of Round Mountain with its large volcanic outcroppings, passes over another narrow bridge to recross Calleguas Creek and continue through farmland offsite to the south (Figure 3.1).

3.1.2 Primary Viewing Corridors

Principal travel corridors are important to an analysis of aesthetic features because they define the vantage point for the largest number of viewers. As the project corridor extends about 5.75 km (3. 57 miles), is relatively flat, and passes through several tree rows, there are no public views that encompass large portions of the project area. Primary public views are represented from areas of higher elevation either along or adjacent to the project site, specifically from the superelevated overhead over Dawson Drive, the Lewis Road Bridge, the California State Channel Islands (CSUCI) Campus, and the Hueneme Road Bridge at the southern terminus of the site. The principal features of each viewing corridor are described below, while existing views from these corridors are shown on Figure 3.1, Photos 1-11.

a. Superelevated Overhead over Dawson Drive. This overhead in the Caltrans segment is utilized to extend Lewis Road from Ventura Boulevard, over Dawson Drive at the adjacent Metrolink Station, and towards Pleasant Valley Road to the south (Figure 3.1, Photo 1). Traffic traveling to the north or south has views of the project site just after peaking the top of the overhead. To the north, a short view of businesses lining Lewis Road is visible ending at the U.S. Highway 101 approximately 487 meters (0.3 miles) away. To the south, Lewis Road extends past Pleasant Valley Road into agricultural lands, and then disappears approximately 1.5 kilometers (0.9 miles) away around a curve to the southwest. Under Caltrans Alternatives 1 and 2 this superelevated structure would be treated in one of three ways. Under Variation A, the overhead would be widened along its eastern edge resulting in its conversion from a two to four lane structure. Under Variation B, the existing structure would be removed and replaced with a wider structure. Variation C would leave the existing structure in place to serve southbound traffic and would construct a separate, but parallel twin structure to serve northbound traffic.

b. Lewis Road Bridge Over Calleguas Creek. The Lewis Road Bridge allows Lewis Road to cross over the Calleguas Creek. Located at the center of an existing "s" curve along Lewis Road, this area offers southbound traffic views of the creek to the west and a panorama of agricultural fields before the backdrop of Round Mountain and foothills in the distance, marking the transition from the flat Oxnard Plain to the Santa Monica Mountains. Traffic heading north also has extended views of agriculture, only in this case punctuated by tree rows and structures. The proposed project could potentially widen, or remove and realign the current bridge with a wider structure (Figure 3.1, Photo 5).

c. CSUCI Campus. The California State University Channel Islands (CSUCI) campus is located to the east of the project corridor within the foothills of the Santa Monica Mountains. Only short segments of Lewis Road are usually visible from this general area due to the topography of the surrounding foothills and tree rows along the length of the project corridor. Agricultural fields form a backdrop for the project area from this location.

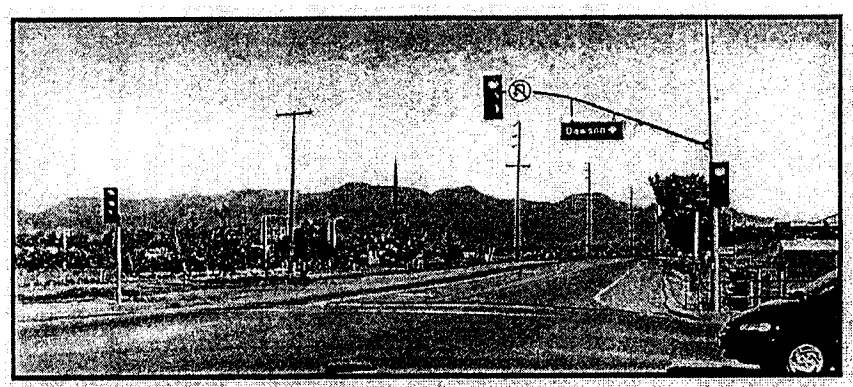


Photo 1: ***From Pleasant Valley Road to Dawson Drive.***
View to the south of Lewis Road from Dawson Drive. Lewis Road north of Pleasant Valley Road is the Caltrans Section of the project. This section will be widened from two to four lanes.

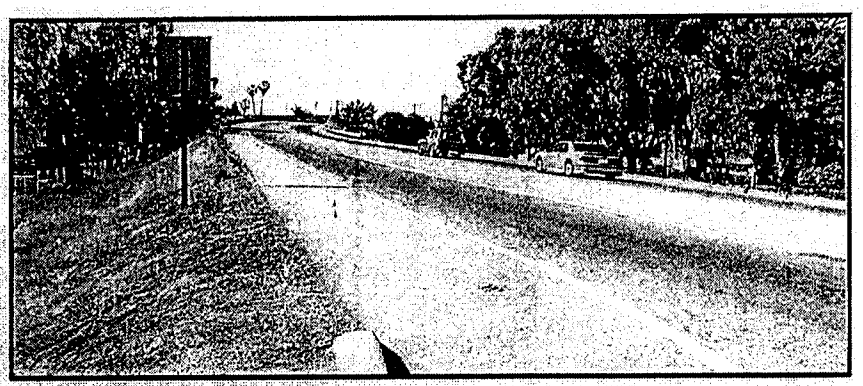


Photo 2: ***Caltrans section bridge.***
View to the north of the super elevated bridge that under Caltrans Alternative 1 or 2 would be widened on its eastern side to four lanes.

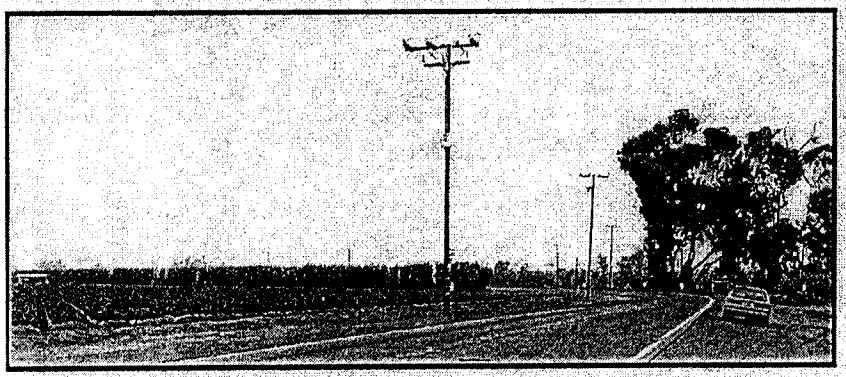


Photo 3 : ***Farmland south of Pleasant Valley Road.***
View to the north of strawberry fields and a windbreak of cottonwood trees (Populus sp.) along a curve of Lewis Road approximately 1 mile south of Pleasant Valley Road. The proposed realignment and widening of Lewis Road would shift to the right (west) of the current footprint, thereby removing the windbreak and a portion of the field in the foreground.

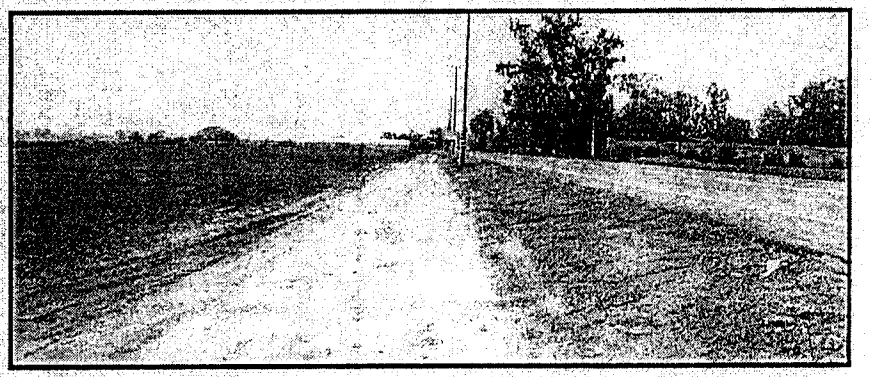


Photo 4: ***Agricultural land across from the entrance of CSUCI.***
View to the northeast of Lewis Road and adjacent fallow agricultural land from the entrance of the California State University Channel Islands. A greenhouse is visible in the background.

Figure 3.1 Site Photos 1-4

Photo 5: ***S-curve at Calleguas Curve.***
View to the south of the S-curve of Lewis Road. Round Mountain and orchards are in the background, while a firewood storage is in the foreground. This section of Lewis Road would be straightened under Alternative 2.

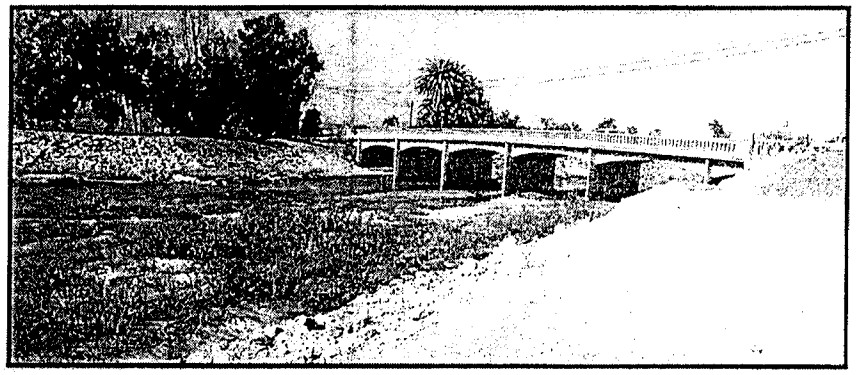


Photo 6: ***Lewis Road Bridge***
View to the north of the Calleguas Creek Bridge. Under Alternative 1, the current bridge would be widened. Under Alternative 2, the current bridge would be removed and replaced with a wider structure.

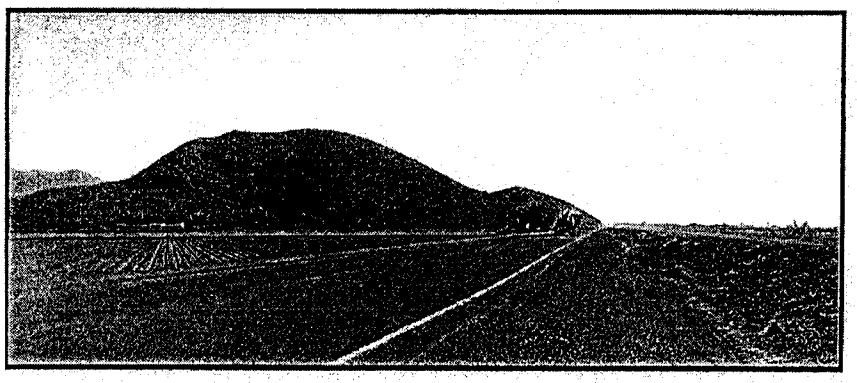


Photo 7: ***Agricultural Land North of Round Mountain***
View to the southeast of agricultural land along Lewis Road with Round Mountain in the background. The Ventura Channel Flood Control District (VCFD) bank is to the right (west) and Calleguas Creek lies just beyond it.

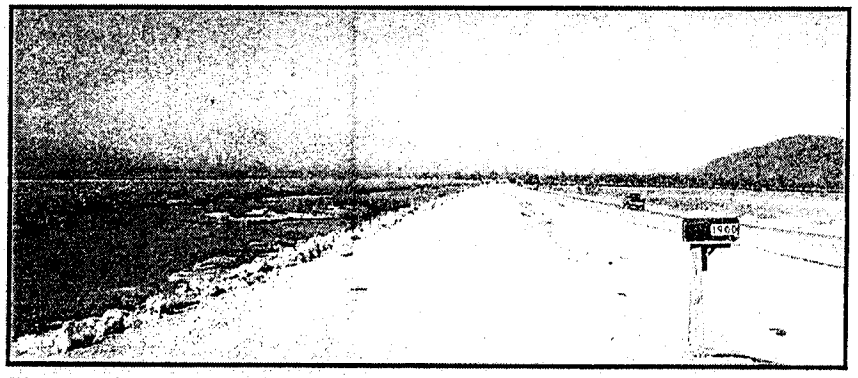


Photo 8: ***Calleguas Creek between the two bridges***
View to the north of riparian habitats within Calleguas Creek from the adjacent VCFCD berm. This portion of the creek lies between the Hueneme Road bridge to the south and the Calleguas Creek bridge to the north.

Figure 3.1 (cont.) Site Photos 5-8

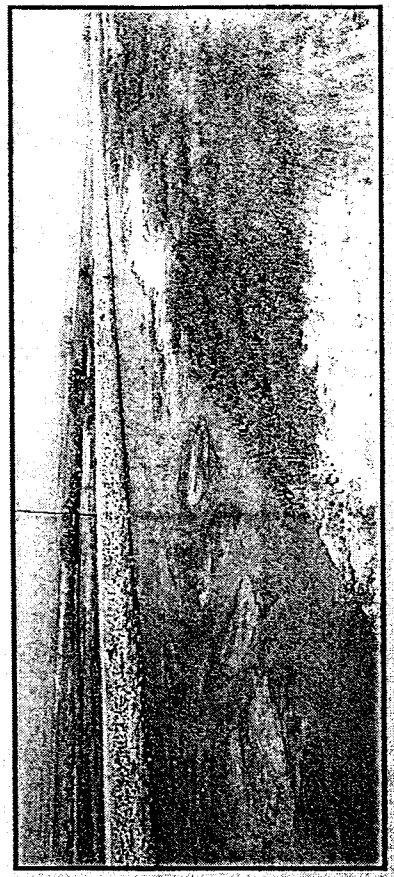


Photo 9: *Potrero Road Connection to Lewis Road*
View to the northeast of Lewis Road and Round Mountain.

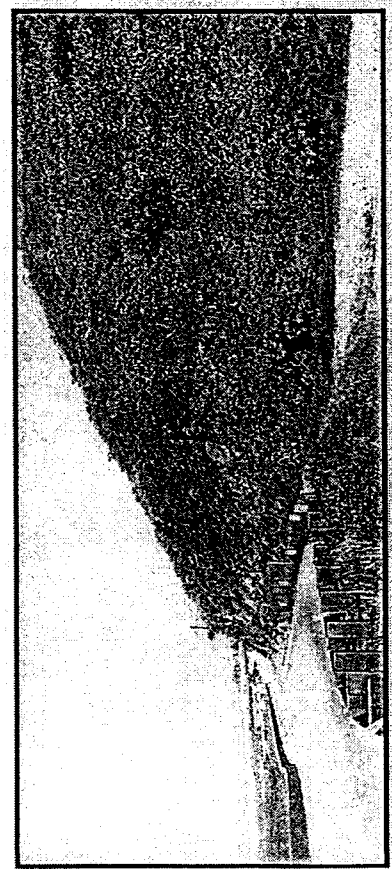


Photo 10 : *Calleguas Creek at Hueneme Road*
View to the north of Calleguas Creek from the Ventura County Flood Control District berm at Hueneme Road.

Photo 11: *Hueneme Road Bridge*
View to the northwest of the bridge over Calleguas Creek that is located west of the intersection of Hueneme and Potrero Roads. Ventura County Alternatives 1 & 2 propose Lewis Road to run along the west side of Calleguas Creek to connect to Hueneme Road beyond.

Figure 3.1 (cont.) Site Photos 9-11

d. Hueneme Road Bridge Over Calleguas Creek. The Hueneme Road Bridge is a narrow two-lane bridge found at the southern terminus of the corridor that crosses over Calleguas Creek. Southwest bound traffic has extensive views of agricultural fields to the west and a snapshot view of the Calleguas Creek to the north and south. Northeast bound traffic views are dominated by the coastal sage covered Round Mountain, with its visible volcanic outcroppings along the eastern edge of the project corridor at this location. Calleguas Creek and surrounding agricultural fields stretch to the north and west, respectively (Figure 3.1, Photo 10).

3.1.3 Nighttime Lighting and Daytime Glare

Lighting is not included as part of the Lewis Road Widening project and is not discussed here.

3.1.4 Regulatory Environment

Due to the subjectivity of aesthetics, the value of visual resources is usually considered at a local level and decisions are based upon community values. The Federal Highway Administration (FHWA) only requires that aesthetics be analyzed. The County of Ventura provides guidelines for the development and protection of scenic resources in its Goals, Policies and Programs portion of the Ventura County General Plan (County of Ventura May 24, 1988). The relevant goals and policies include:

a. Goal 1.7.1.1 Preserve and protect significant open views and visual resources of the county.

b. Policy 1.7.2.1 Discretionary development that would significantly degrade, alter, or obscure public views and visual resources shall be prohibited unless no feasible mitigation measures are available and the decision making body determines that there are overriding consideration.

According to Section 8101-2.1 of the Non-Coastal Zoning Ordinance (September 17, 1996), the provisions of that ordinance do not apply to public road projects. As a result, the Tree Protection Regulations of Section 8107-25 do not apply within the Ventura County segment of the proposed project.

c. City of Camarillo General Plan. The Scenic Highway Element (City of Camarillo 1989), the City identifies Lewis Road as a scenic highway. This element discourages, but does not prohibit, removal of mature trees along a scenic highway.

3.2 Agriculture

3.2.1 Overview of Agriculture in Ventura County

Agriculture has historically played an important role in the economy and land use patterns in Ventura County. At the present time, Ventura County crop yields per acre are among the highest in the nation. The combination of fertile soil and mild climate allow high-value crops, including avocados, lemons, strawberries, celery, broccoli and cabbage, to be planted

year round. In all, gross revenue sales of agriculture in the County were approximately 1.06 billion in 1999 (Ventura County Crop Report, 1999). This continues a steady trend that has shown the increasing value of agriculture in the County. Since 1970, the County's annual crop value has doubled. (County of Ventura, 1996, 1997)

3.2.2 Topography

All of the project alternatives are along or parallel to the current footprint of Lewis Road, between the intersections of Ventura Boulevard and Hueneme Road (Figure 1.3). In general, the topography of this area slopes gently to the southwest with elevation decreasing from 43 meters (140 feet) at its northern terminus to 12 meters (40 feet) at its southern terminus.

3.2.3 Soils

The project corridor traverses the following soil types (Figure 3.2, USDA 1970).

Anacapa Sandy Loam (AcA) phase is found on the 0 to 2 % slopes of level to nearly level alluvial fans and plains and is derived primarily from sedimentary rocks. This soil is usually 1.53+ meters (60 inches) deep, drains well, supports annual grasses and forbs and is primarily used for vegetables, citrus fruits and urban development in Ventura County.

The Camarillo series (Cc and Ce) is found on level to nearly level alluvial plains and is derived primarily from sedimentary rocks. Phases in this series drain poorly, support salt tolerant grasses and forbs, and are utilized for vegetables and lemons.

The Hueneme series (Hn and Hm) is found on the 0 to 2 % slopes in basins and alluvial plains with highly stratified alluvium, and is derived from sedimentary rocks. Phases in this series drain poorly, support salt tolerant vegetation, and are utilized for production of vegetables, lemons, strawberries, field crops, and urban development in Ventura County.

Igneous Rock Land (IrG) consists of steep and very steep mountainous areas of basalt, andesite and volcanic breccia of more than 25% rock outcrop. This series is typically barren with little soil production. Surface runoff is rapid with high erosion potential.

Metz Loamy Sand (MeA) phase is found on the 0 to 2 % slopes in alluvial plains and fans, in stratified alluvium derived from sedimentary rocks. This soil drains quickly, supports annual grasses and forbs, and is utilized for production of vegetables, walnuts, strawberries, field crops, avocados, urban development, and rangeland in Ventura County.

Pico Sandy Loam (PcA) phase is found on 0 to 2% slopes of alluvial fans and plains and is derived from sedimentary rocks. This phase is well- to somewhat excessively-drained, supports annual grasslands, forbs and scattered brush, and is utilized for vegetables, citrus, field crops, walnuts, urban developments, and range land.

Pits and Dumps (PxG) consist of waste areas, sand and gravel pits, and mining related areas. Location, associated soils, and drainage vary. These areas are not valuable for farming as soil fertility is usually low.

Riverwash (Rw) is found in and among channels of intermittent and perennial streams

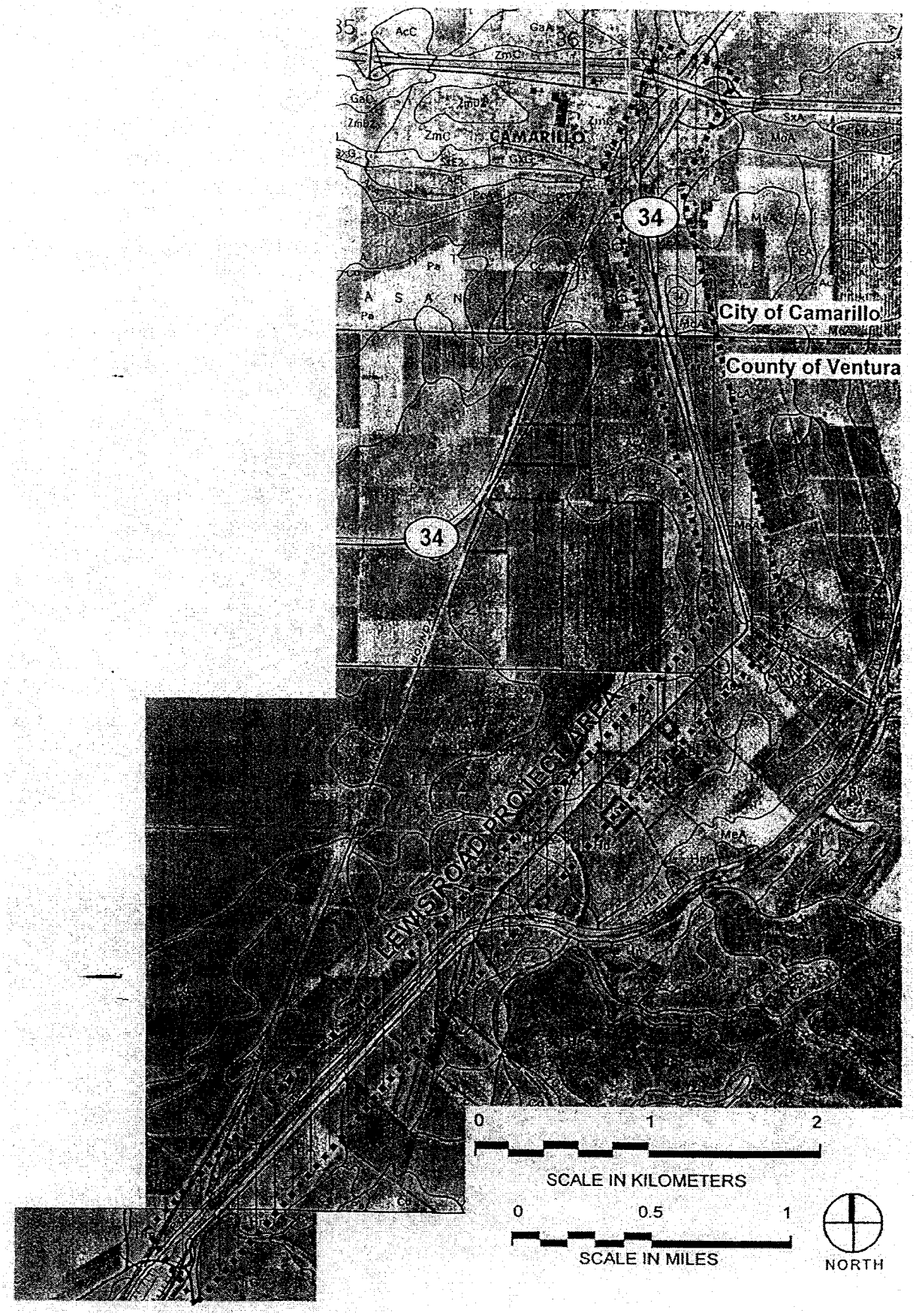


Figure 3.2 Soil Types

and is derived from water–deposited layers of stony and gravelly sand clay. This series is frequently inundated and subject to scouring, cutting and or deposition. Usually barren, this series can support riparian habitats and has no value for farming.

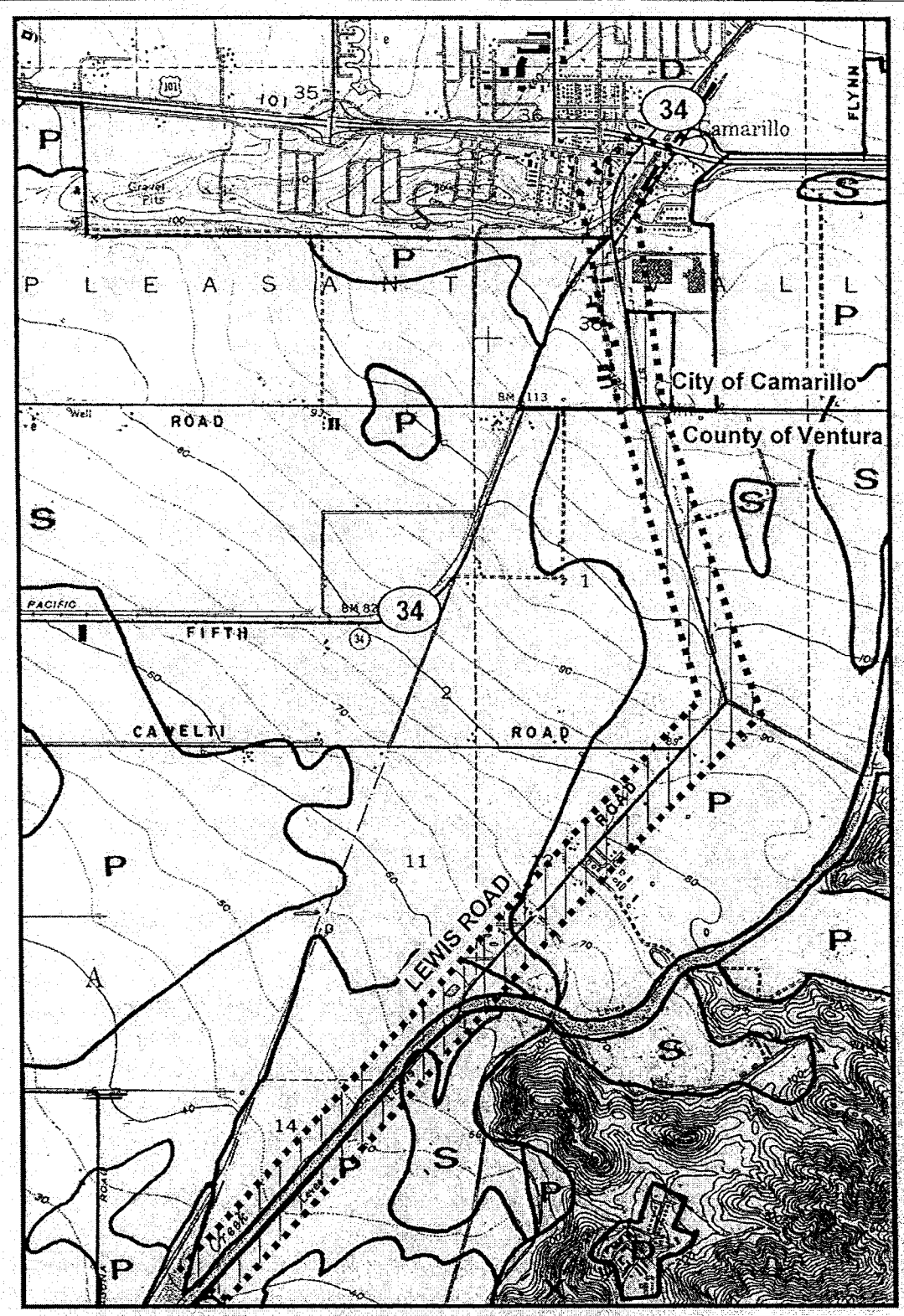
Although hydric soils (AcA, Ce, Hm, Hn, and MeA USDA) are found within the project area of effect (USDA, 1970, 1992, and 1997), the relevant land forms associated with these hydric soils, such as "Basin Rim", which are depressed areas above the high water mark, (Ramos, June 8, 2000), and "Alluvial Fan or Flat", are not found along the corridor. The presence of hydric soils is important as they may signify that areas currently under cultivation could potentially be characterized as "farmed wetlands" or "prior converted croplands" as defined by Natural Resources Conservation Service (NRCS), a branch of the U.S Department of Agriculture (USDA). Farmed wetlands, like all wetlands, are considered sensitive communities and have specific regulations governing their impact. The potential presence and impacts to farmed wetlands is discussed in Sections 3.4 and 4.4, *Biological Resources.*

3.2.4 Agricultural Viability and Classification

The suitability of soils for agricultural use depends on many factors, including fertility, slope, texture, drainage, depth, and salt content. A variety of classification systems have been devised to categorize soil capabilities. The two systems that have been most widely used are the United States Department of Agriculture Capability Classification System and the Storie Index. The first system classifies soils from Class I to Class VIII based on their ability to support agriculture. The Storie Index takes into account other factors such as slope and texture to arrive at a rating.

Important Farmlands Inventory. The State of California, Department of Conservation, Office of Land Conservation, Important Farmlands Inventory (IFI) system is used in Ventura County to inventory lands considered to have agricultural value. This system classifies land based upon the productive capabilities of the land, rather than the mere presence of ideal soil conditions. Land is divided into several categories of diminishing agricultural importance. The State of California's Important Farmland Inventory (IFI) is based in part on the Capability Classification System and the Storie Index described above.

Within this classification farmlands are designated as "Prime", "Statewide Importance", "Unique" and "Local Importance" as outlined in the Soil Survey, Ventura Area, California (Edwards, 1970). "Prime" farmlands are generally defined as irrigated soils (Class I and II) over 40 inches deep with available water holding capacity of 4 inches or more. Generally well drained, they are free from frequent flooding. Farmlands of "Statewide Importance" are irrigated lands other than prime that have a good combination of physical and chemical characters for producing feed, fiber, food, forage, and oilseed crops, "Unique" farmlands are other lands that produce high value food and fiber crops. "Local Importance" farmlands represent dry farmed lands, and unirrigated lands of Prime and Statewide Importance. Lands that have lesser agricultural potential are classified as "Grazing," "Urban," or "Other." The latter classification includes areas that are generally unsuitable for agriculture because of geographic or regulatory constraints. Farmlands of Prime and Statewide Importance are found all along the length of the project site (Figure 3.3).



P = PRIME
S = STATEWIDE IMPORTANCE (SIMILAR TO PRIME)
D = URBAN BUILT-UP LAND
X = OPEN SPACE

NORTH

0 1 2
SCALE IN KILOMETERS

0 0.5 1
SCALE IN MILES

Figure 3.3 Important Farmlands Inventory Map

3.2.5 Regulatory Environment

Federal, state, and county level mechanisms to preserve agriculture are relevant to this project as it is funded from all three sources. At the federal level, impacts of federally funded projects on farmland are reviewed through the Farmland Protection Policy Act (FPPA). This federal review satisfies the requirements of the State's California Environmental Quality Act (CEQA). At the County level, guidelines and multiple programs exist, including the County General Plan and Initial Study Assessment Guidelines, Land Conservation Act (LCA) contracts, and greenbelt agreements. Other programs such as water conservation measures, the Right to Farm Ordinance, and the Save Open Space and Agricultural Resources (SOAR) Ordinance also exist to protect farming resources in the region. Measures to preserve agriculture in Ventura County are described below with those relevant to the proposed project addressed first. Because the Caltrans segment of the project occurs along an urban corridor within the boundaries of the City of Camarillo, no impacts to agriculture are expected to occur within this area. As a result, this segment is not discussed here.

a. Farmland Protection Policy Act (FPPA). The FPPA requires federal agencies to: 1) Identify and take into account the adverse effects of their programs on the preservation of farmland; 2) Consider alternative actions, as appropriate, that could lessen adverse effects; and 3) Ensure that their programs, to the extent practicable, are compatible with State and local government and private programs and policies to protect farmland (7 USC 4202(b), 7 CFR 658.1). As part of this process the NRCS determines whether any areas on site can be classified as "farmland", the acres and classification of farmlands to be converted to other purposes via proposed federally funded projects, and the relative value of the farmland to be converted using established land evaluation criteria such as the Storie System. The lead agency (or implementing local agency) then conducts a site assessment to apply site-specific criteria and a point system (7 CFR 658.5) to determine the impact of conversion. These factors are outlined in Appendix D.

b. Ventura County Land Use Programs and Policies. The County of Ventura has adopted General Plan policies and six programs to preserve farmland:

- Policy 1.6.2.1 – Discretionary development located on land designated as Prime or Statewide Importance shall be planned and designed to remove as little land from agricultural production as possible and minimize impacts on topsoil;
- Policy 1.~~6.2.~~2 – Hillside agricultural grading shall be regulated by the Public Works Agency (PWA) through the Hillside Erosion Control Ordinance; Policy 1.6.2.3 – LCA contracts shall be encouraged on irrigated farmlands;
- Policy 1.6.2.4 – The Public Works Agency shall plan transportation capital improvements so as to mitigate impacts to farmland to the extent feasible;
- Policy 1.6.2.5 – The County shall preserve agricultural land by retaining and expanding the existing Greenbelt Agreements and encouraging the formation of additional ones; and
- Policy 1.6.2.6 – Discretionary development adjacent to Agricultural-designated lands shall not conflict with agricultural use of those lands.

c. Agricultural Zoning. Ventura County General Plan designates agricultural lands separately from other open space areas and establishes a 40-acre minimum parcel size contiguous with other large blocks of agricultural land. The project corridor is generally within the Agricultural land use designation (Figure 3.16 in Section 3.9, *Land Use*).

d. Land Conservation Act (LCA) (or Williamson Act) Contracts. In recognition of the importance of agricultural resources and production, the State of California enacted the Land Conservation Act, also known as the Williamson Act. This act established a land contract procedure whereby a landowner could voluntarily enter into a contract with the local governmental authority to maintain a property in an agricultural preserve in exchange for a reduction in property taxes. The contracts entered into under this Act are intended to encourage the preservation of the State's agricultural resources. Contracts are for a 10- or 20-year period and land use restrictions remain in effect until the remaining 9 or 19 years, respectively, of the contract have passed. Contracts are automatically renewed each year unless a notice of non-renewal is filed with the managing governmental agency. In that case, the land use restrictions remain in effect until the remaining nine years of the contract have passed.

As a publicly owned transportation route, the land within the current footprint of Lewis Road is not subject to LCA contracts. However, Lewis Road is adjacent to many parcels currently under LCA contract that would be impacted by the various project alternatives. Over 90% of the agricultural parcels that could be affected by the proposed project are under LCA contract (Figure 3.4).

e. Camarillo/Oxnard Greenbelt Area. Ventura County greenbelts are created by agreements, adopted by resolution, between public agencies with land use control. They represent a form of mutual regulatory control between two or more jurisdictions concerning urban form, the protection of farmland and open space land, the future extension of urban services/facilities and annexations. These greenbelts are intended to operate as "community separators" or "buffers" and participating cities agree not to extend municipal services into the greenbelts or annex greenbelt lands. Greenbelt agreements have no binding legal authority to regulate land uses. That authority is found in the jurisdiction's general plans and zoning ordinances. Greenbelts, together with other planning and regulatory tools, have functioned as a deterrent to the premature development of farmland and open space lands. They do not, however, provide for permanent conservation or preservation.

The County of Ventura and the cities of Oxnard and Camarillo have established a greenbelt agreement to preserve agricultural lands and open space between Oxnard and Camarillo. The project area is within this greenbelt south of Pleasant Valley Road (Figure 3.5). As the proposed project would not extend municipal services into the greenbelt area, but rather widen or realign an existing road, no provision of the greenbelt agreement would be violated.

f. Ventura County Right-to-Farm Ordinance. This ordinance protects commercial agricultural operations from nuisance lawsuits from adjacent land uses, and requires disclosure to potential land buyers that agricultural operations are protected from such actions. To resolve potential landowner disputes, the Agricultural Commissioner's office provides non-binding mediation. As currently adopted, the ordinance applies only to agriculture in unincorporated areas and would apply to areas within the project right of way.

g. Save Open Space and Agricultural Resources (SOAR) Ordinance. The County of Ventura SOAR Ordinance was established through voter initiative in November 1998. In general, this ordinance prohibits redesignation of lands with Agricultural, Open Space, or Rural designations under the County General Plan until December 31, 2020 without direct

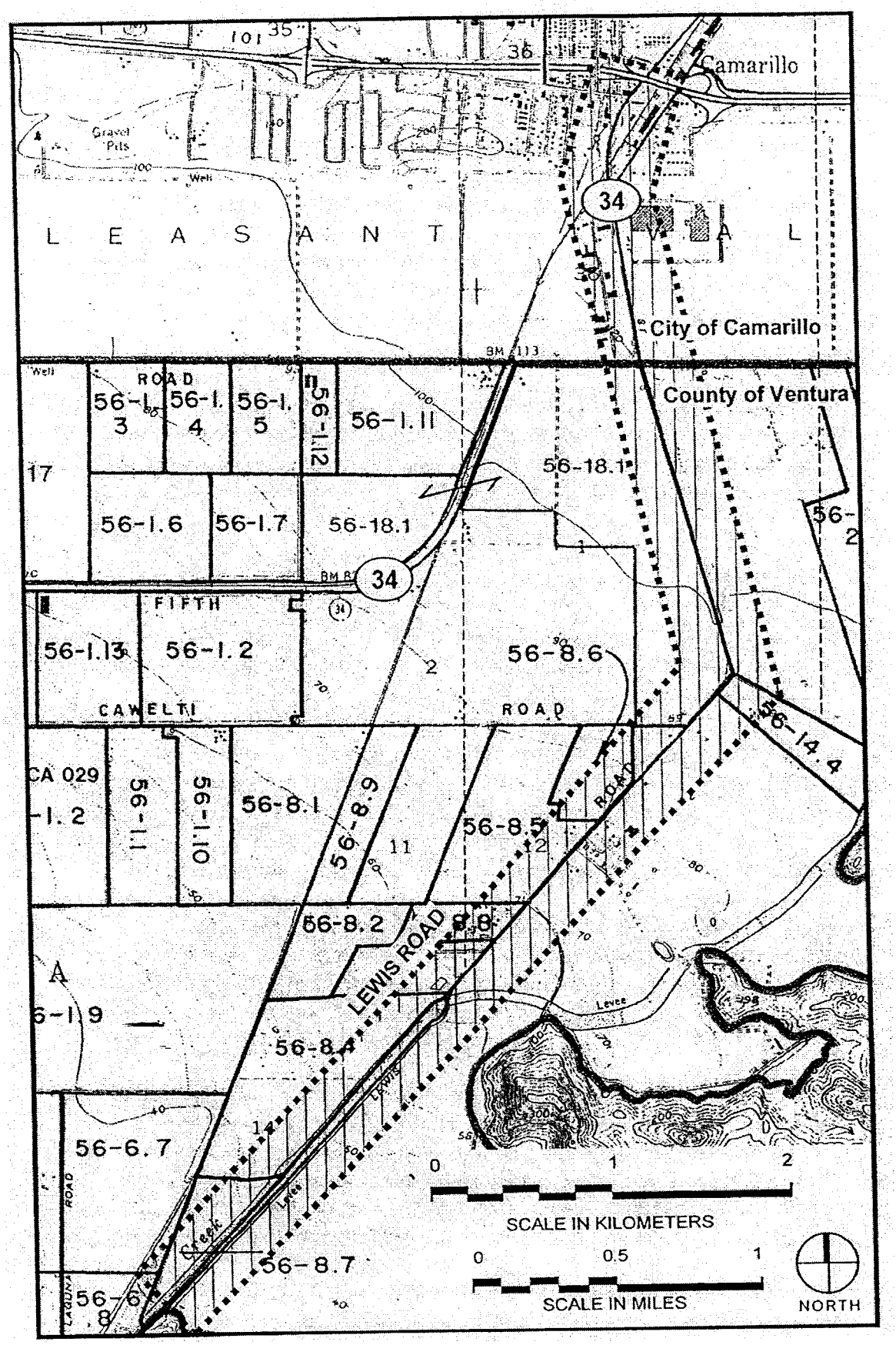


Figure 3.4 Williamson Act Contracts

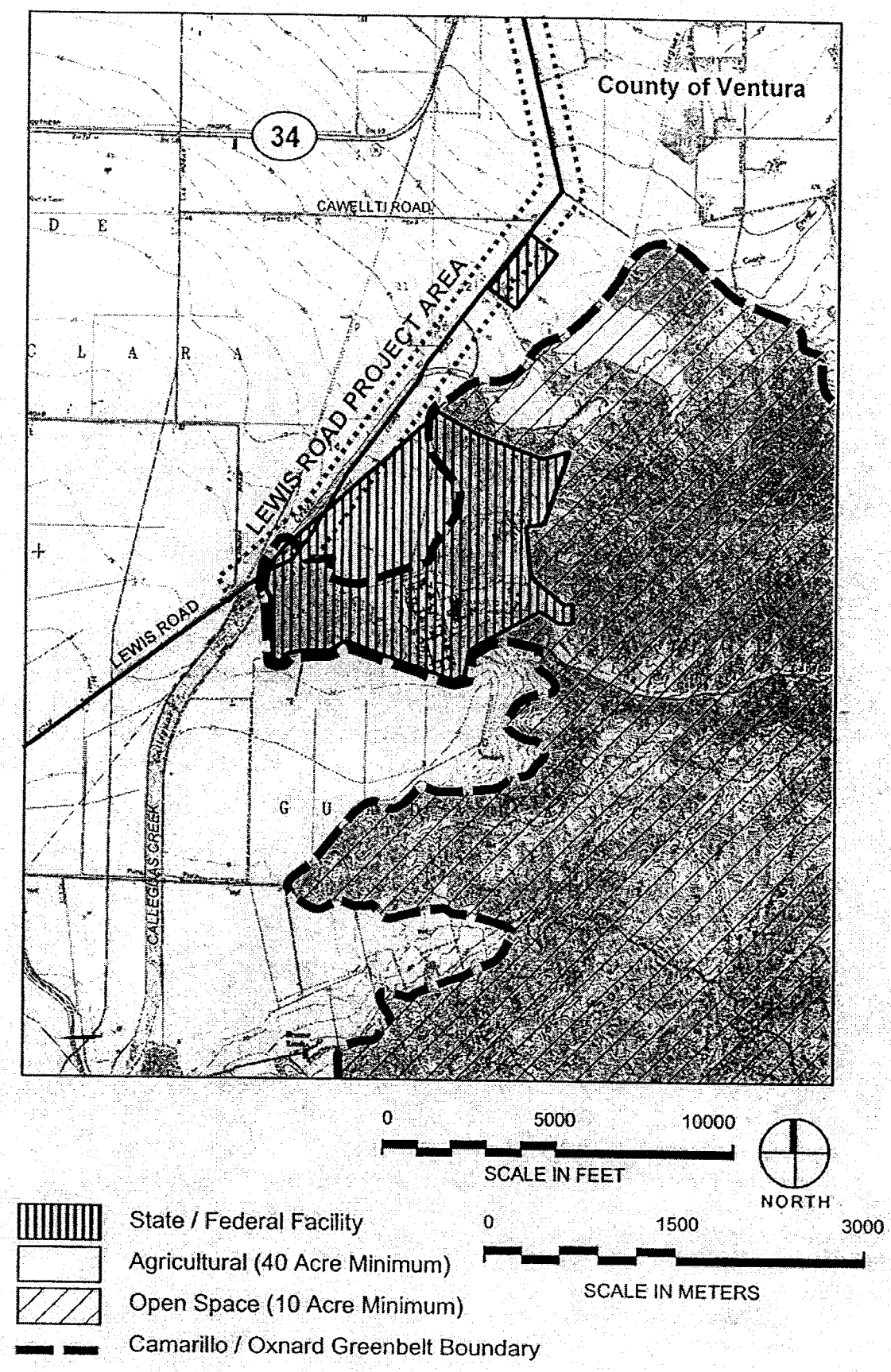


Figure 3.5 Greenbelt Areas

voter approval. The County's SOAR Ordinance does not apply to areas within the designated Sphere of Influence of any of the cities within Ventura County. The project area north of Pleasant Valley Road is within the City of Camarillo Sphere of Influence, while areas to the south are within unincorporated Ventura County. However, since the project does not involve change of "Agricultural", "Open Space" or "Rural" land use designations as defined under the County of Ventura General Plan, SOAR does not apply in this case.

3.3 Air Quality

3.3.1 Current Ambient Air Quality

Federal and state standards have been established for ozone, CO, nitrogen dioxide (NO_2), sulfur dioxide (SO_2), particulates less than 10 microns in diameter (PM_{10}), and lead. California has also set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility reducing particles. Table 3.5 provides a summary of the state and national ambient air quality standards. A description of the criteria pollutants and their health effects are described in Appendix E.

Local air pollution control districts are required to monitor air pollutant levels to ensure that air quality standards are met and, if they are not met, to develop strategies to meet the standards. Air basins in which air pollutant standards are exceeded are referred to as "non-attainment areas." The project is located in the South Central Coast Air Basin (SCCAB). This air basin is classified as non-attainment for Particulate Matter PM_{10} for the State standard; however, the federal standard is classified as attainment/unclassified. The basin is classified as attainment for Carbon Monoxide (Co) for the State standard, while the federal standard for CO is classified as attainment/unclassified. The basin is classified non-attainment for State and federal standards of ozone.

The El Rio air quality monitoring station is the closest station the project site. This station measures ozone, CO, NO_2, and PM_{10}. Table 3.6 summarizes the annual air quality data over the past three years for the local airshed.

The pollutants of greatest concern in Ventura County are ozone and PM_{10}. Concentrations of both of these pollutants have exceeded state standards on one or more days during each of the past three calendar years. Ozone is a secondary pollutant that is not produced directly by a source, but rather is formed by a reaction between NO_x and reactive organic compounds (ROC) in the presence of sunlight. Reductions in ozone concentrations are dependent upon reducing emissions of these precursors. The major sources of ozone precursors in Ventura County are motor vehicles and other mobile equipment, solvent use, pesticide application, the petroleum industry, and electric utilities. The major sources of PM_{10} are road dust, construction, mobile sources, and farming operations. Locally, Santa Ana winds are responsible for entraining dust and occasionally causing elevated PM_{10} levels.

3.3.2 Air Pollution Regulation

Both the federal and state governments have established ambient air quality standards for the protection of public health. The United States Environmental Protection Agency (USEPA) is the federal agency designated to administer air quality regulation, while the California Air Resources Board (CARB) is the state equivalent in the California Environmental Protection

Table 3.5 State and Federal Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards [1]		Federal Standards [2]		
		Concentration [3]	Method [4]	Primary [3.5]	Secondary [3.6]	Method [7]
Ozone (O_3)	1 Hour	0.09 ppm (180 $\mu g/m^3$)	Ultraviolet Photometry	0.12 ppm (235 $\mu g/m^3$)	Same as Primary Standard	Ethylene Chemilumin-escence
	8 Hour	-		0.08 ppm (157 $\mu g/m^3$)		
Respirable Particulate Matter (PM10)	Annual Geometric Mean	30 $\mu g/m^3$	Size Selective Inlet Sampler ARB Method P (8/22/85)	-	Same as Primary Standard	Inertial Separation and Gravimetic Analysis
	24 Hour	50 $\mu g/m^3$		150 $\mu g/m^3$		
	Annual Arithmetic Mean	-		50 $\mu g/m^3$		
Fine Particulate Matter ($PM_{2.5}$)	24 Hour	No Separate State Standard		65 $\mu g/m^3$	Same as Primary Standard	Inertial Separation and Gravimetic Analysis
	Annual Arithmetic Mean			15 $\mu g/m^3$		
Carbon Monoxide (CO)	8 Hour	9.0 ppm (10 mg/m^3)	Non-dispersive Infrared Photometry (NDIR)	9.0 ppm (10 mg/m^3)	None	Non-dispersive Infrared Photometry (NDIR)
	1 Hour	20 ppm (23 mg/m^3)		35 ppm (40 mg/m^3)		
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m^3)		-		
Nirtogen Dioxide (NO_2)	Annual Arithmetic Mean	-	Gas Phase Chemiluminescence	0.053 ppm (100 $\mu g/m^3$)	Same as Primary Standard	Gas Phase Chemilumin-escence
	1 Hour	0.25 ppm (470 $\mu g/m^3$)		-		
Lead	30 days average	15 $\mu g/m^3$	AIHL, Method 54 (12/74) Atomic Absorption	-	-	High Volume Sampler and Atomic Absorption
	Calendar Quarter	-		1.5 $\mu g/m^3$	Same as Primary Standard	
Sulfur Dioxide (SO_2)	Annual Arithmetic Mean	-	Fluorescence	0.030 ppm (80 $\mu g/m^3$)	-	Pararosoaniline
	24 Hour	0.04 ppm (105 $\mu g/m^3$)		0.14 ppm (365 $\mu g/m^3$)	-	
	3 Hour	-		-	0.5 ppm (1300 $\mu g/m^3$)	
	1 Hour	0.25 ppm (655 $\mu g/m^3$)		-	-	
Visibility Reducing Particles	8 Hour (10 am to 6 pm, PST)	In sufficient amount to produce an extinction coefficient of 0.23 per kilometer – visibility of ten miles or more (0.07 – 30 miles or more for Lake Tahoe) due to particles when the relative humidity is less than 70 %. Method: ARB Method V (8/18/89).		No Federal Standards		
Sulfates	24 Hour	25 $\mu g/m^3$	Turbidimetric Barium Sulfate – AIHL Method 61 (2/76)			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 $\mu g/m^3$)	Cadmium Hydroxide STRactan			

See footnotes on next page.....

Source: California Air Resources Board (1/25/99)

Table 3.5 Footnotes:

1. California standards for ozone, carbon monoxide (except Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, suspended particulate matter—PM 10 , and visibility reducing particles, are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations. In addition, Section 70200.5 lists vinyl chloride (chloroethene) under "Ambient Air Quality Standards for Hazardous Substances." In 1978, the California Air Resources Board (ARB) adopted the vinyl chloride standard of 0.010 ppm (26 mg/m 3) averaged over a 24-hour period and measured by gas chromatography. The standard notes that vinyl chloride is a "known human and animal carcinogen" and that "low-level effects are undefined, but are potentially serious. Level is not a threshold level and does not necessarily protect against harm. Level specified is lowest level at which violation can be reliably detected by the method specified. Ambient concentrations at or above the standard constitute an endangerment to the health of the public."
In 1990, the ARB identified vinyl chloride as a Toxic Air Contaminant and determined that there was not sufficient available scientific evidence to support the identification of a threshold exposure level. This action allows the implementation of health-protective control measures at levels below the 0.010 ppm ambient concentration specified in the 1978 standard.
2. National standards (other than ozone, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest eight hour concentration in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24 hour standard is attained when 99 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. For PM 2.5 , the 24 hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact U.S. EPA for further clarification and current federal policies.
3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 mm of mercury. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 mm of mercury (1,013.2 millibar); ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
4. Any equivalent procedure which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.
5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
7. Reference method as described by the EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the EPA.
8. New federal 8-hour ozone and fine particulate matter standards were promulgated by U.S. EPA on July 18, 1997. The federal 1-hour ozone standard continues to apply in areas that violated the standard. Contact U.S. EPA for further clarification and current federal policies.
Source: California Air Resources Board (1/25/99)

Table 3.6 Ambient Air Quality Data at the El Rio Monitoring Station

Pollutant	1997	1998	1999
Ozone, ppm – maximum hourly concentration (ppm)	0.102	0.106	0.103
Number of days of state exceedances (>0.09 ppm)	2	1	1
Number of days of federal exceedances (>0.12 ppm)	0	0	0
Carbon Monoxide, ppm – Worst 1 Hour/8 Hours	3/1.89	ND/2.03	ND/1.20
Number of days of state 1-hour exceedances (>20.0 ppm)	0	0	0
Number of days of state 8-hour exceedances (>9.0 ppm)	0	0	0
Nitrogen Dioxide, ppm – Worst Hour	0.072	0.088	0.099
Number of days of state exceedances (>0.25 ppm)	0	0	0
Particulate Matter <10 microns, maximum concentration in $\mu g/m^3$	252.5	70.3	50.8
Number of samples of state exceedances (>50 $\mu g/m^3$)	3	1	1
Number of samples of federal exceedances (>150 $\mu g/m^3$)	1	0	0
Annual Geometric Mean (state standard = 30$\mu g/m^3$)	26	19	26
Annual Arithmetic Mean (federal standard = 50$\mu g/m^3$)	32	23	28

ND = no data available
Source: CARB, 1997, 1998, & 1999 Annual Air Quality Data Summaries

Agency. Local control in air quality management is provided by the CARB through county-level Air Pollution Control Districts (APCDs). The CARB has established air quality standards and is responsible for the control of mobile emission sources, while the local APCDs are responsible for enforcing standards and regulating stationary sources. The CARB has established 14 air basins statewide. The project site is located in the Ventura County portion of the South Central Coast Air Basin, which is under the jurisdiction of the Ventura County Air Pollution Control District (APCD).

The 1994 Air Quality Management Plan (AQMP) prepared by the Ventura County APCD includes a number of air pollution control measures to reduce emissions and bring the region into compliance with the federal ozone standard. The AQMP, including a 1995 revision, was approved by the USEPA in September 1996. This plan predicts attainment of the federal ozone standard by 2005. To achieve full compliance with the federal ozone standard, the 1995 AQMP Revision projects a 50% reduction in countywide emissions of reactive organic compounds and a 37% reduction in emissions of NO_X. Figure 3.6 shows the projected change in countywide ozone levels through 2005.

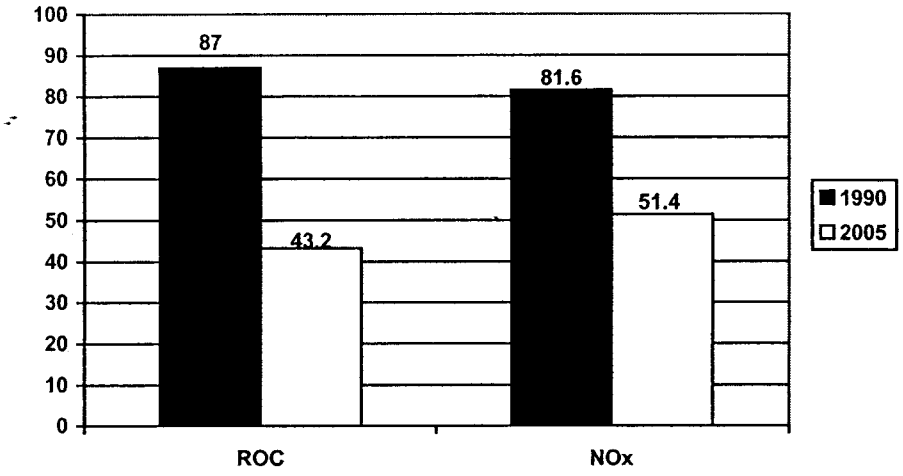


Figure 3.6 Countywide Ozone Precursor Emissions (tons/day)

The Clean Air Act Amendments (CAAAs) of 1990 require that transportation plans, programs and projects, which are funded by or approved under Title 23 U.S.C. or Federal Transit Act (FTA), conform with state or federal air quality plans. In order to be found to conform, a project must come from approved transportation plans and programs such as the State Implementation Plan (SIP), the Regional Transportation Plan (RTP) and Regional Transportation Improvement Program (RTIP) prepared and updated by the Southern California Association of Governments (SCAG).

The proposed project is identified in the federally approved (October 6, 2000), 2000/01 – 2005/06 RTIP. This document is in accordance with SIP and is consistent with the 1998 RTP. The proposed project is identified in the Ventura County Transportation Commission's (VCTC) 1999 Ventura County Congestion Management Program/Capital Improvement Program (CMP/CIP) adopted on December 3, 1999.

3.3.3 Sensitive Receptors

Ambient air quality standards have been established to represent the levels of air quality considered sufficient, with an adequate margin of safety, to protect public health and welfare. They are designed to protect that segment of the public most susceptible to respiratory distress, such as children under 14; the elderly over 65; persons engaged in strenuous work or exercise; and people with cardiovascular and chronic respiratory diseases. The majority of sensitive receptor locations are therefore schools, hospitals, and residences. Residences and

institutional uses located along the roadway alignment would be considered sensitive receptors.

3.4 Biological Resources

A biological assessment of the Lewis Road Widening Project was prepared by Rincon Consultants in July 2000. This report identified biological resources on site and evaluated potential project impacts to these resources. This report is herein incorporated by reference and is available for review at the County of Ventura Public Works Agency, Transportation Department located at 800 South Victoria Avenue, Ventura, California.

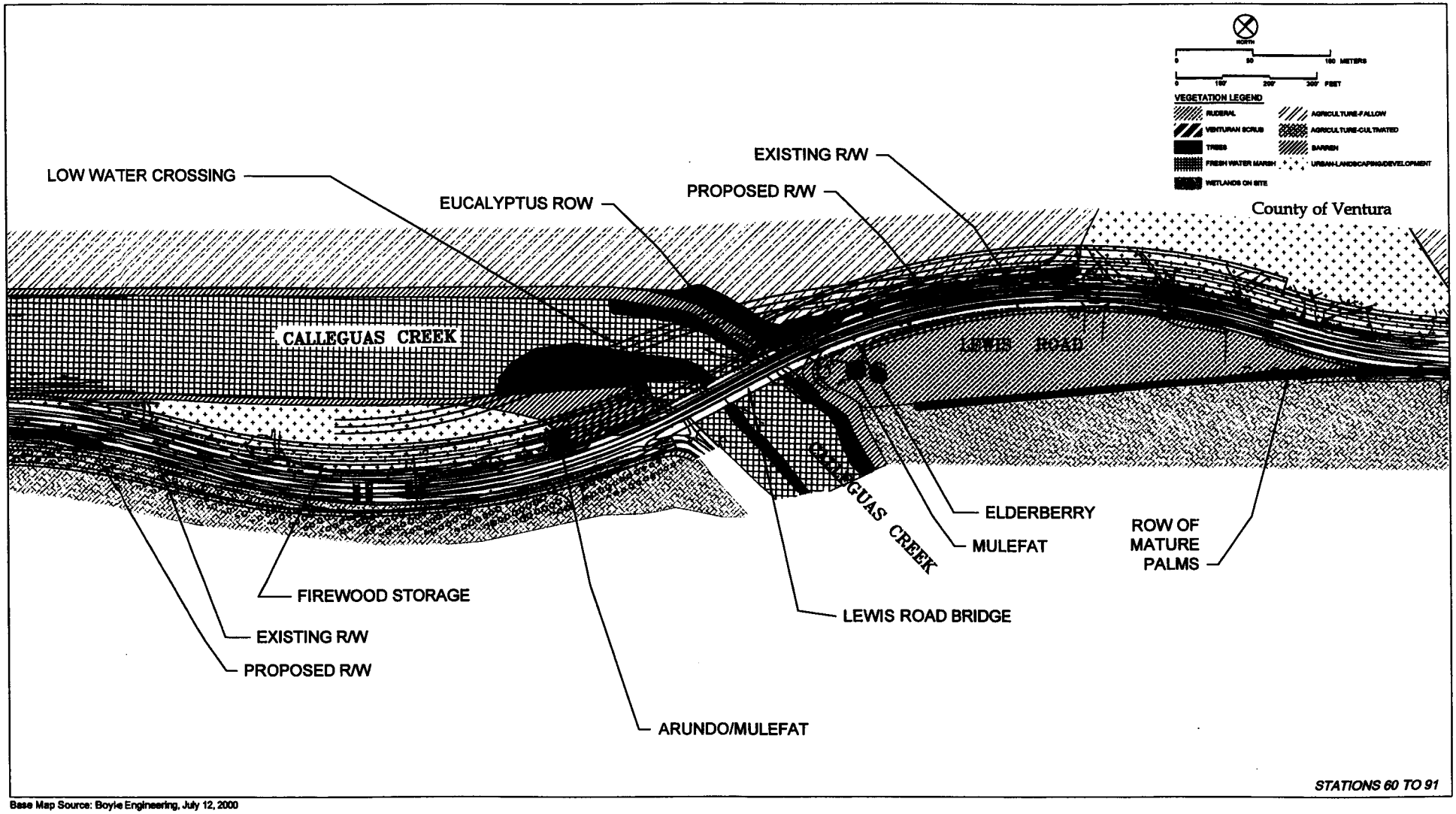
3.4.1 Vegetation and Wildlife

a. Vegetation.--Habitat types were determined by the composition and structure of dominant plant species as described in Holland, 1986 and Holland and Keil, 1990. Habitat sensitivity was determined by the List of California Terrestrial Natural Communities Recognized by the Natural Diversity Data Base (CNDDB, January 1999). The project corridor contains native vegetation and habitat types within the Calleguas Creek corridor and surrounding environs, and includes Coastal and Valley Freshwater Marsh, Arroyo Willow Riparian Scrub, Baccharis Scrub and Venturan Coastal Sage Scrub. The area also contains non-native vegetation and habitat types including cultivated and fallow agricultural fields, ruderal, exotic tree stands and urban landscaping. The plant communities within the project corridor typically have well defined boundaries and are addressed in detail in the *Biological Assessment for the Lewis Road Widening Project* (Rincon, 2000). Figures 3.7 through 3.11 show the distribution of these habitat types in relation to the project are.

The Calleguas Creek Corridor onsite is represented by Calleguas Creek, its tributary Long Grade Canyon Creek and associated waterways. This corridor is an active flood plain that is constrained within the creek banks for 50-year or less flood control protection. Vegetation within the corridor is dominated by riparian habitats with a ruderal presence along the higher and drier edges and top of bank. Wildlife actively uses the area as a corridor for dispersion to areas to the north, south, and east.

b. Wildlife. A number of wildlife species were observed or are expected to occur onsite, especially within the riparian areas. Common species are discussed here while a discussion of sensitive wildlife species will follow.

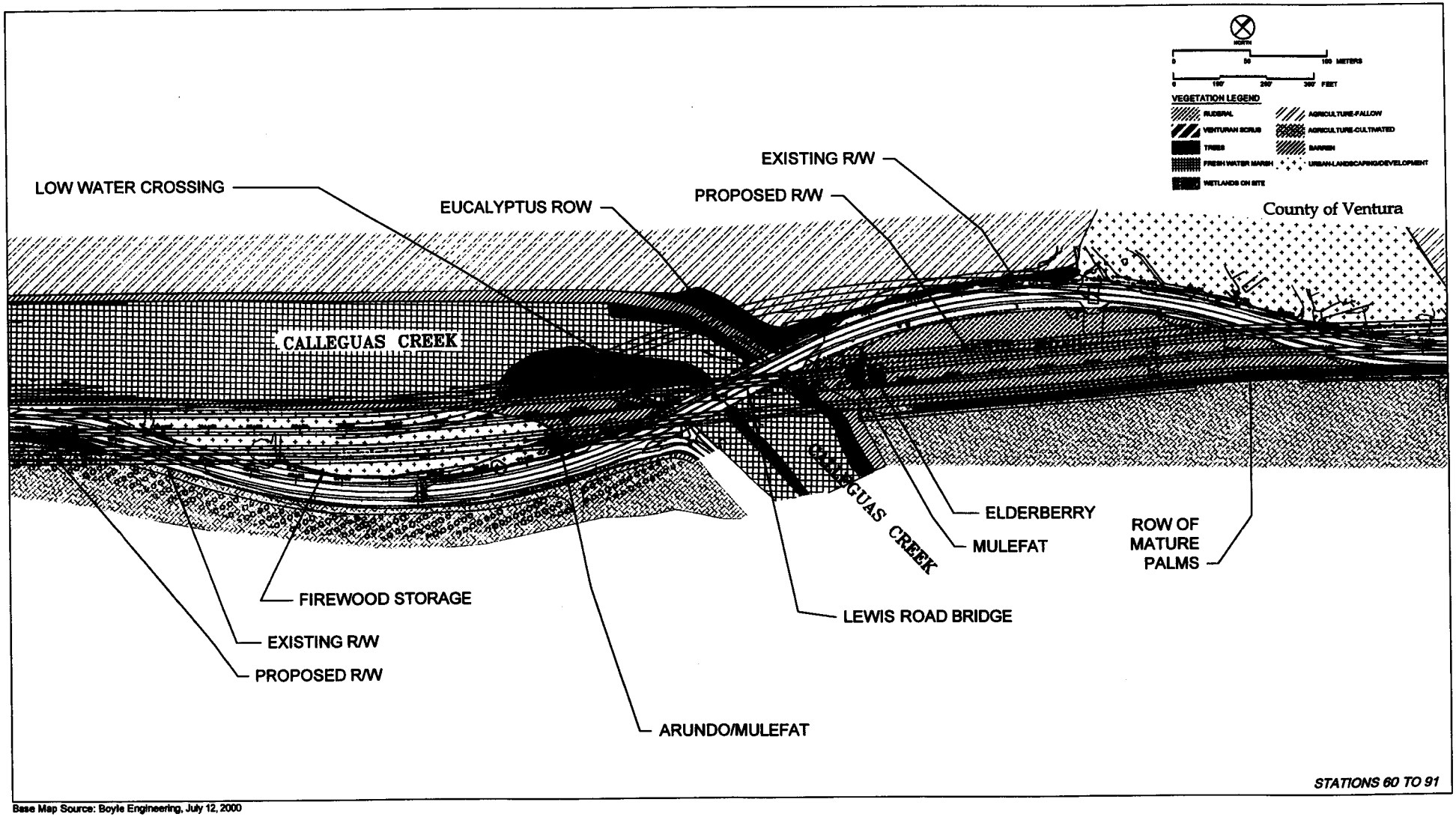
Amphibians. Bullfrog (Rana catesbeiana) tadpoles were observed in Calleguas creek in areas where the water moved slowly along the creek edges. Western toad (Bufo boreas) and Pacific chorus frog (Psuedacris regila) would be expected within the riparian areas as they have been found on adjacent riparian areas on the CSUCI campus (Rincon, 1998). Black-bellied slender salamander (Batrachoseps nigriventris) can be expected to be found in moist locations within the urban landscaping, tree rows, oak grove, and along ditches where litter or woody debris is present.



Base Map Source: Boyle Engineering, July 12, 2000

Alternative 1, Vegetation Map of Lewis Road Bridge Area

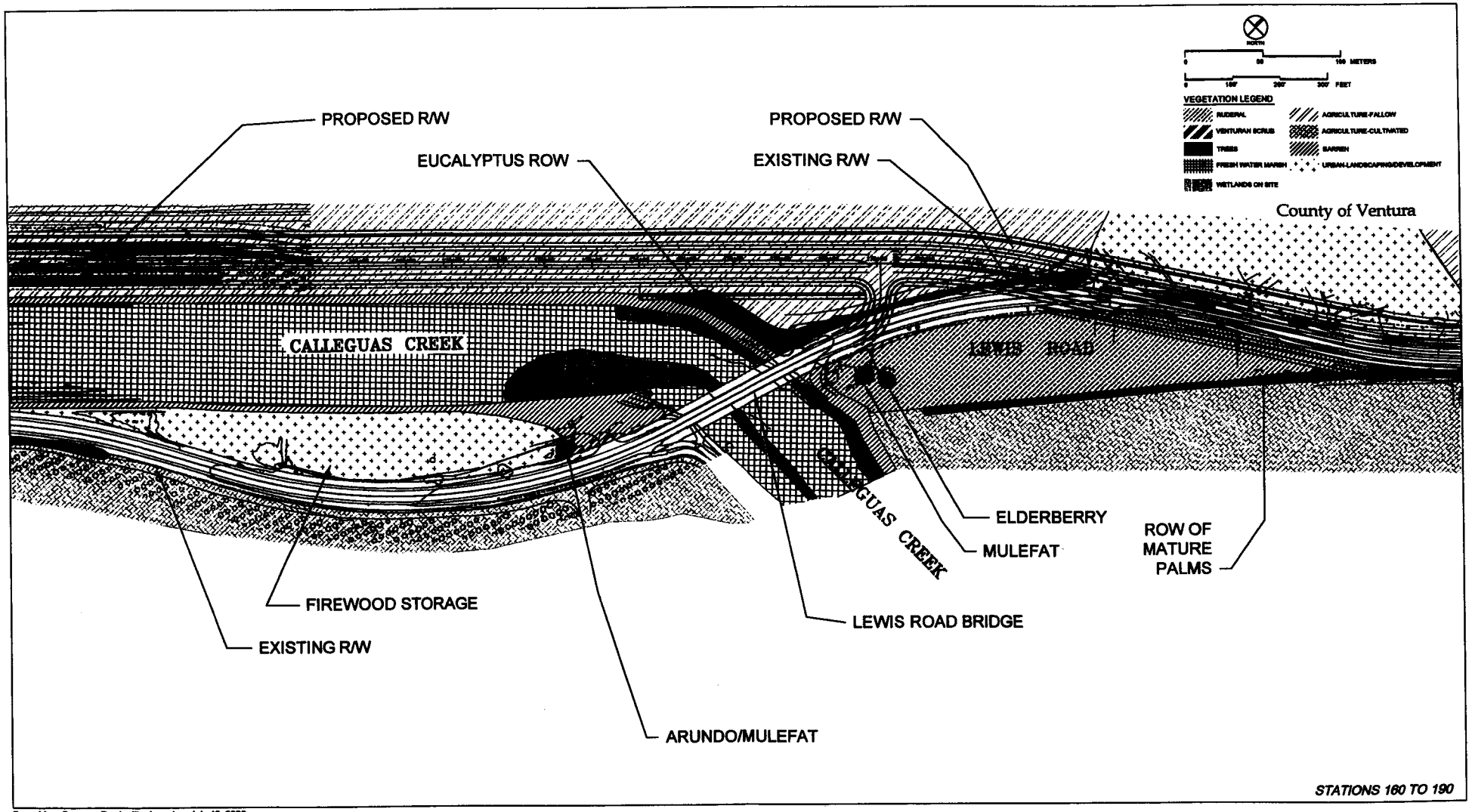
Figure 3.7



Base Map Source: Boyle Engineering, July 12, 2000

Alternative 2, Vegetation Map of Lewis Road Bridge Area

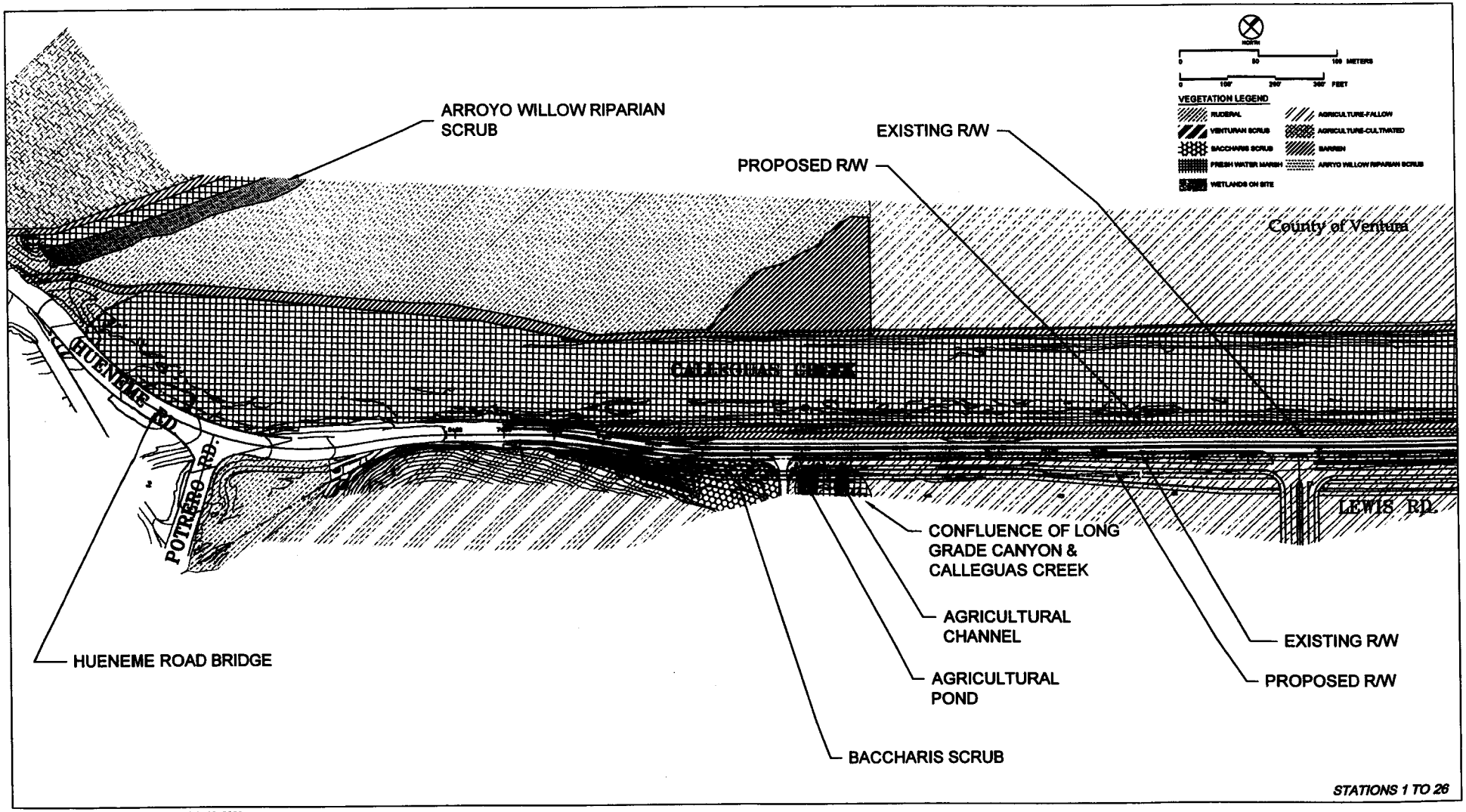
Figure 3.8



Base Map Source: Boyle Engineering, July 12, 2000

Alternative 3, Vegetation Map of Lewis Road Bridge Area

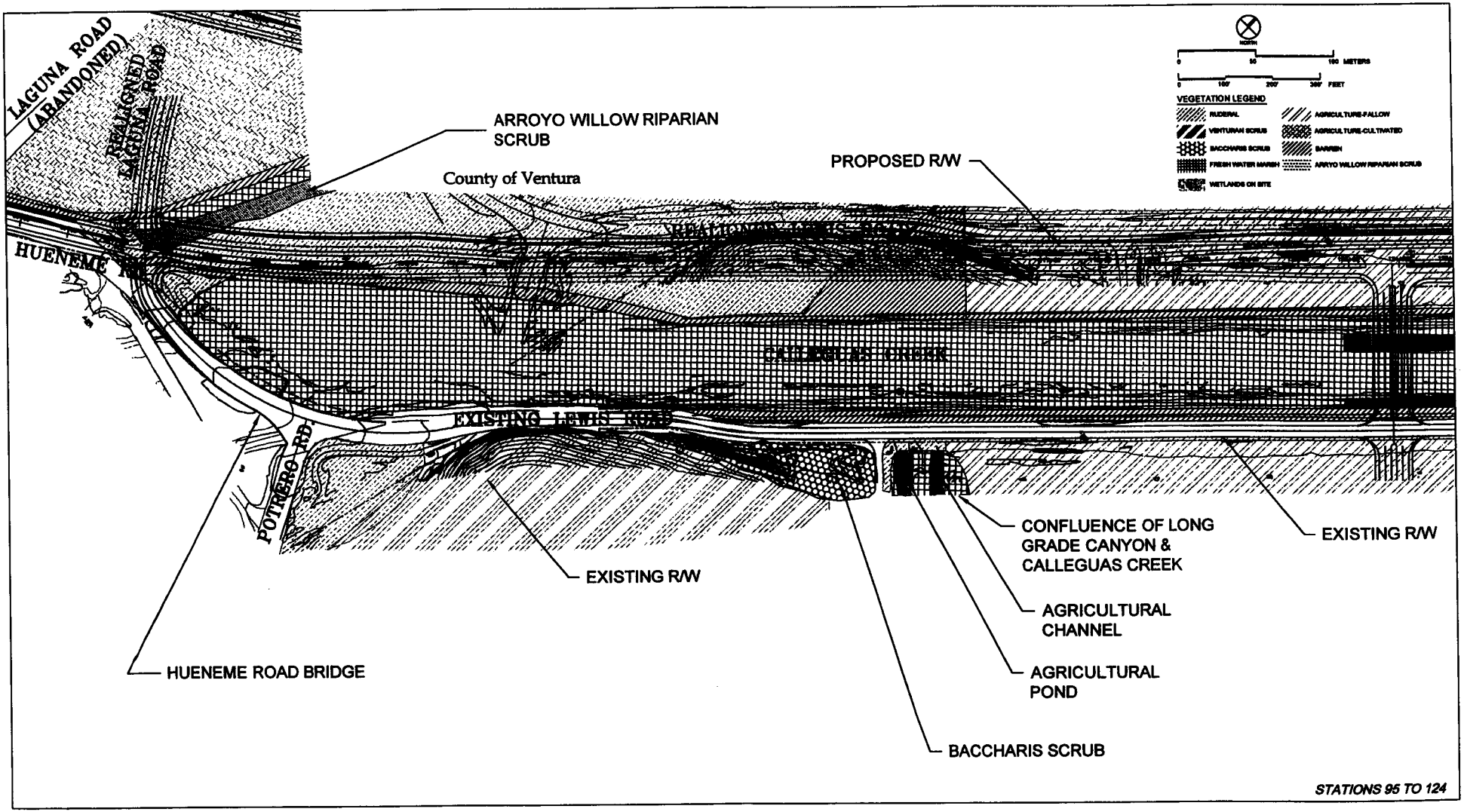
Figure 3.9



Base Map Source: Boyle Engineering, July 12, 2000

Alternatives 1 and 2, Vegetation Map of Southern Terminus

Figure 3.10



Base Map Source: Boyle Engineering, July 12, 2000

Alternative 3, Vegetation Map of Southern Terminus

Figure 3.11

Reptiles. Reptiles observed along the corridor include several western fence lizards (*Sceloporus occidentalis*), side blotched lizards (*Uta stansburiana*) in scrub and ruderal habitats, and one California striped racer (*Masticophis lateralis*) in the ruderal habitat northwest of the Hueneme Road Bridge. Other non-sensitive reptile species expected within any of the habitats onsite include southern alligator lizards (*Gerrhonotus multicarinatus*), western skinks (*Eumeces skiltoianus*), gopher snakes (*Pituophis melanoleucas*), western rattlesnakes (*Crotalus viridis*), California common kingsnakes (*Lampropeltis getulus californiae*), and red coachwhips (*Masticophis flagellum piceus*).

Birds. Bird species identified within the riparian portions of the project area include song sparrow (*Melospiza melodia*), red-winged blackbird (*Agelaius phoeniceus*), spotted sandpiper (*Actitis macularia*), mourning dove (*Zenaida macroura*), great egret (*Ardea alba*), great blue heron (*Ardea herodias*), green heron (*Butorides virescens*), killdeer (*Charadrius vociferus*), mallard (*Anas platyrhyncos*), and a common grackle (*Quiscalus quiscula*). Approximately 15 inhabited cliff swallow (*Petrochelidon pyrrhonota*) nests were found under the Lewis Road Bridge. Other birds that have been identified on the adjacent CSUCI campus in scrub habitat include Anna's hummingbird (*Calypte anna*), Allen's hummingbird (*Selasphorus sasin*), scrub jay (*Aphelocoma californica*), wrentit (*Chamaea fasciata*), bushtit (*Psaltriparus minimus*), California thrasher (*Toxostoma redivivum*), California quail (*Callipepla californica*), California towhee (*Pipilo crissalis*), spotted towhee (*Pipilo maculatus*), and lesser goldfinch (*Carduelis psaltria*). Redtailed hawk (*Buteo jamaicensis*), turkey vulture (*Cathartes aura*), common raven (*Corvus corax*), house finch (*Carpodacus mexicanus*), barn and rough-winged swallows (*Hirundo rustica* and *H. stelgidopteryx serripennis*), western meadowlark (*Sturnella neglecta*), savanna sparrow (*Passerculus sandwichensis*), and mockingbirds (*Mimus polyglottus*) have also been seen in adjacent areas (Rincon, 1998).

Numerous other birds are expected within habitats in the project corridor either as residents or during the winter, the most common of which would include western kingbird (*Tyrannus verticalus*), Bewick's wren (*Thryomanes bewickii*), yellow-rumped warbler (*Dendroica coronata*), and white-crowned sparrow (*Zonotrichia leucophrys*) (Rincon, 1998).

Mammals. Species observed or detected in various habitats along the corridor include California ground squirrel (*Spermophilus beecheyi*), raccoon (*Procyon lotor*), striped skunk (*Mephitis mephitis*), long tailed weasel (*Mustela frenata*), pocket gopher (*Thomomys* sp.), domestic dog, and coyote (*Canis latrans)*. Expected species onsite that have been found on the CSUCI campus to the east include: western harvest mouse (*Reithrodontomys megalotis*), deer mouse (*Peromyscus maniculatus*), California myotis bat (*Myotis* sp.), western pipistrelle bat (*Pipistrellus hesperus*), big brown bat (*Eptesicus fuscus*), Pacific kangaroo rat (*Dipodomys agilis*), California pocket mouse (*Perognathus californicus*), California vole (*Microtus californicus*), cottontail rabbit (*Sylvilagus audobonii*), gray fox (*Urocyon cinereoargenteus*), American badger (*Taxidea taxus*), bobcat (*Lynx rufus*), and mule deer (*Odocioleus hemionus*) (Rincon, 1998). Additional expected species that have been found at the Camarillo Regional Park to the north are, dusky-footed woodrat (*Neotoma fuscipes*), San Diego desert woodrat (*Neotoma lepida intermedia*), ornate shrew (*Sorex ornatus*), cactus mouse (*Peromyscus erimicus*) and brush mouse (*Peromyscus boylii*) (Impact Sciences, 1997).

3.4.2 Special-Status Species.

A "special-status species" or "sensitive biological resource" refers to any rare, threatened or endangered plant or animal species, or those species considered regionally declining by local authorities. Habitats are also considered sensitive if they exhibit a limited distribution, have high wildlife value, contain sensitive species, or are particularly susceptible to disturbance. This section lists those rare or otherwise sensitive species and habitats that were found along the corridor, or that have the potential to occur in the areas of potential effect or in the project vicinity. The potential for occurrence of sensitive resources is based on site characteristics and the known regional distribution and habitat affinities of the species.

a. Special-Status Plants. No state or federally listed rare, threatened, or endangered plants were found within the project corridor. Fourteen plant species, described below and shown in Table 3.7, were considered as potentially occurring within the project corridor and are discussed in detail in the *Biological Assessment for the Lewis Road Widening Project* (Rincon, 2000).

b. Special-Status Wildlife. Special-status animal species possibly found at the site or in the vicinity of the project area are listed in Table 3.8. State or federally listed species are accorded the highest protection status. The only protected species observed on site were the cliff swallow nests located under the Lewis Road Bridge. Only those species that could occur in the existing habitats within the project corridor are discussed. Please see the *Biological Assessment for the Lewis Road Widening Project* (Rincon, 2000) for more detail.

Monarch butterfly. Although the USFWS or CDFG does not list the monarch butterfly as sensitive, it is listed by the CNDDB as a species with a G5S3 ranking for wintering sites. This translates to a state rank of a California restricted range and rare for wintering sites for this species. Monarch butterfly (wintering sites) meets the definition of "rare" according to CEQA Section 15380 and is therefore included in this EIR for analysis.

This species is found wintering in tree groves along the coast between Northern Mendocino and Baja California. Millions migrate every autumn often stopping at the same resting stops (Milne, 1995). Eucalyptus, cypress, and Monterey pine groves with a thick understory, and that are adjacent to sources of water and nectar sources appear to be preferred. Other native tree species have been utilized, although less frequently (CNDDB, June 2000). In the early spring and summer returning females fly north in waves, with new generations replacing the old, as they lay their eggs along the way (Milne, 1995). No monarch butterflies were seen in the project vicinity during any of the biological surveys.

Coastal patch-nosed snakes. Coastal patch-nosed snakes could potentially occur in ruderal vegetation and coastal sage scrub below 7,000 feet of elevation. This species prefers sandy soils and rocky areas in open habitats and, if present in the project vicinity, would most likely be present in the large ruderal areas east of the Lewis Road Bridge and just west of the Hueneme Road Bridge. No individuals were observed in the project area.

Coastal western whiptail. The coastal western whiptail is one of three subspecies of the western whiptail found in California (Stebbins, 1985). This subspecies is distributed along the middle Transverse Ranges south through the Peninsular Ranges into

Table 3.7 Sensitive Plant Species Potentially Occurring in Project Vicinity

Common Name	Scientific Name	Agency Status	Habitat	Potential Occurrence
California orcutt grass	*Orcuttia californica*	FE, SE	Vernal pool	Survey conducted; species and habitat not observed.
Salt marsh bird's beak	*Cordylanthus maratimus ssp. maritimus*	FE, SE	Salt marsh	Survey conducted; species and habitat not observed on site.
Slender-horned spine flower	*Dodecahema leptoceras*	FE, SE	Chaparral, coastal & alluvial fan sage scrub	None observed in Venturan Coastal Sage Scrub on site.
Brauton's milkvetch	*Astragalus brauntonii*	FE, CNDDB	Disturbed chaparral	Survey conducted; species and habitat not observed on site.
Conejo dudleya	*Dudleya abramsii ssp. parva*	FE,	Clay grassland in the Western Santa Monica Mountains	Survey conducted; species and habitat not observed on site.
Nevin's Barberry	*Berberis nevinii*	FE, SE	Chaparral, coastal & alluvial fan sage scrub	None observed in Venturan Coastal Sage Scrub on site.
Santa Monica mountain or marcescent dudleya	*Dudleya cymosa ssp. marcescens*	FT, SR	Shaded rocky slopes in the Santa Monica Mountains	Survey conducted; species and habitat not observed on site.
Blochman's dudleya	*Dudleya blochmaniae ssp. blochmaniae*	FSC	Coastal bluffs and rock outcrops	None observed in volcanic rock outcrops, known 3 miles north and immediately east of site.
Verity's dudleya	*Dudleya verityi*	FT, CNDDB	Massive volcanic boulder outcrops in the Western Santa Monica Mountains	None observed in (Venturan Coastal Sage Scrub); known 1 mile east.
Conejo buckwheat	*Eriogonum crocatum*	FSC, CR	Volcanic-derived soils in the Western Santa Monica Mountains	None observed in volcanic outcrops (in Venturan Coastal Sage Scrub); known 1 mile east
Dune larkspur	*Delphinium parryi ssp blochmaniae*	FSC, CNDDB	Coastal sand dunes, chaparral, volcanic soils and rocky slopes	None observed in volcanic soils or rocky slopes (in Venturan Coastal Sage Scrub); known 2 miles east
Plummer's mariposa lily	*Calochortus plummerae*	FSC, CNDDB	Coastal sage scrub, chaparral, valley & foothill grassland, cismontane woodland, and lower montane coniferous forest	None observed in any habitat on site; known 2 miles east
Lyon's pentachaeta	*Pentachaeta lyonii*	FE, SE	Pockets of grassland	Survey conducted; species and habitat not observed on site.
Rayless ragwort	*Senecio aphanactis*	CSC	Drying alkali flats and coastal sage scrub	None observed in Venturan Coastal Sage Scrub on site; known east.

Source: Rincon Consultants, Inc. 1998, March 2000; CDFG CNDDB January and April 2000; USFWS May 9, 2000.

CFP = California Fully Protected *CNDDB = California Native Plant Society Sensitive* *CSC = California Species of Concern* *FE = Federal Endangered*
FPD = Federal Proposed Delisting *FPT= Federal Proposed Threatened* *FSC = Federal Species of Concern* *FT = Federal Threatened*
PT = Proposed Threatened *SE = State Endangered* *SR = State Rare* *ST = State Threatened*

Table 3.8 Sensitive Wildlife Species Potentially Occurring in Project Vicinity

	Species	Scientific Name	Status	Habitat Requirements	Potential Occurrence
Invertebrates	Riverside fairy shrimp	*Steptocephalus woottoni*	FE	Vernal pools	Survey conducted; habitat not observed on site.
	Conservancy fairy shrimp	*Brachinecta conservatio*	FE	Vernal pools	Survey conducted; habitat not observed on site.
	Monarch butterfly	*Danaus plexippus*	LS	Wintering sites in tree groves or windbreaks near water and nectar sources; usually eucalyptus, cypress, and Monterey pine	Survey conducted; no monarchs observed in tree grows or rows on site
	Quino checkerspot butterfly	*Euphydryas editha quino*	FE	Sandy, clay, or serpentine soils, grassy slopes & flats, open woodland; host plant is *Plantago erecta*	Survey conducted; habitat and host plant not observed on site
Fishes	Unarmored threespine stickleback	*Gasterosteus aculeatus williamsoni*	SE, FE	Quiet water habitats like pools with abundant aquatic vegetation.	Not known from Calleguas Creek; habitat not observed on site
	Steelhead trout	*Oncorhyncus mykiss*	FT, CSC	Small streams with high elevation headwaters close to the ocean that have no impassible barriers; spawning: high elevation headwaters	The Southern California Ecologically Significant Unit does not occur in the Calleguas hydrologic unit
	Tidewater goby	*Eucyclogobius*	FE, CSC	Coastal brackish marsh	Survey conducted; habitat not observed on site
Amphibians	Coast range newt	*Taricha torosa torosa*	CSC	Breeds in streams and ponds with well developed pools in rocky canyons; often associated with hardwood forests, coastal sage scrub, chaparral and grassland	Survey conducted; habitat not observed on site
	California red-legged frog	*Rana aurora draytoni*	FT, CFP	Dense shrubby riparian vegetation associated with deep, slow moving water	Not known from Calleguas and Long Grade Canyon creeks; not observed on site
	Western spadefoot toad	*Scaphiopus hammondi*	FSC, CSC	Near ephemeral pools in valley & foothill grasslands, coastal scrub, and chaparral	Not known from Calleguas and Long Grade Canyon creeks; not observed on site
	Arroyo toad	*Bufo microscophus californicus*	FE, CFP	Shallow sandy pools in streams; overwinters in upland terraces	Not known from general area; none observed on site
Reptiles	Southwestern pond turtle	*Clemmys marmorata pallida*	CFP	Permanent aquatic habitat of rivers and streams with persistent deep poosl	Survey conducted; not observed on site
	Coastal patch-nosed snake	*Salvadora hexalepis virgultea*	CSC	Coastal sage scrub, grasslands, and ruderal vegetation	Possible within Venturan Coastal Sage Scrub and ruderal areas on site; none were observed
	Two-striped garter snake	*Thamnophis hammondi*	FSC, CFP	Perennial and intermittent streams, stockponds and artificially created aquatic habitats with adjacent vegetation for refuge	Possible within riparian areas, none observed during focused surveys

Table 3.8 Sensitive Wildlife Species Potentially Occurring in Project Vicinity (cont.)

	Species	Scientific Name	Status	Habitat Requirements	Potential Occurrence
Reptiles	Blunt nosed leopard lizard	*Gambelia silus*	FE, SE	Endemic to San Joaquin Valley and surrounding foothills	Outside of species range
	Coast horned lizard	*Phrynosoma coronatum*	FSC, CFP	Open, sandy areas of coastal sage scrub, and chaparral	Survey conducted; habitat not observed on site
	Island night lizard	*Xantusia riversiana*	FT, CFP	Limited to Channel Islands	Outside of species range
	Coastal western whiptail	*Cnemidophorus tigris multiscutatus*	FSC, CSC	Open, sandy grassland, chaparral, riparian & sage scrub, arroyos and washes	Possible within Calleguas Creek and ruderal areas on site; none were observed
	California legless lizard	*Aniella pulchra*	FSC, CSC	Sandy soils of chaparral, pine oak woodland, riparian; often associated with bush lupine	Survey conducted; habitat not observed on site
Birds	Cliff swallow	*Petrochelidon pyrrhonota*	FGC, MBT (nests, eggs)	Around bridges, urban structures or cliffs	Observed nesting under Lewis Road bridge;
	Bald eagle	*Haliaeetus leucocephalus*	FT, FPD, SE	Lakes and reservoirs, usually present only as winter migrant in Southern California	Survey conducted; habitat not observed on site
	Cooper's hawk	*Accipiter cooperii*	CSC (nesting)	Riparian forests, mountain canyons, oak woodlands and eucalyptus groves	Possible breeder in eucalyptus or forager over site; none were observed
	Sharp-shinned hawk	*Accipiter striatus*	CSC (nesting)	Nests in coniferous forests in riparian areas; forages in open areas near dense vegetation	Possible winter migrant
	Northern harrier	*Circus cyaneus*	CSC (nesting)	Nests in a variety of habitats outside of Southern California; forages in or near riparian areas	Possible winter migrant
	Prairie falcon	*Falco mexicanus*	CSC (breeding sites)	Nests on cliffs adjacent to grasslands; forages in open fields, grasslands, or ruderal areas	Nesting habitat not observed on site; possible winter migrant
	American peregrine falcon	*Falco peregrinus anatum*	CSC (nesting)	Nests on cliffs near water, forages within coastal and riparian areas	Nesting habitat not observed on site; possible winter migrant
	White-tailed kite	*Elanus leucurus*	FSC, CFP	Nests in trees; forages near agricultural and open areas	Possible resident/migrant; none were observed
	Merlin	*Falco columbarius*	CSC	Nests outside of California; forages in a variety of habitats	Uncommon winter migrant
	Ferruginous hawk	*Buteo regalis*	FSC, CSC (winter)	Nests outside California; forages in scrub, agricultural & open areas in Southern California	Possible winter migrant
	California gnatcatcher	*Polioptila californica*	FT, CSC	Sage scrub, primarily Riversidean and Diegan	None observed on site in Venturan Coastal Sage Scrub; known nine miles north in Moorpark

Table 3.8 Sensitive Wildlife Species Potentially Occurring in Project Vicinity (cont.)

	Species	Scientific Name	Status	Habitat Requirements	Potential Occurrence
Birds	San Diego cactus wren	*Campylorhynchus brunneicapillus sandiegoense*	CSC	Cactus dominated areas of coastal sage scrub	No individuals or sign of historic nesting were observed
	Bell's sage sparrow	*Amphispiza belli*	FSC, CSC	Dry open chaparral	Survey conducted; habitat not observed on site
	Ashy rufous-crowned sparrow	*Aimophila ruficeps canescens*	FSC, CSC	Coastal sage scrub	Possible in Venturan Coastal Sage Scrub; none were observed on site
	Loggerhead shrike	*Lanius l. ludovicianus*	FSC, CSC	Dry, open habitats with shrubs for perches and nesting	Possible nester in trees on site; none were observed
	Yellow warbler	*Dendroica petechia brewsteri*	CSC	Nests and forages in dense riparian woodland, montane chaparral, ponderosa pine, and mixed conifer forest during summer	Survey conducted; habitat not observed on site
	Southwestern willow flycatcher	*Empidonax traillii extimus*	FE	Nests and forages in dense riparian during summer	Habitat not observed on site; none were observed during focused survey
	Yellow-breasted chat	*Icteria virens*	CSC	Nests and forages in dense lowland riparian during summer	Possible in arroyo willow riparian scrub; none were observed on site
	Least Bell's Vireo	*Vireo bellii pussilus*	FE, CE	Nests and forages in dense riparian during summer	Survey conducted; habitat not observed on site
	Light-footed clapper rail	*Rallus longirostrus levipes*	SE, FE	Salt marsh	Survey conducted; habitat not observed on site
	California condor	*Gymnogyps californianus*	SE, FE	Nesting in cliffs and redwood cavities	Nesting habitat not observed on site; very few exist in the wild
	Brown pelican	*Pelecanus occidentalis*	SE, FE	Marine habitat	Survey conducted; habitat not observed on site
	California least tern	*Sterna antillarum browni*	SE, FE	Beach	Survey conducted; habitat not observed on site
	Western snowy plover	*Charadrius alexandrinus nivosus*	FT, CSC	Beach	Survey conducted; habitat not observed on site
	Mountain plover	*Charadrius montanus*	PT, CSC	Winter migrant in fields, grasslands, and alkaline flats	Unlikely to occur due to regional rarity and habitat disturbance; none were observed

Table 3.8 Sensitive Wildlife Species Potentially Occurring in Project Vicinity (cont.)

	Species	Scientific Name	Status	Habitat Requirements	Potential Occurrence
Mammals	Small-footed bat	*Myotis ciliolabrum*	FSC	Roosts in caves, crevices, and trees; forages in various habitats	Possible foraging over site; none were observed
	Long-eared myotis bat	*Myotis evotis*	FSC	High elevation habitats	Survey conducted; habitat not observed on site
	Fringed bat	*Myotis thysanodes*	FSC	High elevation habitats	Survey conducted; habitat not observed on site
	Long-legged bat	*Myotis volans*	FSC	High elevation habitats	Survey conducted; habitat not observed on site
	Yuma myotis	*Myotis yumanensis*	FSC	Roosts in caves, crevices, and trees; forages in various habitats	Possible foraging over site; none were observed
	Pallid bat	*Antrozous pallidus*	FSC, CSC	Roosts in caves, crevices, and trees; forages in various habitats	Possible foraging over site; none were observed
	Pale (Townsend's) big-eared bat	*Corynorhinus (=Plecotus) townsendi pallescens*	FSC, CSC	Roosts in caves	Survey conducted; roosting sites were not observed on site
	San Diego desert woodrat	*Neotoma lepida intermedia*	FSC, CSC	Scrub and chaparral	No individuals or sign of present or past nesting were observed
	Southern sea otter	*Enhydra lutris nereis*	FT	Marine habitat	Survey conducted; habitat does not occur on site

ource: CDFG CNDDB, January and April 2000; Rincon Consultants, Inc. 1998, March 2000, USFWS May 9, 2000.

FP = California Fully Protected
PD = Federal Proposed Delisting
S = Locally Sensitive
CSC = California Species of Concern
FPT= Federal Proposed Threatened
MBT = Migratory Bird Treaty
FE = Federal Endangered
FSC = Federal Species of Concern
PT = Proposed Threaten
FGC= Cal. Fish and Game Code
FT = Federal Threatened
SE = State Endangered

northwestern and central Baja California Norte (Stebbins, 1985). Conversion of coastal sage scrub, grassland, and riparian scrub habitat to urban, industrial, and agricultural uses has eliminated many populations and fragmented the distribution of this species throughout southern California. Microhabitat requirements are similar to those of the coast horned lizard—open grassland and scrub habitats, arroyos and washes with a sandy bottom. Whiptails are active aboveground between mid-April to early October. Although they are known to occur in the more open coastal sage scrub habitat in the CSUCI campus directly to the east (Rincon, 1998), no individuals were seen in the project area.

Cliff swallow. A colony of cliff swallow nests was observed under Lewis Road Bridge. Approximately 15 nests were inhabited in May 2000. Migratory birds and their nests and eggs are protected under the Migratory Bird Treaty Act (U.S.C. 16 (7) (II)) and the California Fish and Game Code.

The birds of prey (bald eagle, Cooper's hawk, sharp-shinned hawk, northern harrier, prairie falcon, American peregrine falcon, white-tailed kite, and merlin) all have extensive ranges that cover many habitats and are expected as rare to common transients at the project site. Most of these species are not expected to breed at the site. Most raptors are considered sensitive due to declines in population levels.

Bald eagle. Usually found close to lakes and reservoirs where they feed on coots, waterfowl, and fish (USDA, 1999), bald eagles generally use Southern California as wintering grounds. None were seen in the project area.

Cooper's hawk. This species prefers riparian forests, mountain canyons, and oak woodlands and has been successful at nesting in residential areas and can be found in eucalyptus groves. Cooper's hawk has been observed foraging over the Camarillo Regional Park (Impact Sciences, 1997) and probably also forages at the site. Although they could potentially nest in the denser tree rows at the site, none were observed during field surveys.

Sharp-shinned hawk, northern harrier, and merlin. These species would be winter visitors only to the project site and would not breed there, which is the time period during which they are considered sensitive. The sharp-shinned hawk nests in coniferous forests in riparian areas (USDA, 1999). The northern Harrier occurs in a variety of habitats from annual grasslands to lodgepole pine and usually nest on the ground in shrubby vegetation at marsh edge (CDFG, 1990). Merlins breed in Alaska and Canada and are an uncommon winter visitor to California. This species tends to forage near riparian areas where shorebirds are present (CDFG, 1990). None of these species were observed in the project corridor.

Prairie falcon and American peregrine falcon. These species possibly forage over the ruderal areas of the site, but the rock formations within the project site do not appear suitable for breeding. Prairie falcons typically nest on cliffs adjacent to grasslands and appear to be declining due to loss of foraging habitat. Due to their diet on non-aquatic birds, they have not been as affected by DDT as other raptors. The endangered American peregrine falcon tends to nest high on cliffs near water and its food source of migrant waterfowl and shorebirds (USDA, 1999). It is known to forage at Point Mugu rock and Mugu Lagoon approximately 10 km (6 miles) to the southeast (Rincon, 1998).

Ashy rufus-crowned sparrow. This species prefers slopes that are typically south facing and covered with sparse brush, bunch grasses and large rocks. It is also associated with extensive stands of coastal sage scrub (USDA, 1999) and has been observed near the north property line of the adjacent CSUCI to the east (Rincon, 1998). It is considered relatively common in the Calleguas Creek watershed (Greaves, 2000). None were observed in the project corridor.

Loggerhead shrike and white-tailed kite. The loggerhead shrike is typically found in dry, open habitats with sparse shrubs and trees below approximately 1,500 meters (5,000 feet) and commonly uses utility poles and fences as perches (USDA, 1999). The shrike has declined throughout its range, probably due to habitat destruction but also due to declines in its prey base of songbirds and large insects. Observed at Camarillo Regional Park to the northeast (Impact Sciences, 1997), this species may be found nesting trees in ruderal habitats and feeding on frogs in riparian areas (Greaves, 2000). The white tailed kite has been known to occur at Camarillo Regional Park (Impact Sciences, 1997). Kites are usually found near agricultural lands and tend to nest at the top of dense trees (CDFG, 1990). Neither shrikes, nor kites were observed on site.

Yellow warbler, southwestern willow flycatcher, yellow-breasted chat, and least Bell's vireo. These species are neotropical migrants that require riparian habitats for nesting. The yellow warbler has been noted as a riparian obligate during the summer and has been found in riparian woodlands in the lowland and foothill canyons with willow, cottonwood, sycamore or alder. It does not appear to be declining across its range (USDA, 1999). The southwestern willow flycatcher builds in riparian habitats that are highly localized and have variable vegetation (USDA, 1999). The yellow breasted chat is a summer resident of dense riparian thickets and brushy tangles in the vicinity of stream in coastal lowland. Due to cowbird parasitism and loss of riparian lowland habitat, it is believed to be quite rare (USDA, 1999). This species has been observed along Arroyo Conejo Creek to the north (Greaves, 1998). Least Bell's vireo is another neotropical migrant found in riparian habitats that is substantially impacted by habitat loss and cowbird parasitism. It is typically found in broad cottonwood-willow woodlands and mulefat scrub (USDA, 1999) with a dense understory (Greaves, 2000). A focused May 2000 survey determined that appropriate southwestern willow flycatcher and least Bell's vireo habitat does not exist in the project corridor. (Greaves, April 26, 2000, Appendix F). ~~None~~ of the above species were observed during field surveys.

Bats require caves or crevices for roosting and breeding. The Bridge over Calleguas Creek was surveyed on the evening of May 20, 2000 and no bat sign or potential roosting sights were observed.

Pallid bat, Yuma myotis bat, and western small-footed myotis bat. The pallid bat is common at elevations below 1.8 km (6,000 feet) and roosts in rock crevices, trees hollows, mines, caves and a variety of manmade structures. This species may potentially forage within the project area. The Yuma myotis bat is found in a variety of habitats including riparian, arid scrublands, deserts, and forests near permanent sources of water. It roosts in trees, rock crevices, trees hollows, mines, caves and a variety of manmade structures. The western small-footed myotis bat inhabits a variety of habitats including

desert, chaparral, riparian, and coniferous areas and utilizes a variety of roost types (USDA, 1999). These species would most likely forage in the area.

3.4.3 Waters of the U.S. and Wetlands

Wetlands are a subset of waters of the United States (waters of the U.S.) that are defined by specific vegetation, hydrology and soil criteria. As defined in the Code of Federal Regulations (CFR) 328.3, waters of the U.S. include:

> ...territorial seas measured seaward a distance of three miles; tributaries of any defined water of the United Sates (including any ephemeral tributary); coastal and inland waters, lakes, rivers, streams and their tributaries; interstate waters and their tributaries, including interstate wetlands; wetlands adjacent to all of the above waters; and all other waters, such as interstate lakes, rivers, streams, isolated wetlands, mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes or natural ponds that are not part of a tributary system to interstate waters or to navigable waters of the U.S., the degradation or destruction of which could affect interstate commerce.

Jurisdictional limits of waters of the U.S. are defined by the Ordinary High Water Mark (OHWM) contour that is often equated with the extent of a two-year flood water surface elevation. Wetlands, in turn, are defined by the United States Army Corps of Engineers (USACE) Wetlands Delineation Manual (1987) as waters of the U.S. that:

> ...are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

Under Section 404 of the Clean Water Act, the USACE has authority to regulate activity that could discharge fill or dredge material or otherwise adversely modify wetlands or other waters of the United States. The Corps implements the federal policy embodied in Executive Order 11990, which, when implemented, is intended to result in no net loss of wetlands values or acres. In achieving the goals of the Clean Water Act, USACE seeks to avoid adverse impacts and to offset unavoidable adverse impacts on existing aquatic resources. Any fill or adverse modification of wetlands may require a permit from USACE prior to the start of work. Typically, permits issued by USACE are a condition of a project as mitigation to offset unavoidable impacts on wetlands and other waters of the U.S. in a manner that achieves the goal of no net loss of wetland acres or values.

Perennial and intermittent streams also fall under the jurisdiction of the California Department of Fish and Game (CDFG). Sections 1601-1603 of the Fish and Game Code (Streambed Alteration Agreements) gives the CDFG regulatory authority over work within the stream zone (which could extend to the edge of the riparian habitat or the 100-year flood plain) consisting of, but not limited to, the diversion or obstruction of the natural flow or changes in the channel, bed, or bank of any river, stream or lake. California Department of Fish and Game identifies wetlands using a less stringent definition. Only hydrophytic vegetation needs be present for an area to be defined as a wetland by the CDFG.

Three of the four watercourses that occur in the study area have been identified positively as waters of the U.S. and would fall under the jurisdiction of the USACE (Figure 3.11). These are the VCFCD drainage ditch, Calleguas Creek, and the confluence of Calleguas and Long

Grade Canyon Creeks. The agricultural channel to the northwest of Hueneme Road Bridge has the potential to be classified as waters of the United States (McNeil, May 29, 2000). All are described in detail in the *Biological Assessment for the Lewis Road Widening Project* (Rincon, 2000).

Several of the identified waters of the U.S. within the project area also contain wetlands and are described below:

Calleguas Creek. At the Lewis Road Bridge, freshwater marsh vegetation is found along the low-flow waters edge and is dominated by herbaceous vegetation. Robust emergent vegetation dominated by cattails (*Typha* sp.) is found within the footprint of the low water crossing adjacent to the Lewis Road Bridge and within other areas offsite. At the proposed Santa Barbara Bridge herbaceous wetland vegetation is found in wider swathes along the edge of the water more extensive stands of robust emergent vegetation.

Confluence of Calleguas and Long Grade Canyon Creeks. Both the agricultural storage pond and adjacent channel within the project area were identified as potential wetlands. This determination is based upon the area's designation as waters of the U.S. and the hydrophytic vegetation observed within it.

Agricultural Channel Northwest of Hueneme Road Bridge. This area is a potential wetland as hydrophytic vegetation, hydric soils (NRCS, 1970 and 1997), and wetland hydrology exist in this area. However, it is unclear whether this area is considered a Water of the U.S., and thus a wetland.

In addition to the areas discussed above, the farmland currently under cultivation along Lewis Road was considered as a potential wetland. Although hydric soils are found extensively within the project area of affect (USDA 1970), the relevant landforms associated with these hydric soils are not present within agricultural areas. Most notable is the "Alluvial Fan or Flat" landform. Historically present throughout the project area, alluvial fan/flat areas are currently limited to the Calleguas Creek channel. VCFCD banks on either side of Calleguas Creek protect adjacent farmland from a 50-year flood event. As a result, areas alongside the creek but outside of the VCFCD banks no longer experience frequent flooding or the deposition of alluvium. In addition, no riparian vegetation was observed during site surveys in areas outside for the Calleguas Creek channel. Therefore, the only wetlands in the project corridor appear to be limited to the freshwater marsh and arroyo willow riparian scrub habitat within the bed and banks of the Calleguas creek, Long Grade Canyon creek, and the agricultural channels on site. If the wetlands were determined to exist within the agricultural areas by NRCS, they would be considered a "prior converted cropland," and not a "farmed wetland" (McNeil, May 29, 2000), as farming has occurred in the area prior to 1985. In addition, due to the modifications to local hydrology through farming and flood control in the project area, agricultural areas would not likely revert back to wetlands with the cessation of farming.

3.5 Cultural and Historic Resources

This section is a summary of the Negative Historical Property Survey Report (HPSR) prepared August 2000 by archeologist Robert Wlodarski and Caltrans architectural historian

Andrea Morrison. Based on the findings of this Phase I survey, it was determined that no potentially adverse impacts to cultural resources could occur in the vicinity of Round Mountain, a documented sensitive cultural resource site. This study is attached in Appendix K.

As part of this study, a thorough and intensive archival-background research phase was conducted for the project corridor using information gained from historic maps, archival data, and prior studies and reports, and included the following sources:

- National Register of Historic Places (Federal Register - 8/94 -supplements to date);
- The California Inventory of Historic Resources (California Department of Parks and Recreation 1976);
- The California Historic Landmarks Directory (California Department of Parks and Recreation 1990);
- The California State Historic Resources Inventory, Office of Historic Preservation, California Department of Parks and Recreation;
- California Points of Historical Interest (1992), Office of Historic Preservation, California Department of Parks and Recreation;
- Historic maps on file at the Geography Department Map Reference Center, California State University, Northridge, Bureau of Engineering, Ventura County Government Center; and Ventura County Museum of History and Art (VCMHA);
- Previous studies within a one-eighth mile radius of the APE: Anon 1992, 1994a,b; Brock 1987; Clewlow 1975; Dames & Moore 1988; King 1992, 1994; Leonard et. al 1970; Lopez 1978, 1986, 1988; Maki 1994 a,b, 1996; Peak & Associates 1991; Romani 1994 a, b; Rosen 1975, 1978; Singer 1974, 1986; Singer & Atwood 1990; Steele & Gallardo 1982; W & S Consultants 1990a,b, 1992, 1995; and Wlodarski 1989, 1998). The following surveys overlap portions of the project area (Anon 1992, 1994a,b; Brock 1987; Clewlow 1975; Dames & Moore 1988, King 1992; Lopez 1988; Maki 1994a,b, 1996; Peak & Associates 1991, Romani 1994b; Rosen 1975, 1978; Singer 1974, 1986; Singer & Atwood 1990, Steele & Gallardo 1982, W & S Consultants 1990b, 1992; and Wlodarski 1998); and
- Inspection of the Hueneme USGS topographic map indicated that by 1900, Laguna Road, Hueneme Road, Potrero Road, as well as several other unimproved roads were in existence. Round Mountain appears on the map and a portion of Calleguas Creek cuts through the project area north of Round Mountain and Long Grade Road. The city of Camarillo is illustrated on the map, along with the Somis Branch of the Southern Pacific Railroad Line. Only a few small farmhouses dot the landscape in the area of Lewis Road.

The general area (from Camarillo to Point Mugu) contains a number of important village and shrine sites, as well as associated resource exploitation centers, special use sites and activity areas, and ceremonial sites. Additionally, an even greater concentration and diversity of archaeological resources lie within five miles of Lewis Road. Studies at Oak Park, Running Springs, Ring Brothers, Three Springs, Santa Monica Mountains National Recreation Area, the Oxnard Plain, and Arroyo Santa Rosa attest to the rich cultural heritage of this region.

The records search indicated that:

- No prehistoric isolates have been recorded within the project area;

- No historic archaeological sites and/or isolates have been recorded within the project area;
- No properties are listed on the National Register of Historic Places within the APE;
- The California State Historic Resources Inventory lists no properties that have been evaluated for historical significance within the APE;
- No California Historical Landmarks (1990) of the Office of Historic Preservation, California Department of Parks and Recreation are listed within the APE; and
- No resources are listed on the California Points of Historical Interest (1992), Office of Historic Preservation, California Department of Parks and Recreation within the APE.

The field reconnaissance performed as part of the Phase I Archaeological Study and subsequent Negative HPSR involved thirty-eight person- hours during which time the conditions were ideal for surveying, and ground surface visibility was good-to-excellent throughout the project area. A majority of the right-of-way had been previously disturbed by:

- Prior grading activities as evidenced by large, cleared areas adjacent to Lewis Road in the area of off-set structures, and fronting several agricultural fields;
- Agricultural related activities;
- Commercial construction;
- The construction and maintenance of Lewis Road;
- The construction of Pleasant Valley Road;
- The construction of Ventura Boulevard, S. Dawson Drive, Dawson Place, and the Union Pacific Railroad line;
- The construction of minor drainage channels and access roads for agricultural use
- Bridge construction;
- Modifications to Calleguas Creek;
- Various landscaping features including trees and shrubs lining Lewis Road; and
- Utility construction and maintenance.

The results of the cultural resources surveys indicated that no prehistoric or historic archaeological sites or isolates were recorded within the APE. Additionally, no potentially eligible structures were identified due to the fact that the APE as delineated would have no impact on the built environment.

3.6 Drainage and Hydrology

3.6.1 Water Quality and Use

The protection of water quality in the project vicinity is under the jurisdiction of the State Water Resources Control Board and its satellite Regional Water Quality Boards (RWQCB). This board establishes requirements prescribing the quality of point sources of discharge. National Pollutant Discharge Elimination System (NPDES) regulations have also been established for non-point discharges (area discharges such as stormwater runoff) to establish surface runoff water quality standards and abatement requirements that are overseen by the Regional Water Quality Control Board. Water quality objectives are established through the Water Quality Control Plan, the Los Angeles Region Basin Plan for the Ventura Coastal Watershed Unit (Regional Water Quality Control Board, Los Angeles Region, 1994).

Water quality objectives are established based on the designated beneficial uses for a particular surface water. Existing beneficial uses designated for the Calleguas Creek Watershed surface waters, include industrial service and process supply, agricultural supply, groundwater recharge, water contact and non-contact recreation, wildlife habitat, and warm freshwater habitat. An identified potential beneficial use for the inland surface waters is as a municipal and domestic water supply.

Major water quality issues associated with the Calleguas Creek watershed are focused on the effect to Mugu Lagoon, one of the largest remaining coastal wetlands in southern California. While natural flows in Calleguas Creek were intermittent, discharges of municipal, agricultural, and urban watershed wastewaters have increased flow in the creek to a perennial condition and increased sedimentation in the lagoon. The instability of local streambanks, destruction of riparian vegetation, and other land use practices have accelerated erosion in the watershed. Should sedimentation continue at its present rate, it is estimated that the lagoon could fill in about 50 years (Regional Water Quality Control Board, 1994). Additional problems are produced by irrigation flows that add high concentrations of pesticides, nutrients, and other dissolved constituents to the surface flow.

Groundwater within the Pleasant Valley confined aquifers is designated for existing beneficial uses that include municipal and domestic water supply, industrial service and process supply, and agricultural supply. The upper, unconfined and perched aquifers of the Pleasant Valley groundwater basin has the same identified beneficial uses, except that municipal and domestic water supply is identified as a potential, rather than existing, use. The basin plan contains narrative and specific numerical objectives for a variety of parameters and potential pollutants based on these beneficial use designations.

The Calleguas Creek Watershed has been chosen as the subject of a Watershed Management Study. The purpose of this study is to develop a plan that could result in a substantial reduction in the problems affecting the watershed and surface water flows. In addition, the Coastal Conservancy has been awarded a Wetland Protection Grant from the U.S. Environmental Protection Agency and will be preparing a wetland restoration program for the Calleguas Creek Watershed. The purpose of the program is to restore and enhance the wetlands and primary riparian resources of the watershed.

3.6.2 Drainage and Flooding

The project site is located within the Calleguas Creek watershed. The Calleguas Creek watershed is approximately 343 square miles and collects water from several urban areas, including the cities of Simi Valley, Moorpark, Thousand Oaks, and Camarillo. Peak flow upstream of the Camarillo Drive Bridge is estimated at 36,000 cubic feet per second (cfs) during the 100-year storm. Because Calleguas Creek collects runoff from a large watershed, this peak flow occurs more than 1,274 minutes after the beginning of the design storm event.

While Calleguas Creek is confined within a levee system, the flow from a 100-year storm is not contained within this system. Overflow occurs on both sides of the channel within the vicinity of the California State University Channel Islands campus. Ventura County Flood Control District does not have any current plans to contain this flow.

Flood zone mapping and drainage improvements are based on the probability of a certain amount of rain to fall within a particular time frame, usually 24 hours. From rainfall gauge records, the size of a storm that has a 1% probability of occurring in any one year within a particular watershed can be calculated. A storm with this probability is often referred to as the "100-year storm" since at least one such storm would be expected to occur in a 100-year period, and the associated overflow termed the "100-year flood." Unfortunately, the "100-year storm" term has been taken too literally and it is often assumed by the public that only one such storm can occur in a 100-year period. In fact, this is simply a probability estimate based on incomplete rainfall gauge data that in most watersheds has been collected for only approximately 50 years. Therefore, it is possible for several "100-year" storms to occur in the course of a few years, which would result in a revision to the estimated storm probabilities. In addition, storms do not exhibit the same rainfall intensity uniformly, and the same storm system that exhibits a 100-year intensity in a particular watershed can have a much lower intensity in an adjacent watershed.

The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs) are used to determine the flooding hazard along waterways. The FIRMs for the project area indicate that most of the County portion of the Lewis Road alignment is located within Flood Zone "A" (the 100-year flood area) as shown in Figure 3.12.

3.7 Geologic Hazards

This section is based on a technical memorandum prepared by Fugro West, Inc. June 13, 2000. A copy of this document is available for review at the County of Ventura Public Works Agency Transportation Department located at 800 South Victoria Avenue, Ventura, California.

3.7.1 Regional Settings

The Camarillo area is located within the Transverse Ranges geologic/geomorphic province of California. That province is characterized by generally east-west-trending mountain ranges composed of sedimentary and volcanic rocks and soil materials ranging in age from Cretaceous to Recent. Major east-trending folds, reverse faults, and left-lateral strike-slip faults reflect regional north-south compression and are characteristic of the Transverse Ranges. The Camarillo area has been mapped by several authors including Dibblee (1990) and Weber et al. (1973).

The project site is located in the seismically active southern California area, and the project will most likely be subjected to strong earthquake ground motion during its lifetime. Several active or potentially active faults are known or postulated to exist within about 20 miles of the site.

3.7.2 Local Conditions

The Lewis Road widening project is located near the eastern extent of the Oxnard Plain. Three geologic environments are apparent in the project area: 1) alluvial materials associated with the formation of the Oxnard Plain, 2) older alluvial materials, and 3) bedrock of the Conejo Volcanics Formation. The general distribution of those materials is indicated on

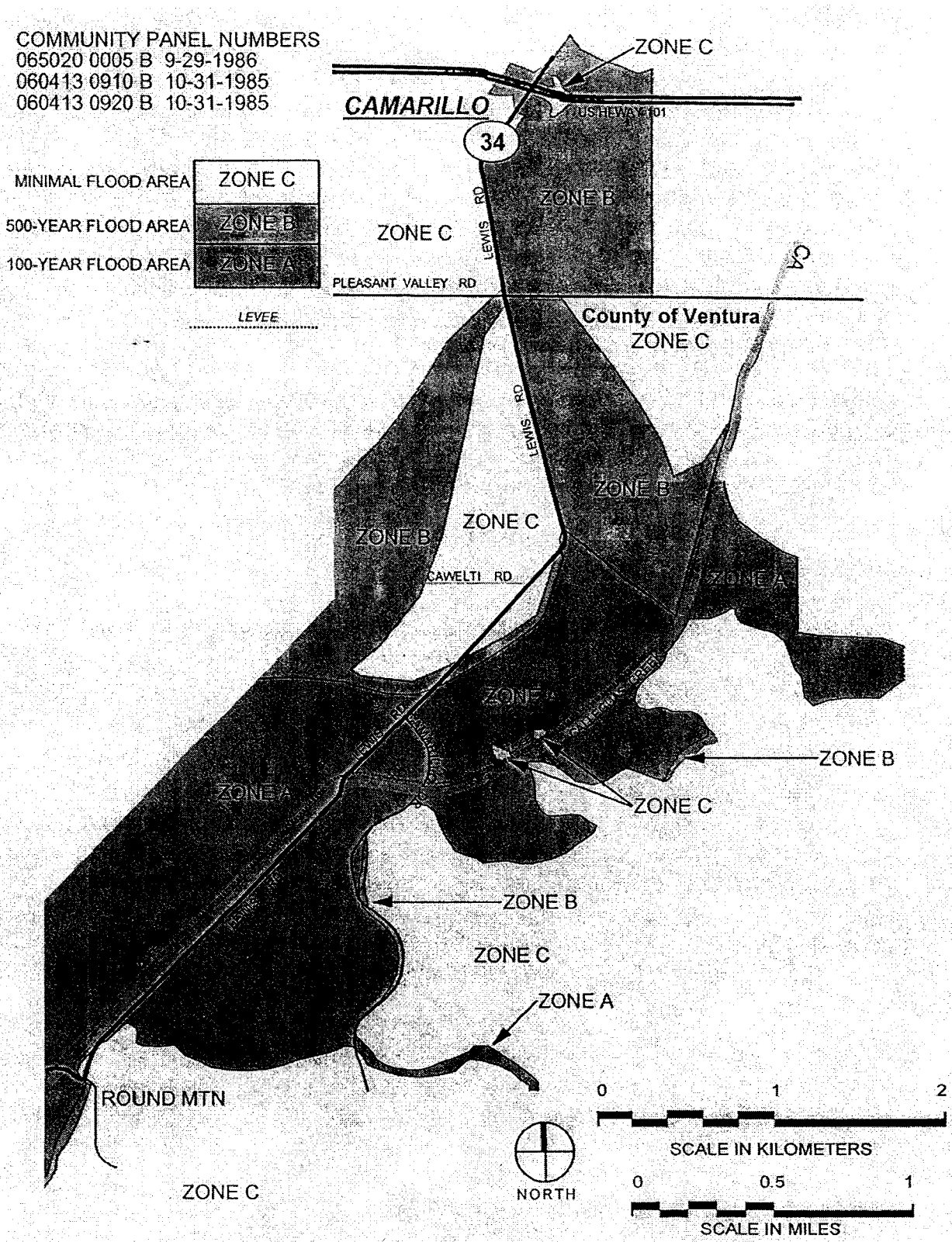


Figure 3.12 Flood Map

Figure 3.13, Regional Geologic Map. Artificial fill also is present in the study area in the form of earth materials placed as part of engineering works (e.g., bridge abutments and approaches, roads and highways, flood control embankments), and agricultural disturbances (e.g., drainage improvements and field cultivation and leveling). Calleguas Creek, which flows year-round, roughly parallels the southern portion of the alignment. Alluvial sediments cover the majority of the study area and consist of non-indurated mixtures of sand, silt, clay, and gravel. The alluvial sediments are located in the low-lying flat valley areas of the Oxnard Plain, and typically slope gently to the southwest at less than 1 percent.

Older alluvial sediments are present near the northern end of the proposed Lewis Road widening project in the vicinity of the Union Pacific Railroad (UPRR) overhead. The Older Alluvium has been described as moderately to well consolidated and often slightly cemented to locally well-cemented alluvial gravel, sand, and clay by Tinsley et al. (1985).

The Conejo Volcanics crop out in the hills east of Calleguas Creek and may also underlie the alluvial materials at various depths. The Conejo Volcanics in the area of the proposed road widening improvements consist of andesitic and basaltic flows and flow breccias. Those materials are moderately hard to hard, moderately fractured to non-fractured, and well indurated where fresh and unweathered.

a. Soil Conditions. The earth materials exposed at the ground surface in the vicinity of the proposed road widening improvements consist of artificial fill, alluvium, older alluvium, and bedrock of the Conejo Volcanics.

Review of existing subsurface data from the project vicinity suggests that the subsurface conditions may consist of interbedded alluvial sediments including soft to stiff clays and silts and loose to medium dense sand, silty sand, and clayey sand. Standard Penetration Test (SPT) blow counts are expected to be less than about 10 blows per foot in the upper 15 feet within the alluvial sediments along much of the alignment. Additionally, artificial fill material related to agricultural activities is anticipated to overlie the alluvial sediments along much of the road widening alignment.

Two existing bridge structures are present near the northern end of the road widening project, 1) the US 101 overcrossing over the UPRR, and 2) the Lewis Road overcrossing over the UPRR. Review of the Logs of Test Borings for those structures (Caltrans, 1972 and 1984) suggests that the subsurface materials in that vicinity may consist of medium dense to dense sand and silty sand interbedded with layers of soft clay and silt to depths of about 30 to 35 feet. Below about 30 to 35 feet, the logs indicate the presence of dense to very dense sand to depths of about 70 feet (the maximum depths explored). The logs of test borings are appended to the geology technical memorandum prepared by Fugro.

Review of information available in previous Materials Reports by Caltrans (1959 and 1969) indicate that the near surface soils in the vicinity of Lewis Road alignment between the Camarillo State Hospital and US 101 may consist of sand, silty sand, clayey sand, and lean clay. Reported relative compaction values ranged from 76 to 91 percent and reported R-values ranged from 14 to 78. Pertinent data from the materials reports have been appended to this technical memorandum.

Data available in the County of Ventura files was reviewed for the Lewis Road bridge over

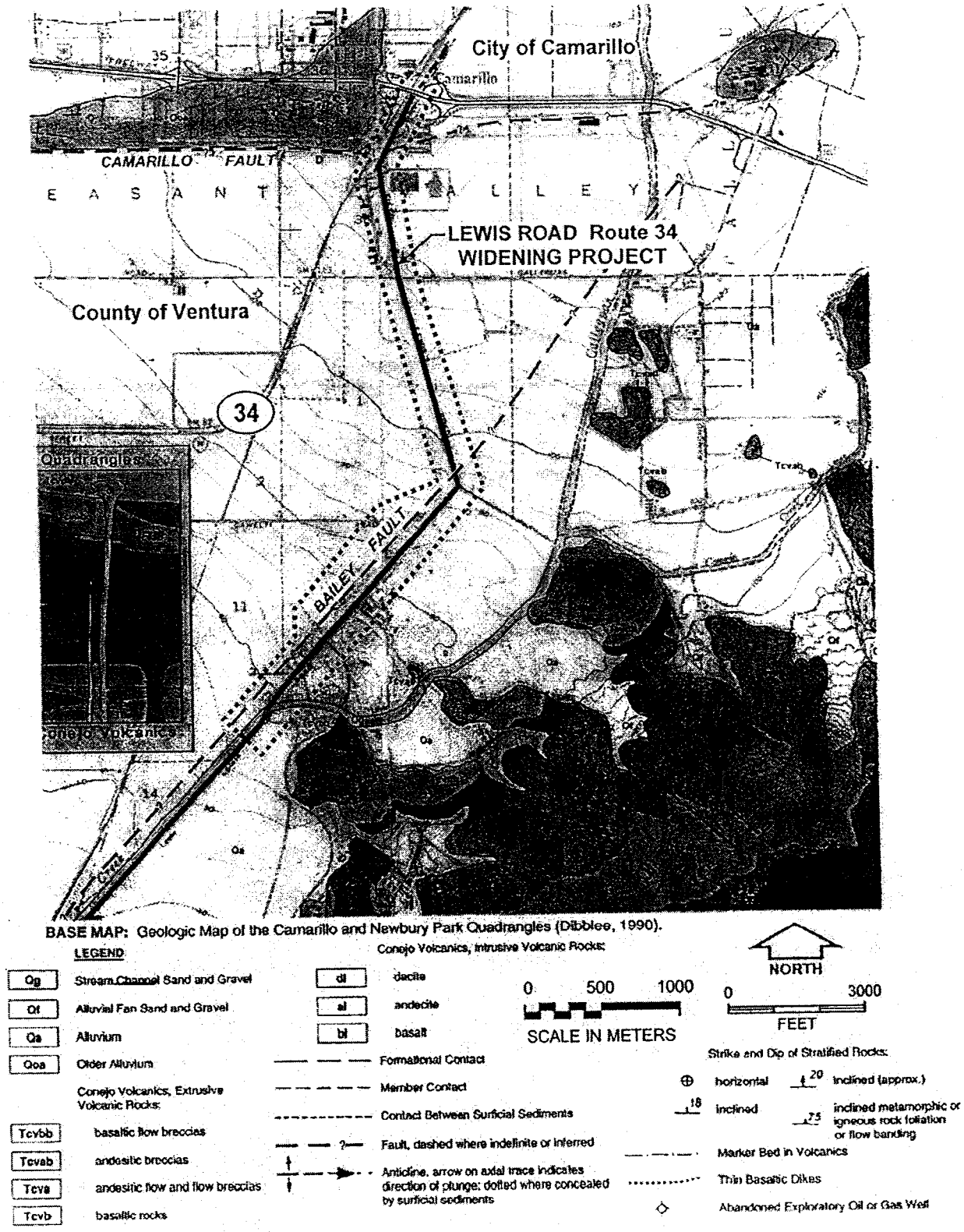


Figure 3.13 Regional Geologic Map

Calleguas Creek. The County files contained bridge design data but did not contain geologic and subsurface data for the bridge location.

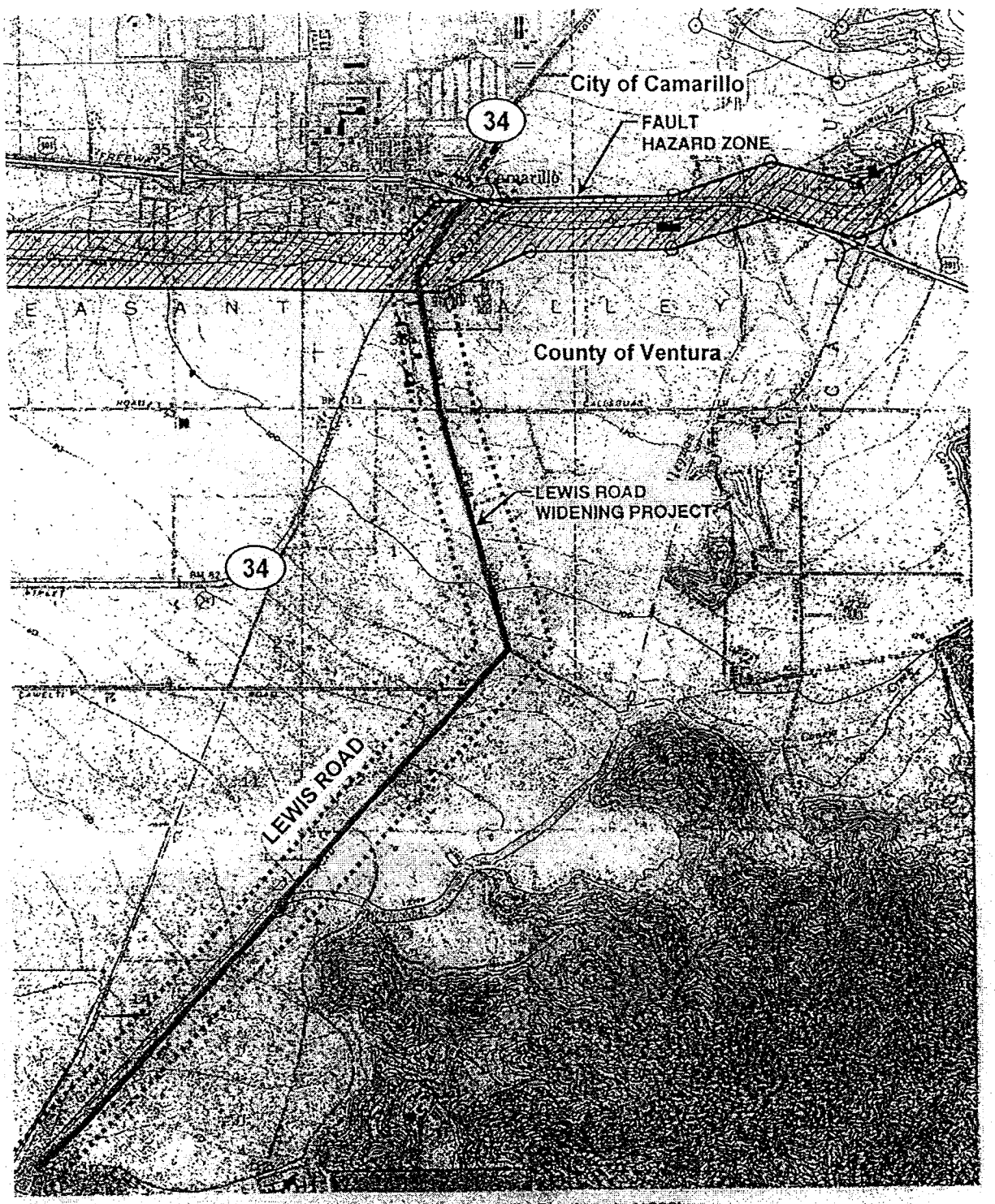
Shallow groundwater, possibly within about 20 feet or less of the ground surface, is anticipated to occur along much of the alignment. Perched groundwater may occur within bedrock fractures/discontinuities, above bedrock contacts, or above materials of low permeability (such as fine-grained silt and clay lenses). Further, both surface and groundwater levels may vary depending on proximity to Calleguas Creek, creek flow, seasonal precipitation levels, and/or irrigation practices.

b. Faults and Seismicity. The project site is located in the seismically active southern California area, and the project will most likely be subjected to strong earthquake ground motion during its lifetime. Several active or potentially active faults are known or postulated to exist within about 20 miles of the site, including the Camarillo, Simi-Santa Rosa, Santa Susana, Oakridge, San Cayetano, Bailey, and the Malibu Coast faults. The Camarillo fault, which is part of the active Simi-Santa Rosa fault system, crosses the northern end of the project alignment as indicated on Figure 3.13. The Camarillo fault is considered active and has been zoned under the Alquist-Priolo Special Studies Zone Act as indicated on Figure 3.14, State of California - Camarillo Fault Hazard Zone. In addition, the Bailey fault has been mapped as a northeast-trending fault subparalleling a majority of the project alignment (Weber et al., 1973) as indicated on Figure 3.13. Little is known about the Bailey fault except that it lacks geomorphic expression and acts as a groundwater aquitard in the Santa Rosa Valley. The Bailey fault is considered potentially active. No other active or potentially active faults as defined by the State of California, Division of Mines and Geology (CDMG) are known to traverse the Lewis Road project corridor.

Because the road alignment crosses the mapped trace of the Camarillo fault and inferred trace of the Bailey fault, the potential for fault rupture to affect the project is considered to be moderate to high.

c. Strong Ground Motion. Recent seismic hazard analyses by Caltrans (Mualchin, 1996) indicate that the site could experience a horizontal ground acceleration between about 0.5g to 0.6g. In comparison, recent seismic hazard analyses for the southern California area by the CDMG (1999), indicate that the Camarillo area could experience a horizontal ground acceleration in the range of 0.7g to 0.8g (10 percent probability of exceedance in 50 years). A reasonable design earthquake magnitude is between 6.5 and 7.5, based on Mualchin (1996).

d. Liquefaction. Liquefaction is the sudden loss in shear strength because of a rapid increase in soil pore water pressures resulting from cyclic loading during a seismic event. In order for liquefaction to occur, three general geotechnical characteristics must be present: 1) groundwater must be present within the potentially liquefiable zone; 2) the potentially liquefiable soil must be granular and the grain size distribution should fall within a relatively specific range; and 3) the potentially liquefiable soil must be of low relative density. If those criteria are met and strong ground motion occurs, then those soils may liquefy, depending upon the intensity and cyclic nature of the strong ground motion. Liquefaction that produces surface effects generally occurs in the upper 40 to 50 feet of the soil column, although the phenomenon can occur deeper than 100 feet.



BASE MAP: State of California Earthquake Fault Zones, Camarillo Quadrangle (1998).

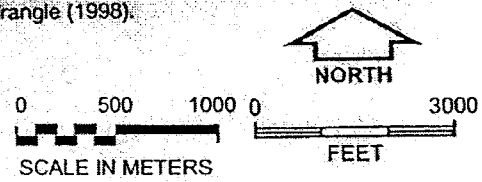


Figure 3.14 Alquist Priolo Fault Zone

In Simi Valley, there was a substantial amount of damage to both public infrastructure and residential structures adjacent to Arroyo Simi during the 1994 Northridge earthquake. A large portion of the damage was concentrated within a zone of up to several hundred feet wide centered along the axis of the old Arroyo Simi channel (Fugro, 1995). Further, a large percentage of the damage appears to have been related to liquefaction and lateral spreading of loose native soils and artificial fill placed to channelize the arroyo. Similar geologic conditions are thought to exist along portions of Calleguas Creek.

As mentioned previously, existing data from the project vicinity suggests that groundwater may occur within 20 feet or less of the ground surface along much of the project alignment and that low blowcount soils may exist within the upper 50 feet of the soil column. Review of Tinsley et al. (1985) indicates that the relative liquefaction susceptibility for the project area ranges from moderate to high.

e. Liquefaction-Related Settlement. Liquefaction-related settlement can occur when liquefied layers reconsolidate as excess pore pressures dissipate. Because liquefaction potential is considered to be moderate to high, the potential for liquefaction-related settlement is also considered to be moderate to high. From a cursory assessment it is possible that settlement on the order of a several inches or more could locally occur in the project area as a result of liquefaction.

f. Lateral Spreading. Lateral spreading is the phenomena where earth materials move laterally toward a free face or in the direction of sloping ground in response to strong ground shaking. Occurrence of lateral spreading is related to liquefaction and has been further linked to soils with low SPT blow counts. For the southern portion of the proposed road widening alignment within several hundred feet of Calleguas Creek, the potential for damage to occur as a result of lateral spreading is considered to be moderate to high, and lateral deflections of a few to several feet potentially could occur. The potential for lateral spreading to occur decreases with increasing distance from a free face or with decreasing ground slope. Therefore, the potential for lateral spreading to affect other portions of the road alignment is likely to be moderate to low.

g. Seismically-Induced Settlement. Seismically-induced settlement occurs in loose to medium dense soils or even weakly cemented, medium dense soils above the groundwater level that densify when subjected to cyclic shear strains from a seismic event. Seismically-induced settlement is considered to be moderate in the project area because of the anticipated presence of loose to medium dense granular soil above the groundwater. On a qualitative basis, the potential magnitude of seismically-induced settlement that could occur in the project area may likely be on the order of a couple inches or less.

h. Hydroconsolidation. Hydroconsolidation (collapse) can occur in soils above the groundwater that are loose to medium dense that undergo compression upon wetting. On the basis of the geologic environment and the anticipated soil conditions, we anticipate that the potential for hydroconsolidation to occur at the site is considered to be moderate to high. However, due to the anticipated presence of high groundwater, the thickness of the soil column that may be affected is limited.

i. Expansive Soils. Expansive soils can change volume upon the addition or subtraction of moisture. Due to the anticipated earth material types and source area, the potential for expansive soils to be present within the project site is considered to be moderate to high.

j. Landsliding/Slope Instability. No large-scale landslides have been mapped by the California Division of Mines and Geology (Weber et al., 1973) or Dibblee (1990) in the vicinity of the proposed roadway widening improvements. Therefore, damage to the roadway project as a result of landsliding is considered to be low. Southwest of the Calleguas Creek crossing, Lewis Road roughly parallels Calleguas Creek. The potential exists for local instabilities of the creek bank to affect the road alignment.

3.8 Hazardous Materials

This section presents the findings of an Initial Site Assessment (ISA) performed by Rincon Consultants, Inc. (January 1999) and follow-up limited soil investigations prepared by Weston (reports dated April 2000 and June 2000) for the proposed Lewis Road Widening Project with additional communications received September 2000. The purpose of the ISA was to provide an evaluation of the potential for soil and/or groundwater contamination to exist in the project area as a result of past or present land use activities. The purpose of the Weston investigation was to assess the extent of aerially-deposited lead contamination along the Caltrans and Ventura County segments of the proposed roadway and to assess a broader range of potential contaminants, including pesticides, herbicides, and petroleum hydrocarbons along the Ventura County segment of the proposed roadway. The investigation results were used to determine the proper handling and disposal of soil disturbed by grading activities associated with the proposed roadway widening and reconstruction. Also addressed were potential underground hazards such as oil wells and a natural gas pipeline, and the lead and chromium content in existing paint striping (Appendix J). These technical reports are hereby incorporated by reference and are available for review at the County of Ventura Public Works Agency Transportation Department located at 800 South Victoria Avenue, Ventura California. The following is a summary of these technical reports.

3.8.1 Background

As part of the Initial Site Assessment (ISA) the following work tasks were performed:

- A review of public records maintained by government and regulatory agencies to determine the reported presence of hazardous substances and contamination in the study area; and
- A site reconnaissance of the project area for obvious visual indications of hazardous substances or building materials (including asbestos containing material and lead-based paint) presence and/or contamination.

The following findings were made in the preparation of the ISA and therefore these issues are not discussed in more detail here.

- No Asbestos Containing Material (ACM) and lead based paint (LBP) were identified as associated with the Lewis Road Bridge over Calleguas Creek or the Union Pacific

Railroad Overhead along Lewis Road. No other structures would be demolished under the proposed project;

- Groundwater is anticipated to be located at a depth of 22-26.5 meters below the ground surface (bgs) in the Caltrans Segment and 8 meters bgs in the County Segment. As a result, no contaminated groundwater is expected to encountered during project construction; and
- Contaminated surface water is not known to be located within the project area. General water quality issues and impacts are discussed in detail in Sections 3.6 and 4.6, *Drainage and Hydrology.*

According to the ISA, there were eighteen properties identified along the Caltrans Segment of the project area that may involve use, storage, or past spillage of contaminated materials. Four properties were located on the eastern side of the street and fourteen on the western side of the street (Figure 3.15).

Along the County Segment of the project area, ten properties were identified that may involve use storage or past spillage of contaminated materials. Of these, five properties were located on the east side of the street and five on the west side of the street (Figure 3.15).

In addition to the above, existing and historic agricultural properties are located along the corridor (primarily along the County segment). Four abandoned oil wells and an underground natural gas pipeline were also identified in the immediate project vicinity. The pipeline is on varying sides of Lewis Road from Pleasant Valley Road to Hueneme Road. Discussions with Caltrans also identified the chromium and lead content in the existing thermoplastic paint striping as a potential hazard (Galvin, August 2000).

Due to the current and possible historic agricultural use of many properties along the project corridor, it was concluded that there is a potential that these properties could be affected with pesticides, or other chemicals used routinely in agricultural production.

Within the Caltrans right-of-way, oil sampling was performed by Weston along both the west and east side shoulders of Lewis Road between Ventura Boulevard and Pleasant Valley Road. A total of 61 soil samples were collected from 21 locations along the State segment of the alignment.

Within the County right-of-way, soil sampling was also conducted by Weston along both the west and east side shoulders of Lewis Road between Pleasant Valley Road and Hueneme Road. A total of 45 soil samples were collected by Weston from 23 locations along the County segment of the alignment. Within the County segment of the project corridor the majority of the samples were collected from the unpaved shoulders along the alignment. One sample was collected from sediments in the Calleguas Creek channel, and one was collected from the unlined portion of the drainage ditch on the east side of Lewis Road between Pleasant Valley Road and the prominent curve.

All samples were hand-delivered to American Analytics (AA), a California-certified analytical laboratory, located in Chatsworth, California for analysis. The following sections describe the field methodologies used to collect soil samples and present the results of the analyses.

One to three soil samples were collected at each location. Samples were collected at ground surface (extending to approximately 0.3 feet [9.1 cm]), one foot (30.5 cm), 1.5 feet (45.7 cm), and/or three feet (91.4 cm) below ground surface (bgs). The quantity of samples analyzed for given constituents is summarized as follows:

- 78 samples — Total lead by EPA Method 7420.
- 12 samples — Samples with total lead concentrations above 50 mg/kg were analyzed for the Soluble Threshold Limit Concentration (STLC) for lead, using the Waste Extraction Test (WET) extraction, per the California Code of Regulations Title 22 (22 CCR).
- 7 samples — Total recoverable petroleum hydrocarbons (TRPH) by EPA Method 418.1.
- 10 samples — Organochlorine pesticides by EPA Method 8081.
- 5 samples — Chlorinated herbicides by EPA Method 8151.

3.8.2 Caltrans Segment Sampling Results

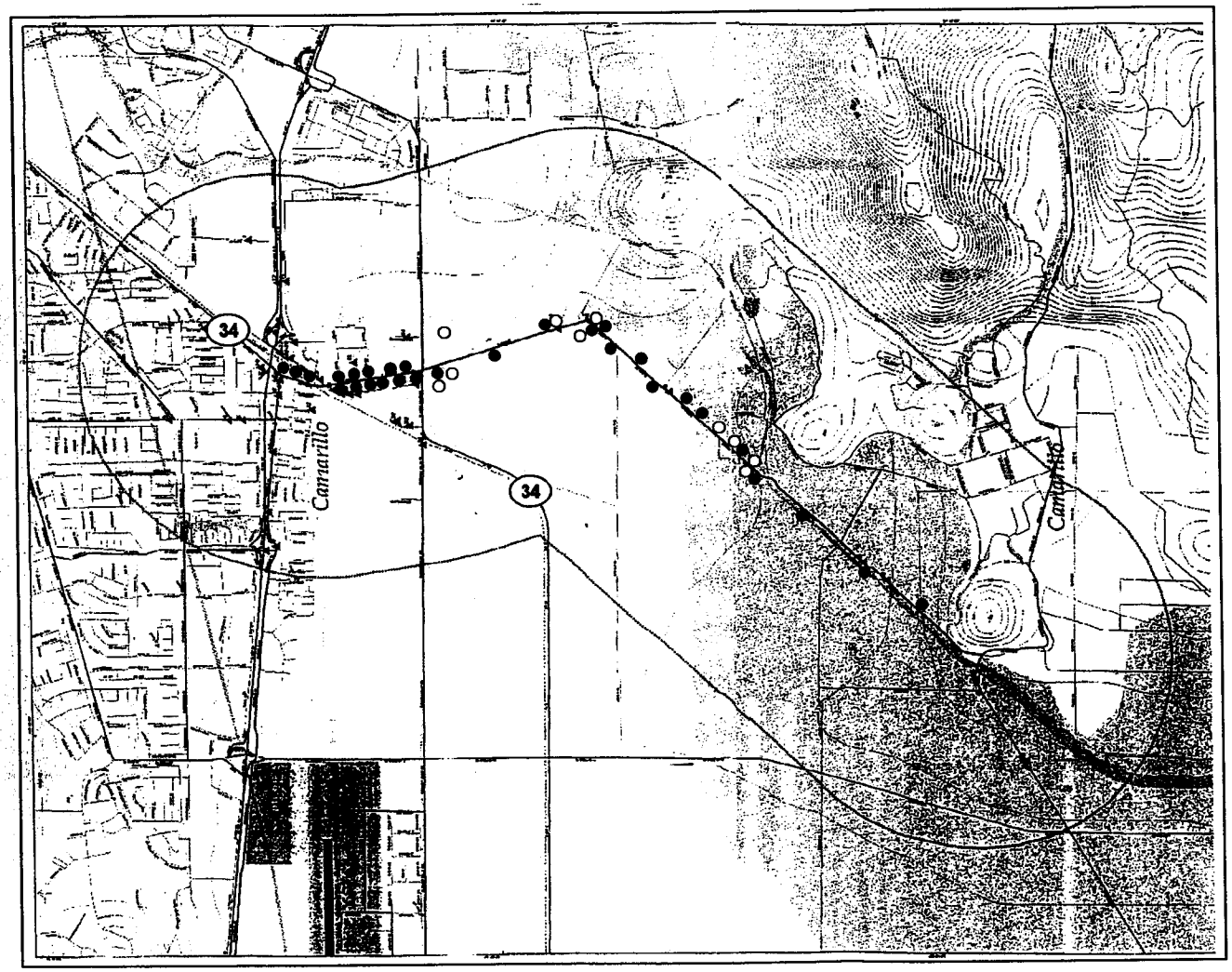
As shown in Table 3.9, none of the samples from the study area yielded total lead results exceeding the 22 CCR TTLC limit of 1,000 milligrams per kilogram (mg/kg) for classification of hazardous waste. However, results for six of the seven surficial samples and the two 1.5-foot samples analyzed for soluble lead using the standard WET extraction exceed the 22 CCR STLC limit value of 5 milligram/liter (mg/l) for alternate classification as hazardous waste.

3.8.3 County of Ventura Segment Sampling Results

Along the Ventura County Segment, total lead was detected in 29 of 32 samples analyzed. Detectable concentrations typically range from approximately 5 to 30 mg/kg. Three samples with total lead concentrations above 50 mg/kg (56 to 350 mg/kg) were subsequently analyzed for the soluble threshold limit concentration (STLC) of the lead. These three samples contained 0.42 to 2.6 mg/L of soluble lead. The lead concentrations found were all below potential hazardous waste threshold values. The results of the sampling for lead within the County segment are shown in Table 3.10.

Concentrations of TRPH detected in the samples analyzed were also uniformly low. TRPH was detected in five of seven samples to a maximum concentration of 49 mg/kg. The detections do not suggest impact from a considerable release, and may be attributable mainly to occurrence of organic matter or traces of asphalt material in the soil samples. Standards for acceptable TRPH concentrations in soil have not been established, but, according to Weston, the concentrations detected do not appear to pose any particular concern.

Based on the results of the shallow soil sampling conducted along the Ventura County Segment, Weston concluded that nine of the ten near surface soil samples yielded detectable concentrations of the pesticides 4,4'-DDD, 4,4'-DDE, and/or 4,4'-DDT (Table 3.11). Combined concentrations of these constituents ranged from 47 µg/kg to 2,080 µg/kg, with considerable differences in concentrations between samples. Two of the samples contained combined concentrations exceeding 1 mg/kg (1,000 µg/kg), the 22 CCR TTLC for regulation as hazardous waste. The combined concentrations of DDD, DDE, and DDT exceed the 22 CCR TTLC value of 1 mg/kg for potential classification as hazardous waste in two samples. These and the remaining chlorinated pesticide results suggest residual concentrations in soil remain from past applications of DDT as a pesticide. The definition for a release cited in 22 CCR specifically exempts the normal application of pesticides. Therefore, the contamination



KEY

- Listed Sites
- Earthquake Epicenters (Richter 5 or Greater)
- Study Area Boundary
- Roads
- Pipelines
- Powerlines
- Fault Lines
- Water
- Lead Sampling Locations (Weston 2000)
- Pesticide Sampling Locations (Weston 2000)
- Major Roads
- Waterways
- Railroads
- Contour Lines
- Superfund Sites
- 100-Yr Flood Zones
- Wetlands

0 1/4 1/2
SCALE IN MILES

NORTH

Sampling Locations and Potential Hazardous Waste Sites

Figure 3.

Table 3.9 Lead Analysis Results for the Caltrans Segment

Sample No.	Approx. Station No.	Total Lead (mg/kg)	STLC Lead, Citrate Solution Extraction (mg/L)	STLC Lead, Deionized Water Extraction (mg/L)
WEST SIDE:				
LCA-1-0.5	217+00	79	8.8	ND
LCA-1-1.5	217+00	100	9.0	ND
LCA-2-0.5	216+10	73	11	ND
LCA-2-1.5	216+10	ND	-------	-------
LCA-3-0.5	215+15	1.8	-------	-------
LCA-3-1.5	215+15	1.2	-------	-------
LCA-3-3	215+15	ND	-------	-------
LCA-4-0.5	213+40	15	-------	-------
LCA-4-1.5	213+40	1.4	-------	-------
LCA-5-0.5	212+35	28	-------	-------
LCA-5-1.5	212+35	5.0	-------	-------
LCA-6-0.5	210+85	440	22	ND
LCA-6-1.5	210+85	20	-------	-------
LCA-7-0.5	209+85	32	-------	-------
LCA-7-1.5	209+85	ND	-------	-------
LCA-7-3	209+85	ND	-------	-------
LCA-8-0.5	208+65	33	-------	-------
LCA-8-1.5	208+65	1.5	-------	-------
LCA-8-3	208+65	ND	-------	-------
LCA-9-0.5	207+60	22	-------	-------
LCA-10-0.5	206+40	16	-------	-------
LCA-10-1.5	206+40	19	-------	-------
LCA-10-3	206+40	3.5	-------	-------
EAST SIDE:				
LCA-11-0.5	205+90	38	-------	-------
LCA-11-1.5	205+90	5.1	-------	-------
LCA-12-0.5	206+95	56	2.6	-------
LCA-12-1.5	206+95	91	11	ND
LCA-12-3	206+95	1.0	-------	-------
LCA-13-0.5	208+05	11	-------	-------
LCA-13-1.5	208+05	11	-------	-------
LCA-13-3	208+05	13	-------	-------
LCA-14-0.5	209+15	4.9	-------	-------
LCA-15-0.5	210+35	130	14	ND
LCA-15-1.5	210+35	7.1	-------	-------
LCA-16-0.5	211+35	7.7	-------	-------
LCA-16-1.5	211+35	ND	-------	-------
LCA-17-0.5	212+30	330	29	0.2
LCA-17-1.5	212+30	14	-------	-------
LCA-17-3	212+30	14	-------	-------
LCA-18-0.5	213+45	21	-------	-------
LCA-18-1.5	213+45	5.1	-------	-------
LCA-19-0.5	215+50	11	-------	-------
LCA-19-1.5	215+50	26	-------	-------
LCA-20-0.5	216+40	86	12	ND
LCA-21-0.5	217+45	9.2	-------	-------
LCA-21-1.5	217+45	4.0	-------	-------

Source: Weston, 2000
Notes: ND = None Detected above Method Detection Limit (MDL)
——— = Not Analyzed
MDL for Total (TTLC) Lead = 1 mg/kg
MDL for STLC Lead using citrate extractant = 0.1 mg/L
MDL for STLC Lead using deionized water = 0.1 mg/L
Shaded results exceed CCR Title 22 STLC value of 5 mg/L for regulation as hazardous waste.

Table 3.10 Lead Analysis Results for the County Segment

Sample ID	Approximate Station Number	Total Lead (mg/kg)	STLC Lead, Citrate Extraction (mg/L)
WEST SIDE:			
LCO-1-0.5	184+30	19	-------
LCO-1-1.5	184+30	8.6	-------
LCO-3-0.5	170+80	11	-------
LCO-3-1.5	170+80	56	2.6
LCO-5-0.5	137+00	350	0.76
LCO-5-1.5	137+00	22	-------
LCO-6-0.5	128+00	11	-------
LCO-6-1.5	128+00	4.0	-------
LCO-7-0.5	117+00	24	-------
LCO-7-1.5	117+00	1.9	-------
LCO-11-0.5	72+80	1.9	-------
LCO-11-1.5	72+80	ND	-------
LCO-12-0.5	57+00	12	-------
LCO-12-1.5	57+00	ND	-------
LCO-13-0.5	43+80	13	-------
LCO-13-1.5	43+80	4.1	-------
EAST SIDE:			
LCO-14-0.5	8+50	14	-------
LCO-14-1.5	8+50	190	0.42
LCO-15-0.5	20+00	8.3	-------
LCO-15-1.5	20+00	1.1	-------
LCO-16-0.5	82+50	29	-------
LCO-16-1.5	82+50	7.2	-------
LCO-17-0.5	92+80	17	-------
LCO-17-1.5	92+80	21	-------
LCO-19-0.5	108+00	16	-------
LCO-19-1.5	108+00	1.5	-------
LCO-20-0.5	119+00	18	-------
LCO-20-1.5	119+00	3.5	-------
LCO-21-0.5	134+50	24	-------
LCO-21-1.5	134+50	7.3	-------
LCO-22-0.5	157+30	30	-------
LCO-22-1.5	157+30	ND	-------

Source: Weston, 2000
Notes: ND = None Detected above Method Detection Limit (MDL)
------- = Not Analyzed
MDL for Total (TTLC) Lead = 1 mg/kg
MDL for STLC Lead using citrate extractant = 0.1 mg/L

does not constitute a reportable release. However, the combined concentrations of DDD, DDE, and DDT exceed the 22 CCR TTLC of 1 mg/kg for possible regulation as hazardous waste in the two samples noted. According to the Duty Officer at the Department of Toxic Substances Control (DTSC), these two samples represent material that would be regulated as a hazardous waste once the soil is excavated.

According to Weston, it was not clear whether the two elevated results represent some mass of soil that would require segregated removal and management as hazardous waste, or if the elevated results are isolated occurrences. With the exception of the pesticide results, Weston did not identify any other adverse soil contamination along the Ventura County Segment of the alignment.

Table 3.11 Pesticide Analysis Results for the County Segment

Sample No.	Approx. Station Number	4,4'-DDD (ug/kg)	4,4'-DDE (ug/kg)	4,4'-DDT (ug/kg)	Total Concentration DDD+DDE+DDT (ug/kg)
WEST SIDE:					
LCO-1-1	184+30	ND	170	240	410
LCO-2-1	182+80	ND	310	900	1,210
LCO-4-1	139+50	ND	330	190	520
LCO-8-1	97+00	ND	28	63	91
LCO-10-1	75+00	ND	ND	ND	ND
EAST SIDE:					
LCO-16-1	82+50	22	18	24	64
LCO-17-1	92+80	11	24	12	47
LCO-18-1	99+00	ND	160	130	290
LCO-21-1	134+50	ND	1,200	880	2,080
LCO-23-0.5	157+30	ND	67	76	143

Source: Weston, 2000
Notes: ND = None Detected above Method Detection Limit (MDL)
MDL for DDT/DDE/DDD = 5 ug/kg where sample not diluted.
Shaded results exceed CCR Title 22 TTLC value of 1,000 ug/kg for regulation as hazardous waste.

3.9 Land Use

3.9.1 Regional Land Use

The project corridor is located within the County of Ventura at the western edge of the Santa Monica Mountains, within the broad, flat alluvial Oxnard Plain. The project corridor extends from the southeastern portion of the City of Camarillo that generally supports commercial and industrial uses, into unincorporated Ventura County to the south that is dominated by agricultural uses including the cultivation of strawberries, citrus, and other crops.

3.9.2 Project Corridor

The project would widen 5.75-km (3.57-mile) of Lewis Road from two to four lanes with associated shoulders, parkways, medians and bike lanes. Located between Ventura Boulevard in the City of Camarillo and Hueneme Road in unincorporated Ventura County, the proposed project is divided into two separates segments that are separated by the boundary of the City of Camarillo at Pleasant Valley Road. The Caltrans segment is found to the north and the Ventura County segment to the south. The existing setting is described in more detail in Chapter 2, *Project Description*

3.9.3 Adjacent Lands

Within the Caltrans segment, the project corridor is currently surrounded primarily by commercial and industrial uses, although one apartment building is adjacent to the corridor, just west of the Dawson Drive/Union Pacific Railroad (UPRR) overhead. Towards the southern terminus of this segment, the corridor transitions to more rural land uses. An organic farm is located to the northeast of the intersection of Lewis and Pleasant Valley Roads.

Within the Ventura County Segment, farmland is located along most of the length of the project corridor and is classified as either Prime or Statewide Importance. Agricultural land uses and definitions are further discussed in Sections 3.2 and 4.2, *Agriculture*. Scattered residences and agricultural related businesses are also located within this area. The California State University Channel Islands (CSUCI) is nestled among the foothills of the Santa Monica Mountains to the east of the corridor. Several waterways intersect the Lewis Road project area; Calleguas Creek flows along Lewis Road south of the Calleguas Creek/Lewis Road Bridge, and Long Grade Canyon Creek and an unnamed agricultural channel to the northwest of the Hueneme Road Bridge are located near the southern terminus of the site.

3.9.4 Regulatory Setting

The Caltrans segment of the proposed project is located within the City of Camarillo and is subject to its regulations. The Ventura County Segment, south of Pleasant Valley Road, is located within unincorporated Ventura County and is therefore subject to its regulations (Figure 3.16).

a. General Plan Designation and Zoning. Within the Caltrans segment, the areas within the project right-of-way have a City of Camarillo General Plan Land Use designation of "Industrial". Several zoning designations fall within this General Plan category. Areas along the western side of Lewis Road are zoned M-1, Industrial, and are used primarily for light industrial, commercial, office, and semi-public purposes. Areas along the northwestern portion of this segment are designated "Residential".

Within the Ventura County segment, the areas within the project right-of-way have a County of Ventura General Plan Land Use designation of "Agricultural " and are zoned, A-E, Agricultural Exclusive with a 40-acre minimum parcel size. The purpose of this zone is to preserve and protect commercial agricultural lands. The areas including and adjacent to the CSUCI campus are designated as "State/Federal Facility" an d are zoned O-S-160 Ac, Open Space with a 160 acre minimum lot size.

b. County Of Ventura and City Of Camarillo General Plan Goals and Policies. The goals and policies most relevant to land use issues for the proposed project are outlined below. Other goals, programs, and policies relating specifically to Aesthetics, Agriculture, and Traffic & Circulation are discussed in their relevant sections.

<u>County of Ventura</u>

- Goal 3.2.1.4(5). Restrict the introduction of conflicting uses into farming areas.

<u>City of Camarillo</u>

- Land Use Element – general visual improvements are promoted in industrial areas via the use of vegetation.

c. Land Conservation Act (LCA) (or Williamson Act) Contracts. As described in detail in Section 3.2, *Agriculture* , this act established a land contract procedure whereby a landowner could voluntarily enter a contract with the local governmental authority to maintain a property in an agricultural preserve in exchange for a reduction in property taxes. As a publicly-owned transportation route, the land within the current footprint of Lewis Road

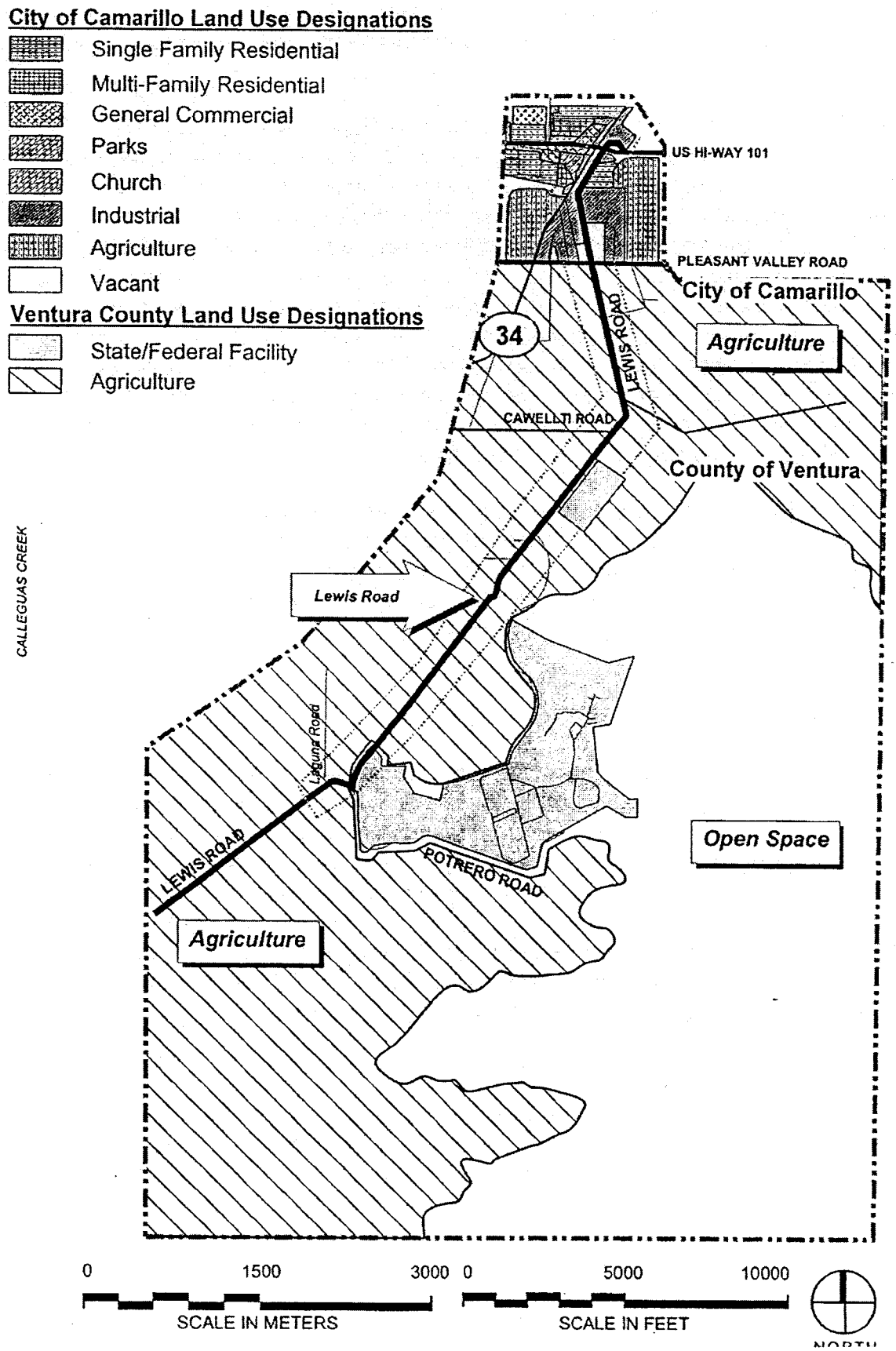


Figure 3.16 General Plan Designations

is not subject to an LCA contract. However, Lewis Road is adjacent to many parcels currently under LCA contract that would be affected by the various project alternatives. Over 90% of the agricultural parcels that could be affected by the proposed project are under LCA contract (Figure 3.4).

d. Camarillo/Oxnard Greenbelt Area. The County of Ventura and the cities of Oxnard and Camarillo have established a greenbelt agreement to preserve agricultural lands and open space between Oxnard and Camarillo. This agreement is intended to act as a community separator by having participants agree not to annex or develop greenbelt lands. The agreement is not legally binding, although the "Measure A Implementation Committee", comprised of Supervisors John Flynn and Frank Schillo, and staffed by the County Planning Division, is investigating elevating the Camarillo/Oxnard Greenbelt and other existing and proposed greenbelt agreements in Ventura County to the level of an ordinance. Under a greenbelt ordinance, any proposed development in a greenbelt area would undergo more rigorous public hearing and more extensive public noticing than changes under a greenbelt agreement. Areas of the project corridor south of Pleasant Valley Road fall within the Camarillo/Oxnard Green belt area (Figure 3.5, in Section 3.2, *Agriculture*).

e. Save Open Space and Agricultural Resources (SOAR) Ordinance. As discussed in detail in Section 3.2, *Agriculture*, the County of Ventura SOAR Ordinance was established through voter initiative in November 1998. As the project does not involve change of "Agricultural", "Open Space" or "Rural" land use designations as defined under the County of Ventura General Plan, SOAR would not apply.

3.10 Noise

A technical noise study has been prepared regarding the ambient sound environment of the project vicinity and the predicted future effects of the proposed project alternatives and the "No Project" alternative on noise levels (Rincon Consultants, July 2001). This study is herein incorporated by reference in its entirety per the *State CEQA Guidelines* Section 15150. In addition, the Ventura County Noise Element governs noise and associated land use issues in the unincorporated portions of Ventura County. That Element is also incorporated in its entirety per *State CEQA Guidelines* Section 15150. These documents may be reviewed at the Ventura County Public Works Agency, 800 S. Victoria Avenue, Ventura, California. The following is a summary of pertinent information from these documents.

3.10.1 Fundamentals of Sound

Noise level (or volume) is generally measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound power levels to be consistent with that of human hearing response, which is most sensitive to frequencies around 4,000 Hertz (about the highest note on a piano) and less sensitive to low frequencies (below 100 Hertz). In addition to the actual instantaneous measurement of sound levels, the duration of sound is important since sounds that occur over a long period of time are more likely to be an annoyance or cause direct physical damage or environmental stress. One of the most frequently used noise metrics that considers duration as well as sound power level is the equivalent noise level (Leq). The Leq is defined as the steady A-weighted level

that is equivalent to the same amount of energy as that contained in the actual time-varying levels over a period of time. Leq is typically summed over a one-hour period.

The sound pressure level is measured on a logarithmic scale with the 0 dB level based on the lowest detectable sound pressure level that people can perceive (an audible sound that is not zero sound pressure level). Decibels are measured on a logarithmic scale; therefore, a doubling of sound energy is equivalent to an increase of 3 dB. Because of the nature of the human ear, a sound must be about 10 dB greater than the reference sound to be judged as twice as loud. In general, a 3 dB change in community noise levels is noticeable, while 1-2 dB changes are generally not perceived.

The actual time period in which noise occurs is also important since noise that occurs at night tends to be more disturbing than that which occurs during the daytime. The Community Nose Equivalent Level (CNEL) recognizes this characteristic by weighting the hourly Leqs over a 24-hour period with the addition of 10 dB to nighttime noise levels to account for the greater amount of disturbance associated with noise at this time period. It also includes a 5 dB weighting for the evening hours (7:00 PM to 10:00 PM). The Day-Night Average Level (Ldn or DNL) is a similar noise index except that it does not include the evening weighting. The two indices are generally within 1 dBA.

3.10.2 Regulatory Setting

a. Federal. The proposed project has been identified as a "Type I" project under Title 23 of the Code of Federal Regulations (CFR), Section 772, as it involves a physical alteration of an existing highway that significantly changes the horizontal alignment and increases the number of through traffic lanes. As a result, specific methodology, standards, analyses, and noise abatement mitigation are required. These are included in the Traffic Noise Analysis Protocol [TNAP] (Caltrans, October 1998a), which has been used in the preparation of this EIR.

The Federal Highway Administration (FHWA) has established the following noise abatement criteria for various land uses based on their activities as shown in Table 3.12. These criteria apply to federally funded highway projects, and are in terms of both Equivalent Noise Level (Leq) and L_{10} (that sound level exceeded 10% of the time). Figure 3.17 shows the location of these land use categories within the project area.

Table 3.12 Noise Abatement Criteria/Federal Highway Administration

Category	Land Use	Leq, dBA
A	Tracts of land in which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its purpose, i.e. amphitheaters, parks and open spaces	57 (Exterior)
B	Picnic areas, recreation areas, playgrounds, active sports areas, parks, residences, motels, hotels, schools, churches, libraries, and hospitals.	67 (Exterior)
C	Developed lands, properties or activities not included in Categories A or B above	72 (Exterior)
D	Undeveloped Lands	---
E	Residences, motels, hotels, public meeting rooms, schools, churches, libraries, hospitals and auditoriums	52 (Interior)

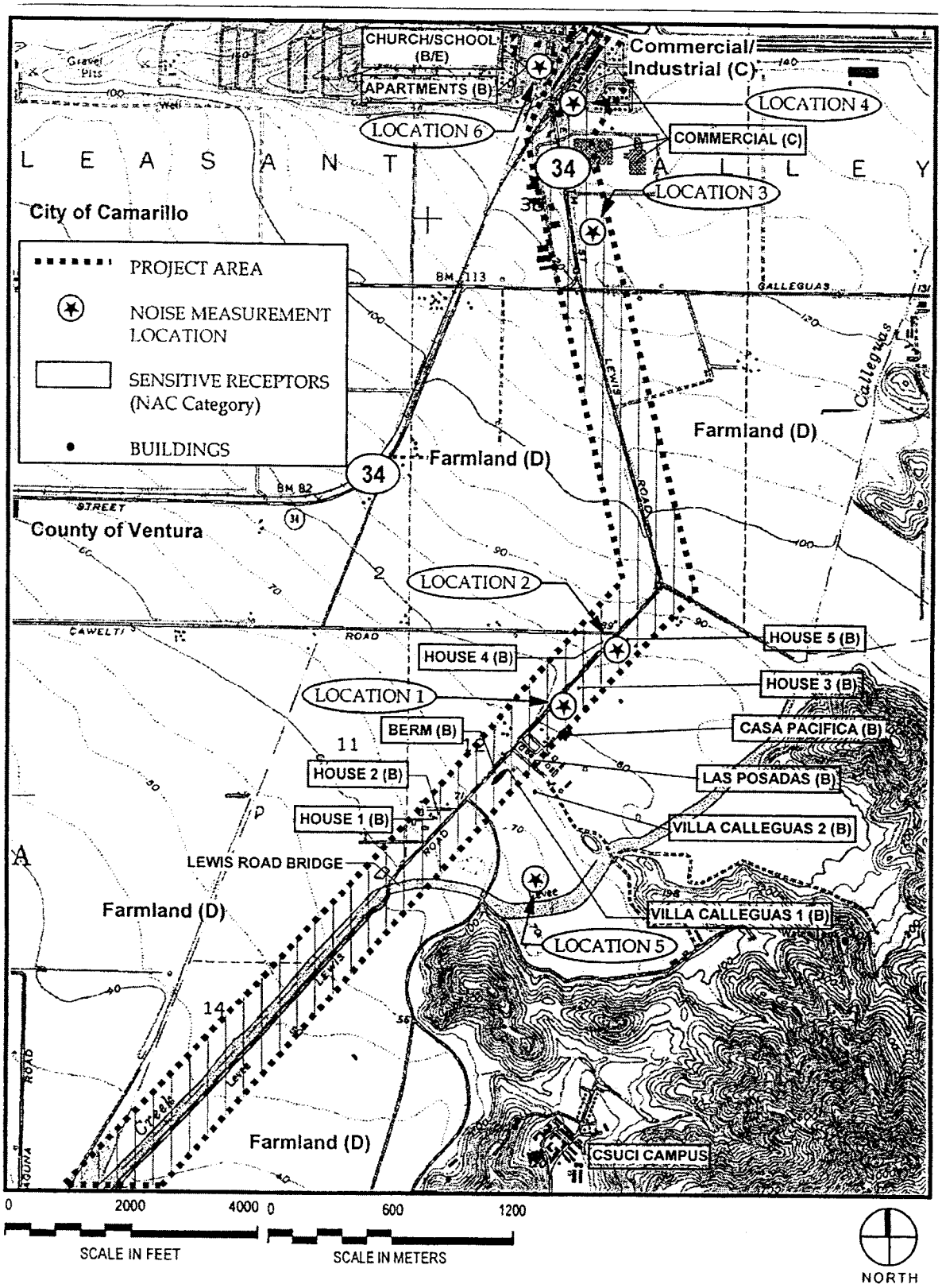


Figure 3.17 Locations of Noise Receptors

In addition, according to Chapter 1100, Highway Traffic Noise Abatement, of the Caltrans Highway Design Manual, traffic noise impacts occur and mitigation should be provided when the predicted traffic noise levels approach or exceed the noise abatement criteria.

b. State. The Traffic Noise Analysis Protocol (TNAP, Caltrans, October 1998a) establishes Caltrans noise policies intended to meet CEQA, NEPA, 23CRF772, and Section 216 et. seq. of the California Streets and Highway Code noise analysis and abatement/mitigation requirements. Caltrans uses the same FHWA criteria (referred to as NAC) in determining the potential for noise impacts.

c. Local. The Ventura County General Plan Goals, Policies and Programs document governs noise and associated land use issues in the unincorporated portions of the county. It does this by establishing policies regarding the location of noise sensitive uses near noise sources and the location of noise generating uses near to noise sensitive uses.

The following policies contained within the County's General Plan Policy Document would normally apply to proposed projects.

> Policy 2.16.2-1(4). Noise generators, proposed to be located near any noise sensitive use, shall incorporate noise control measures so that outdoor noise levels received by the noise sensitive receptor, measured at the exterior wall of the building, does not exceed any of the following standards:
>
> a. Leq1H of 55 dB(A) or ambient noise level plus 3 dB(A), whichever is greater, during any hour from 6:00 a.m. to 7:00 p.m.
> b. Leq1H of 50 dB(A) or ambient noise level plus 3 dB(A), whichever is greater, during any hour from 7:00 p.m. to 10:00 p.m.
> c. Leq1H of 45 dB(A) or ambient noise level plus 3 dB(A), whichever is greater, during any hour from 10:00 p.m. to 6:00 a.m.

Section 2.16.2-1(4) is specifically not applicable to increased traffic noise along any of the roads identified within the 2010 Regional Roadway Network (Figure 1.2.3) Public Facilities Appendix of the Ventura County General Plan. Lewis Road is identified as part of the 2010 Regional Roadway Network in that document. In addition, State and Federal highways, all railroad operations, aircraft in flight, and public utility facilities are noise generators having Federal and State regulations that preempt local regulations. While Policy 2.16.2-1(4) does not directly apply, it is reported within this document for comparison purposes with other County environmental documents. Policy 2.16.2-2 below would still apply to the construction phase of the project.

> Policy 2.16.2-2. Discretionary development which would be impacted by noise or generate noise which cannot be reduced to meet the standards prescribed in Policy 2.16.2-1, shall be prohibited. This policy does not apply to noise generated during the construction phase of a project if overriding considerations are adopted by the decision-making body.

The Caltrans portion of the Lewis Road corridor is located within the City of Camarillo. While the City is not a responsible agency and has no permit authority over the project, noise from the project would affect residences and land uses located within City jurisdiction.

Therefore, this noise section also addresses noise impacts with regard to City criteria. The City of Camarillo has adopted several noise policies within the City's Noise Element (1996), which establish acceptable interior, and exterior noise standards for transportation related noise. The residential standard is 45 dBA Ldn (Day Night Average Level) for interior noise levels and 60 dBA Ldn for exterior noise levels. The Ldn scale of noise measurement is similar to the CNEL noise scale. In addition, the City of Camarillo Noise Ordinance (§ 10.34.010 to 10.34.050) contains standards for allowable noise levels from construction related activities. The established daytime exterior noise level for residential uses is 55 dBA Leq. The Noise Ordinance also regulates construction-related noise either within or adjacent to a residential zone through the restriction of the operation of a variety of industrial or construction-related tools and devices before 7:00 AM and after 7:00 PM and on Sunday or any public holiday.

3.10.3 Noise Sensitive Receptors

Noise exposure goals for various types of land uses reflect the varying noise sensitivities associated with those uses. Residences, hospitals, schools, guest lodging, and libraries are most sensitive to noise intrusion and therefore have more stringent noise exposure targets than manufacturing or agricultural uses that are not subject to impacts such as sleep disturbance. As shown in Figure 3.17, land uses near the Caltrans portion of the project are primarily commercial and light industrial in nature. At the intersection of Ventura Boulevard and Lewis Road are two commercial centers (northwest and southwest corners). The large Imation complex (300 S. Lewis Road) lies on the east side of the road, while 15 industrial lots are located on Dawson Drive (294-578 Dawson Drive) that back on the west side of Lewis Road. These areas consist primarily of buildings and parking lots and are not areas of frequent human activity. The vacant land to the east of Lewis Road is also designated for light industrial uses.

Particular noise sensitive uses are the apartment complex (Park Glen Apartments on Holly Street) and the adjacent church and school complex (St. Mary Magdalen, church at 2530-2534 Ventura Boulevard; school at 1999 Chapel Drive) located west of the northern [Caltrans] portion of the project corridor. Approximately 30 first and second story apartments are oriented such that they have views of Lewis Drive.

Land uses in the immediate vicinity of the County portion of the project are agricultural in nature and consist primarily of cultivated farmland. Noise sensitive receptors along this portion of the corridor include two farm residences (1957 and 1931 Lewis Road) just south of University Drive, the Villa Calleguas Apartments for disabled persons, the Association for Retarded Citizens Las Posadas Mental Health Care Facility, Casa Pacifica Crisis Care Center south of Cawelti Road, a farm residence adjacent to Casa Pacifica (1728/1730 Lewis Road), two farm residences north of Cawelti Road (1354 and 1444 Lewis Road), and a farm residence at the southwest corner of Cawelti and Lewis (2710 Calwelti Road). It is noted that the 1354 Lewis Road residence is set back from Lewis Road by about 500 feet.

The Villa Calleguas apartments are a recent development near the road that is shielded from traffic noise by a variable height earthen berm. The locations of these sensitive receptors and the land uses in the area are shown in Figure 3.17. The California State University Channel Islands (CSUCI) is also a potential noise sensitive use, however, it is more than 3,400 feet from Lewis Road and traffic noise from Lewis Road is only a minor background sound on

campus. The continued development of the CSUCI campus that would occur prior to development of the proposed project is not anticipated to expose additional sensitive receptors to adverse noise levels associated with the widening of Lewis Road.

3.10.4 Existing Noise Conditions and Sources

a. Noise Sources. Motor vehicles are the most common source of noise in the project vicinity. This source of noise is of concern because it is characterized by a high number of individual events, which often create a sustained noise level, and the proximity of roads to areas sensitive to noise exposure. The Union Pacific railroad line is a significant noise source along the Caltrans segment, particularly for the Park Glen apartments that front towards the railroad tracks (see Figure 3.17). U.S. Highway 101 located to the north of the Caltrans segment is also a major source of traffic noise in this vicinity, while traffic along Ventura Boulevard is a secondary source. Localized noise sources in the vicinity of the Caltrans segment are stationary source noises associated with the light industrial activities.

Lewis Road is the primary traffic noise source for the Ventura County segment, with Pleasant Valley Road also a secondary traffic noise source at its intersection with Lewis Road. Cawelti Road and University Drive have low traffic volumes and are minor traffic noise sources. The Lewis Road corridor south of Pleasant Valley Road is within the 60 CNEL contour of the Point Mugu Naval Air Station, which is a major source of noise for the vicinity (US Navy, March 1998). Other localized noise sources in the area are associated with the operation of farm machinery.

b. Field Noise Measurements. Noise measurements in the project vicinity adjacent to Lewis Road at the nearby sensitive uses were taken in September 2000 following the Caltrans protocol (Section N-5300, *Technical Noise Supplement*, California Department of Transportation, October 1998b). As shown in Table 3.13 and Figure 3.17, ambient noise measurements were taken along the entire corridor for areas of existing or planned development. No measurements were taken for the areas of undeveloped farmland south of Pleasant Valley Road and south of the Lewis Road Bridge as they are not areas of frequent human activity.

Table 3.13 Existing Ambient Noise Levels (dBA)**

Location	Date	Primary Noise Source	Distance From Source	Leq*	L_{10}	L_{50}
1	9/8/00	Lewis Road	15 m (50 ft) from edge	65	69	62
2	9/8/00	Lewis Road	15 m (50 ft) from edge	66	70	62
3	9/13/00	Lewis Road	15 m (50 ft) from edge	64	67	62
4	9/12/00	Lewis Road	15 m (50 ft) from edge	62	65	61
5	9/13/00	General Community Noise	630 m (2,060 ft) from Lewis Rd.	56	58	49
6a (interior)	4/5/01	Lewis Road	43 m (140 ft) from edge	51	54	50
6b (exterior)	4/5/01	Lewis Road	34 m (110 ft) from edge	63	66	61

** Average of two measurements per protocol rounded to nearest dB, except for Location 6.*
***All locations measure community background noise.*

Sound measurements were taken at locations that were determined to be acoustically equivalent for the sensitive receptors of concern. Noise measurements at the sensitive uses were taken during the evening peak hour (3:00 PM – 6:00 PM) when noise levels from this source are greatest during the day. The Leq and the statistical sound level (L_n, indicating that

sound level exceeded n% of the time) for each location are presented in Table 3.13. Additional measurement details are contained in Appendix H and in the Technical Noise Study. It is noted that the noise measurements at the St. Mary Magdalene school site (Location 6) included sound generated by children playing on the playground in addition to traffic noise from Lewis Road. It should be noted that the field measurements did not include either train pass-bys (Locations 4 and 6) or significant Navy jet traffic (Locations 1 and 2), which are substantial noise sources in the area.

These noise measurements indicate that sound levels at the apartments and adjacent school/church complex (Locations 4 and 6, Caltrans portion of corridor) do not currently exceed the NAC "B" or "E" criteria for exterior and interior noise at residential and school sites, respectively. Noise levels associated with Lewis Road also do not exceed the NAC "C" criteria at Location 3, which is proposed for and adjacent to commercial and light industrial uses.

Using the general observation that a peak hour Leq is roughly equivalent to a daily Ldn and based on the City of Camarillo's 60 dBA Ldn exterior residential guideline, the Glen Park apartments next to the Caltrans portion of the project are already exposed to highway traffic noise levels that exceed the City's guideline by 2 to 3 dBA. This noise level does not account for the additional noise effect of the railroad line, which for those apartments that face both the railroad line and Lewis Road would be expected to add another 2-3 dB or more to the Ldn.

Current noise levels near the residences in the County portion of the corridor currently do not exceed, the NAC "B" criteria. However, the levels at Location 2 (acoustically equivalent to the residences at 1444 Lewis Road and 2710 Calwelti Road) approach (are within 1 dBA) the NAC "B" criterion.

c. Predicted Existing Noise Levels. Noise levels associated with existing traffic along Lewis Road were also calculated using the SOUND32 model (Caltrans, 1989) per the protocol in the *Technical Noise Supplement*. The noise model was checked for calibration based on traffic counts taken at the time of the noise measurements. The noise calculations used the existing average daily traffic volumes (ADT) on the road segments as discussed in the traffic study conducted for the proposed project. It is noted that the counts taken during the noise measurements indicate that traffic volumes are slightly greater south of Pleasant Valley Road and slightly less north of Pleasant Valley Road than that indicated in the traffic study. Truck volumes used in the calculations were based on the count data taken during the measurements. The calculated average daily noise levels at each of the sensitive receptors along the roadway are shown in Tables 3.14 and 3.15. The locations of these receptors are shown on Figure 3.17.

The noise levels shown in Table 3.14 indicate that the exterior areas of the buildings along the analyzed roadway segments are not exposed to noise levels that exceed the NAC along the Caltrans portion of the project. This portion of the project also lies within the City of Camarillo, and, as discussed above, the 63 – 65 dBA peak hour Leq calculated for the apartments is approximately equivalent to an Ldn, and this level exceeds the City's guideline for residential uses.

The commercial and light industrial areas in the Caltrans segment are not locations of frequent human activity, and these locations generate their own noise internally as a result of their operations. Nonetheless, a location within the current agricultural area northeast of the intersection of Pleasant Valley Road and Lewis Road was modeled to illustrate the general levels that would be experienced in this area. As indicated in Table 3.14, existing levels do not exceed the NAC Category "E" of 72 dBA Leq for general developed land.

The noise levels shown in Table 3.15 indicate that the exterior areas of the buildings along the County portion of the project are not currently exposed to noise levels that exceed the NAC Category "B" except for House 4 (2710 Calwelti Road). Existing highway noise also approaches or is greater than the County's base Leq 1H level of 55 dBA under Policy 2.16.2-1(4) at all locations.

Table 3.14 Calculated Existing Roadway Noise Levels Along the Caltrans Segment

Receptor	Nearest Measurement Location	Peak Hour Leq (dBA)[a]	Approach or Exceed NAC? (Category, dBA)	Exceed City Criteria? 60 Ldn
Glen Park Apartment 1st Floor	4	60	No (B, 67)	Yes
Glen Park Apartment 2nd Floor	4	65	No (B, 67)	Yes
School/Church Playground	6b	57	No (B, 67)	N/A
School Interior	6a	46 [b]	No (E, 52)	N/A
Commercial	3	62	No (C, 72)	N/A

[a] *At exterior of structures*
[b] *Calculated noise level of 56 dB reduced by minimum of 10 dB based on interior and exterior noise measurements taken on 4/5/01 with doors and windows open.*
Source: Traffic data from Associated Transportation Engineers, July 2000
See Appendix H for calculations

Table 3.15 Calculated Existing Roadway Noise Levels Along the County Segment

Sensitive Receptor	Nearest Measurement Location	Peak Hour Leq (dBA)[a]	Approach or Exceed NAC? (Category, dBA)
House 1 (1957 Lewis Rd)	1	62	No (B, 67)
House 2 (1931 Lewis Rd)	1	61	No (B, 67)
Villa Calleguas 1	1	55	No (B, 67)
Villa Calleguas 2	1	48	No (B, 67)
Las Posadas	1	54	No (B, 67)
Casa Pacifica	1	55	No (B, 67)
House 3 (1728/1730 Lewis Rd)	1	62	No (B, 67)
House 4 (2710 Calwelti Rd)	2	68	Yes (B, 67)
House 5 (1444 Lewis Rd)	2	60	No (B, 67)

[a] *At exterior of structures*
Source: Traffic data from Associated Transportation Engineers, July 2000
See Appendix H for calculations

3.11 Pedestrian and Bicycle Facilities

As discussed in Chapter 1, *Purpose and Need*, promotion of alternative forms of transportation by provision of bicycle lanes along Lewis Road would reduce traffic impacts resulting from cumulative growth in the area, which includes development of the adjacent California State University Channel Islands campus.

Chapter 4 Environmental Effects and Mitigation Measures

This section addresses the environmental effects of the project and mitigation measures that are required to reduce those impacts identified. Table 4.1 is a checklist that summarizes physical, biological, social and economic factors that might be impacted by the proposed project. In many cases, the background studies performed in connection with this project clearly indicate that elements of the project that have a substantial negative effect can be mitigated to reduce the effects on a particular issue to less than significant levels. The following sections document this determination for both the "yes" and "no" responses indicated in Table 4.1 for each of the alternative alignments considered. Based on the analysis that follows, the project would not result in any unavoidable significant impacts that cannot be mitigated to below federal impact threshold criteria. Therefore, the following analysis will be used as the basis for making a Finding of No Significant Impact (FONSI) under the National Environmental Policy Act (NEPA). It is also noted that the project would involve an exceedance of Ventura County impact threshold criteria for the conversion of agricultural land and temporary construction noise. These impacts are classified as an unavoidable significant impact under the California Environmental Quality Act (CEQA). This determination will require that a Statement of Overriding Considerations and other required findings be made under CEQA as part of project approval.

The assessment of each issue area begins with a summary of the environmental effects for that issue area. It is followed by the impact analysis for both construction and operational effects. Within the impact analysis, the first two subsections identifies the methodologies used and the "impact thresholds", which are those criteria adopted by the County and/or other agencies that are universally recognized, or developed specifically for this analysis to determine whether potential effects are adverse and/or significant. The next subsection describes each impact of the proposed project, mitigation measures for identified impacts, and the level of impact after mitigation. Each impact under consideration for an issue area is separately listed in bold text, with the discussion of the effect and its impact following mitigation. Each bold statement also contains a statement of the level of impact under CEQA determination for the environmental effect, as follows:

Adverse and Unavoidable (or Significant and Unavoidable under CEQA) (U): An impact that cannot be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires a Statement of Overriding Considerations to be issued if the project is approved per §15093 of the State CEQA Guidelines.

Mitigate Impacts to a Level of Non-significance (Less Than Significant With Mitigation under CEQA) (M): An impact that can be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires findings to be made under §15091 of the State CEQA Guidelines.

No Impact (Less than Significant under CEQA) (L): An impact that may be significant, but does not exceed the threshold levels and does not require mitigation measures.

Beneficial (B): An effect that would reduce existing environmental problems or hazards.

Following each environmental impact discussion is a listing of recommended mitigation measures (if required). Each mitigation measure is numbered according to the associated impact. Following the mitigation measures is a discussion of residual effects remaining after the implementation of the measures. In those cases where the mitigation measure for an impact could have a significant environmental impact in another issue area, this impact is discussed as a residual effect. The impact analysis concludes with a discussion of cumulative effects, which evaluates the impacts associated with the proposed project in conjunction with other future development in the area.

Table 4.1 Environmental Impact Checklist

	Impact Questions	Yes or No	If yes after mitigation, is the impact significant under NEPA/CEQA)?
PHYSICAL. Will the proposal (either directly or indirectly):			
1.	Appreciably change the topography or ground surface relief features?	No	
2.	Destroy, cover, or modify any unique geologic, paleontologic, or physical features?	No	
3.	Result in the loss of availability of a known mineral resource or locally important mineral resource recovery site that would be of value to the region and the residents of the state?	No	
4.	Result in unstable earth surfaces or increase the exposure of people or property to geologic or seismic hazards?	No	
5.	Result in or be affected by soil erosion or siltation (whether by water or wind)?	No	
6.	Result in the increased use of fuel or energy in large amounts or in a wasteful manner?	No	
7.	Result in an increase in the rate of use of any natural resource?	No	
8.	Result in the substantial depletion of any nonrenewable resource?	No	
9.	Violate any published Federal, State, or local standards pertaining to hazardous waste, solid waste or litter control?	Yes	No/No
10.	Modify the channel of a river or stream or the bed of the ocean or any inlet or lake?	Yes	No/No
11.	Encroach upon a floodplain or result in or be affected by floodwaters or tidal waves?	Yes	No/No
12.	Adversely affect the quantity or quality of surface water, groundwater, or public water supply?	Yes	No/No
13.	Result in the use of water in large amounts or in a wasteful manner?	No	
14.	Affect wetlands or riparian vegetation?	Yes	No/No
15.	Violate or be inconsistent with Federal, State, or local water quality standards?	No	
16.	Result in changes in air movement, moisture, or temperature, or any climatic conditions?	No	
17.	Result in an increase in air pollutant emissions, adverse effects on or deterioration of ambient air quality?	Yes	No/No
18.	Result in the creation of objectionable odors?	No	
19.	Violate or be inconsistent with Federal, State, or local air standards or control plans?	No	
20.	Result in an increase in noise levels or vibration for adjoining areas?	Yes	No/No
21.	Result in any Federal, State, or local noise criteria being equal or exceeded?	Yes	No/No
22.	Produce new light, glare, or shadows?	No	

	Impact Questions	Yes or No	If yes after mitigation, is the impact significant under NEPA/CEQA)?
BIOLOGICAL. Will the proposal (either directly or indirectly):			
23.	Change in the diversity of species or number of any species of plants (including trees, shrubs, grass, microflora, and aquatic plants)?	No	
24.	Reduction of the numbers of or encroachment upon the critical habitat of any unique, threatened or endangered species of plants?	Yes	No/No
25.	Introduction of new species of plants into an area, or result in a barrier to the normal replenishment of existing species?	No	
26.	Reduction in acreage of any agricultural crop or commercial timber stand, or affect prime, unique, or other farmland of State or local importance?	Yes	No/Yes (Significant and Unavoidable Based on Local Ventura County Thresholds)
27.	Removal or deterioration of existing fish or wildlife habitat?	Yes	No/No
28.	Change in the diversity of species, or numbers of any species of animals (birds, land animals including reptiles, fish and shellfish, benthic organisms, insects or microfauna)?	No	
29.	Reduction of the numbers of or encroachment upon the critical habitat of any unique, threatened or endangered species of animals?	Yes	No/No
30.	Conflict with any applicable habitat conservation plan, natural community conservation plan or other approved local, regional, or state habitat plan?	No	
31.	Introduction of new species of animals into an area, or result in a barrier to the migration or movement of animals?	Yes	No/No
SOCIAL AND ECONOMIC. Will the Proposal (directly or indirectly):			
32.	Cause disruption of orderly planned development?	No	
33.	Be inconsistent with any elements of adopted community plans, policies or goals?	No	
34.	Be inconsistent with a Coastal Zone Management Plan?	No	
35.	Affect the location, distribution, density, or growth rate of the human population of an area?	No	
36.	Affect life-styles, or neighborhood character or stability?	No	
37.	Affect minority, elderly, handicapped, transit-dependent, or other specific interest groups?	No	
38.	Divide or disrupt an established community?	No	
39.	Affect existing housing, require the acquisition of residential improvements or the displacement of people or create a demand for additional housing?	No	
40.	Affect employment, industry or commerce, or require the displacement of businesses or farms?	No	
41.	Affect property values or the local tax base?	No	
42.	Affect any community facilities (including medical, educational, scientific, recreational, or religious institutions, ceremonial sites or sacred shrines)?	No	
43.	Affect public utilities, or police, fire, emergency or other public services?	Yes	No/No
44.	Have substantial impact on existing transportation systems or alter present patterns of circulation or movement of people and/or goods?	No	
45.	Generate additional traffic?	No	
46.	Affect or be affected by existing parking facilities or result in demand for new parking?	No	
47.	Expose people or structure to significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	No	

	Impact Questions	Yes or No	If yes after mitigation, is the impact significant under NEPA/CEQA)?
48.	Involve a substantial risk of an explosion or the release of hazardous substances in the event of an accident or otherwise adversely affect overall public safety?	No	
49.	Result in alterations to waterborne, rail or air traffic?	No	
50.	Support large commercial or residential development?	No	
51.	Affect a significant archaeological or historic site, structure, object, or building?	No	
52.	Affect wild or scenic rivers or natural landmarks?	No	
53.	Affect any scenic resources or result in the obstruction of any scenic vista or view open to the public, or creation of an aesthetically offensive site open to public view?	Yes	No/No
54.	Result in substantial impacts associated with construction activities (e.g., noise, dust, temporary drainage, traffic detours and temporary access, etc.)?	Yes	No/No
55.	Result in the use of any publicly-owned land from a park, recreation area, or wildlife and waterfowl refuge?	No	
56.	Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number of, restrict the range of a rear or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	No	
57.	Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals? (A short-term impact on the environment is one that occurs in a relative brief, definitive period of time while long-term impacts will endure well into the future.)	No	
58.	Does the project have environmental effects, which are individually limited, but cumulatively considerable? Cumulatively considerable means that the incremental effects of an individual 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. It includes the effects of other projects, which interact with this project and, together, are considerable.	No	
59.	Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	No	

As described in Chapter 3, and the Initial Study (Appendix A), the following subject areas were not considered relevant to a discussion of impacts for the proposed project. Therefore, these issues are not discussed in greater detail than as summarized here.

Aviation Hazards - The project site is not located near or in the path of any airport. Therefore, no impact upon aviation is anticipated.

Coastal Beaches and Sand Dunes - The project is not located within or near any coastal beaches or sand dunes and will not result in any direct or indirect impacts on coastal resources.

Education - The project would have no impact on area schools or libraries.

Energy Resources - The proposed project will result in the use of fuel and energy both during the construction and post construction phases. However, per the County of Ventura Initial Study Guidelines, the use of energy is not considered substantial because

solar, wind and hydraulic energy is renewable and petroleum is considered a world wide, national, and statewide resource which is beyond the scope of local governments to manage or control.

Fire Hazards - The project is not located in a high fire hazard area. Therefore, no fire hazards are anticipated.

Fire Protection - There would likely be limited short-term impacts on emergency services during construction. This would be typical of any road improvement project since there may be a temporary increase in traffic congestion. However, these impacts would be temporary. Road-widening improvements would reduce traffic congestion in the long term. This would improve emergency vehicle access and response times. No impacts to personnel, equipment, or facilities are anticipated.

Housing - Construction jobs created by the project may potentially impact the demand for additional housing. Construction worker demand on housing is estimated to be of a short-term nature. Thus, the project is not expected to displace any housing or businesses and would not generate any new long-term demand for housing resources.

Law Enforcement/Emergency Services - There would likely be limited short-term impacts on police for traffic control or other emergency services during construction. This would be typical of any road improvement project since there may be temporary increase in traffic congestion. However, these impacts would be temporary. Road-widening improvements would reduce traffic congestion in the long term. This would improve emergency vehicle access. No additional law enforcement facilities are required.

Mineral Resources - The proposed project will require the consumption of aggregate resources during the construction phase. However, this project will have a less than substantial impact on the demand for aggregate resources because there is a sufficient amount of aggregate resources to meet local demand for the next 50 years (Resources Appendix of the Ventura County General Plan).

The proposed project will consume petroleum by-products as fuel for the equipment used during project construction phase. However, this project will have a less than substantial impact on the demand for petroleum resources because petroleum is considered a world wide, national, and state wide resource which is beyond the scope of local governments to effectively manage or control.

Paleontological Resources - The project site lies within alluvial valleys and hillsides of volcanic origin that are not conducive to the development of fossils. No impact to paleontological resources is therefore anticipated.

Recreation - The proposed project would not impact local parks and facilities. Camarillo Regional Park, a 327-acre County facility at the base of the Santa Monica Mountains is the closest regional park to the proposed project. The park is located east of the proposed roadway but is not adjacent to Lewis Road and would not be impacted by the proposed project. The Ventura County Regional Trails and Pathways Final Master Plan Report (1995) designates Lewis Road as a Class II regional pathway. A Class II pathway is an on-road bike lane usually located along the edge of the paved area of between the parking

lane and the first motor vehicle lane. The proposed project appears to be generally consistent with and serves to implement this component of the Trails and Pathways Master Plan.

Social and Economic Effects – As required by Executive Order 12898, disproportionate impacts to the human health and environmental effects on minority and low-income populations have been considered (Chapter 3, Affected Environment). The project is not expected to involve the displacement of any residences or businesses, or, to adversely affect lifestyles, neighborhood character and stability, or an established community. As a result, minority, low-income, elderly, handicapped, transit-dependent and other specific interest groups would not be adversely affected by the project.

Stream Location and Meander Patterns - The location and meander patterns of the drainage within the project corridor, Calleguas Creek, Long Grade Canyon Creek, and the unnamed agricultural channel, would not be affected by project development.

Utilities - No communication facilities are needed for or would be disrupted by the proposed project.

No electrical service is needed for the proposed project. However, the project will require relocation of a number of power poles along the roadway alignment. The utility company should be contacted and coordinated with during all phases of the construction process.

No gas supplies are needed for the proposed project. A pressurized gas pipeline is located adjacent to the road alignment and will require coordination with the pipeline operator during all phases of construction.

However, any impacts related to utility relocation would be temporary.

Water Supply – The proposed project is not expected to have an impact on the quality of water delivered to the project area. The proposed project is expected to use less water than applied to existing agricultural lands and is not expected to have an impact on the quantity of water delivered to the project area. The project is not anticipated to require additional fire flow services.

Waste Treatment/Disposal - The proposed project would not require individual sewage disposal systems, or generate sewage or solid waste.

4.1 Aesthetics

Development of the proposed project would result in the conversion of Lewis Road from two lanes to four, alter the existing bridge system along Lewis Road, and add retaining walls along portions of the project corridor. Sound walls may also be constructed as mitigation to noise impacts. Four tree rows would also be removed. The widening of Lewis Road would be generally consistent with the existing aesthetic character of the area in that the current setting includes an existing roadway. The widening from two lanes to four lanes would increase the prominence of this corridor in a predominantly rural setting. Removal of a eucalyptus tree row within the Caltrans segment and the monolithic effect of constructed

retaining- and sound walls within both the Caltrans and County segments, are mitigable impacts.

4.1.1 Methodology.

Federal, state and local guidelines and policies were identified and reviewed (Federal Highway Administration 1998, Bass et al. 1999, County of Ventura 1992, 1994, 1996, & 1997, City of Camarillo 1989). Maps of scenic and eligible scenic highways and the locations of "historic trees" in the County of Ventura and the City of Camarillo were also reviewed. Scenic resources along the corridor were identified and consisted primarily of the view corridors along Lewis Road (which is both an eligible County scenic highway and a designated City scenic highway), mature and possibly heritage trees along the project corridor, and the volcanic rock outcroppings at the base of Round Mountain at the southern terminus of the corridor.

4.1.2 Impact Thresholds.

The assessment of aesthetic impacts involves qualitative analysis that is inherently subjective in nature. Different viewers react to viewsheds and aesthetic conditions differently. This subjective element of aesthetics is underlined in the various guidelines that help determine the effect of changes to visual resources; few defined thresholds exist. The California Environmental Quality Act (CEQA), and the Ventura County and City of Camarillo General Plans offer guidelines to determine impact thresholds; CEQA, however, offers the most detailed guidance. Ultimately, the final decision as to whether aesthetic impacts occur and are considered significant would be determined by the lead agency.

a. California Environmental Quality Act. Appendix G of the *State CEQA Guidelines* specifies that a significant impact would occur if a project would *have a substantial, demonstrable negative aesthetic effect.* Specifically, a significant impact to visual resources:

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

In EIR practice, this has come to be interpreted as an obstruction of a designated scenic vista or view open to the public or the creation of aesthetically offensive sites open to public view.

b. Ventura County Initial Study Assessment Guidelines.

Impacts to Community Character. The Initial Study Guidelines defer to the CEQA thresholds outlined above and add that inconsistencies with the Ventura County General Plan and Zoning would also constitute a significant impact.

Scenic Highways. Under the Initial Study Guidelines, a scenic highway is defined as the "view from the road", or the areas visible from a designated or eligible scenic highway,

usually within one-half mile from the road. Policy 1.7.2.4 of the Ventura County General Plan identifies adverse impacts to scenic highways as those that would "degrade visual resources or significantly alter or obscure public views".

Scenic Areas or Features. Scenic resources are defined under the Initial Study Guidelines as an "area or feature that is visually or aesthetically pleasing or is zoned Scenic Resource Protection..." Again, Policy 1.7.2.4 of the Ventura County General Plan is referenced. Significant impacts to scenic areas or features are those that would "degrade visual resources or significantly alter or obscure public views." CEQA thresholds as outlined above are also referenced.

c. City of Camarillo General Plan. In the Tree Preservation Section of the Scenic Highway Element (City of Camarillo, 1989), the City discourages removal of mature trees and proposes replacement when feasible.

In this analysis, modifications to visual resources were considered less than significant if the modification would be unnoticeable or visually subordinate. A modification that would be visually dominant or one that would unfavorably modify the existing view is considered a significant impact.

4.1.3 Project Impacts and Mitigation Measures

As discussed in Section 3.1 Aesthetics, the proposed project is relatively flat. Public viewing corridors are therefore limited to small sections of the project area with a backdrop of the surrounding agricultural fields to the west and the foothills of the Santa Monica Mountains to the east. As the project corridor is almost completely surrounded by expanses of agricultural fields in the Oxnard Plain, primary view corridors are from the tops of the various bridges within the project corridor. The California State University, Channel Islands (CSUCI) campus nestled in the foothills to the east would be an additional location from which the corridor would in part be viewed. Potential impacts to aesthetics occur within both the Caltrans and Ventura County segments of the proposed project. Impacts to visual resources from project implementation can be separated into two areas: 1) Impacts to views seen from the project site, which is considered a eligible scenic highway, and 2) Impacts to views of the site and surrounding areas from along public viewing corridors. Due to the long, flat nature of the site, impacts within these two categories are identical and will be discussed together. Impacts due to lighting and glare are not discussed, as no new lighting would be created under any of the project alternatives. After each identified "effect", specific aesthetic impacts resulting from each Caltrans and Ventura County alternatives are analyzed.

Effect AES-1 Lewis Road is an eligible County and a designated City scenic highway, and the view corridor along this route would be altered by the proposed project. Removal of the eucalyptus trees along the Caltrans segment of the project corridor would exceed visual impact thresholds of the City of Camarillo. Retaining and sound walls constructed within the project corridor would impact visual resources by creating a monolithic effect within both the Caltrans and County segments. These impacts are therefore considered to be less than significant with mitigation for both the Caltrans and County segments (M).

Photo-simulations of the proposed project are provided in Figures 4.1 through 4.4. In general, implementation of the proposed project would incrementally increase the urbanized appearance along the Lewis Road Corridor. However, as this is an existing road corridor, the road widening is not expected to substantially alter the character of existing views to or from Lewis Road. Visual effects associated with the removal of trees is considered adverse by the City of Camarillo, while the construction of retaining and sound walls is considered adverse by the City of Camarillo and the County of Ventura.

Caltrans Alternatives. Under Caltrans Alternatives 1 and 2, Lewis Road would be widened from two to four lanes. Visual impacts are relatively the same under either alternative and project implementation would change the following key elements. Under all of the bridge variations for Caltrans Alternatives 1 and 2, the resulting superelevated overhead would accommodate four lanes of traffic. As a result, approximately four large eucalyptus trees would be affected within their driplines (Figures 3.1, Photo 2). A row of 29 mature eucalyptus on the west side of Lewis Road near Pleasant Valley Road would also be removed as part of the project (Figures 3.1, Photo 1). At least 13 of these would also qualify as heritage trees based upon circumference. Several retaining walls would also be constructed along this segment. A row of telephone poles would be removed along the eastern edge of the road south of Dawson Place and the Ventura County Flood Control District (VCFCD) channel would be converted to a reinforced concrete box (Figure 2.3).

With the exception of the area near Pleasant Valley Road, this segment has a general urban character. The widening of the road alone would not change the visual nature of this area or impair scenic views available from the superelevated overhead. Removal of the eucalyptus along Lewis Road would be considered adverse by the City of Camarillo standards as the area is designated as a City Scenic Highway. These trees are visual features that create a transition between the urban areas within the City of Camarillo and the rural unincorporated lands to the south. In addition, their relative age and large size add to their aesthetic value. The construction of retaining walls in this segment may create a massing effect that would be visible along the more rural area adjacent to Pleasant Valley Road. Mitigation measures are recommended to lessen the visual effects associated with project implementation. This is consistent with the City of Camarillo Tree Preservation Program for City designated scenic highways that discourages the removal of mature trees and suggests replacement when feasible.

Ventura County Alternatives. The County of Ventura Non-Coastal Zoning Ordinance, and thus, the Tree Preservation Ordinance included within it, does not apply to road widening projects. As a result, impacts to tree rows within this portion of the corridor are not considered a substantial visual impact.

Under Alternative 1, Lewis Road would be widened from two to four lanes along most of its length and the current Lewis Road Bridge over Calleguas Creek would be widened to also accommodate four lanes of traffic (Figure 4.2). As a result, long thin strips of ruderal habitat and farmland would be removed to accommodate the road widening. Two cottonwood and one eucalyptus windbreak and various landscaping trees would be removed (Figures 3.1, Photos 3 and 6). As discussed in Section 4.10, *Noise*, soundwalls could potentially be constructed within this segment to reduce noise impacts on residents. Construction of soundwalls would result in secondary impacts on aesthetics through the creation of a

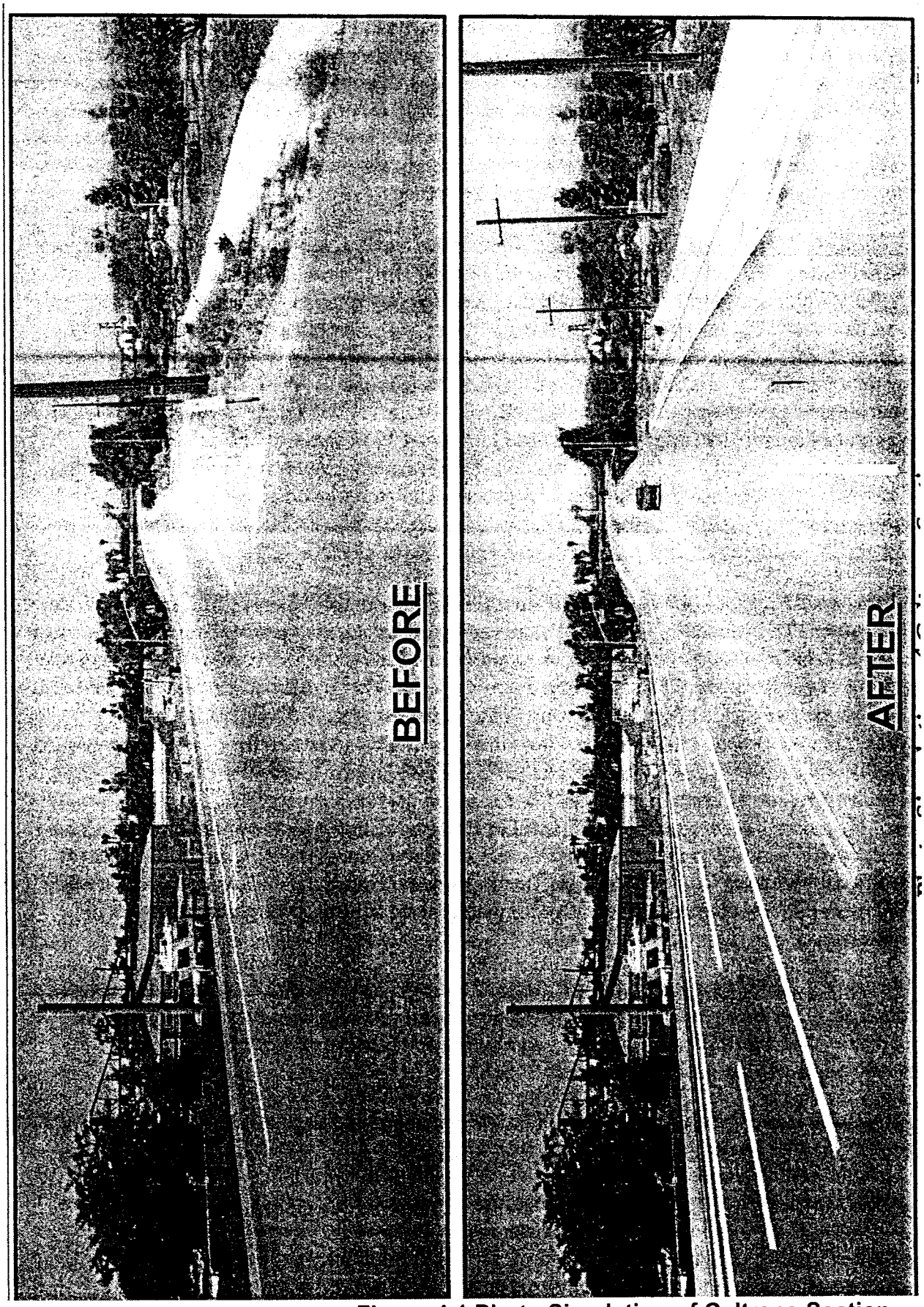


Figure 4.1 Photo Simulation of Caltrans Section

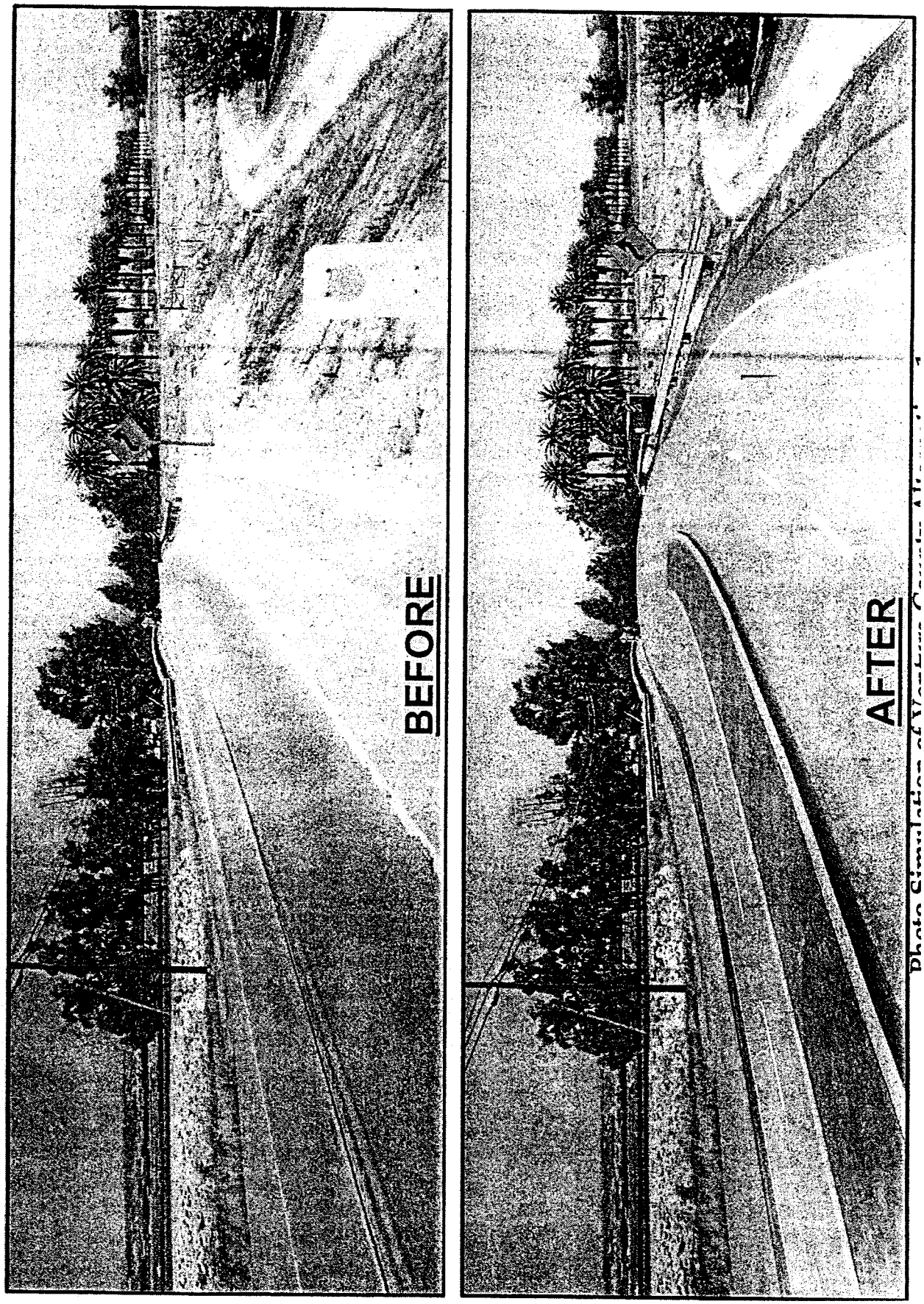


Figure 4.2 Photo Simulation of Ventura County Alternative 1

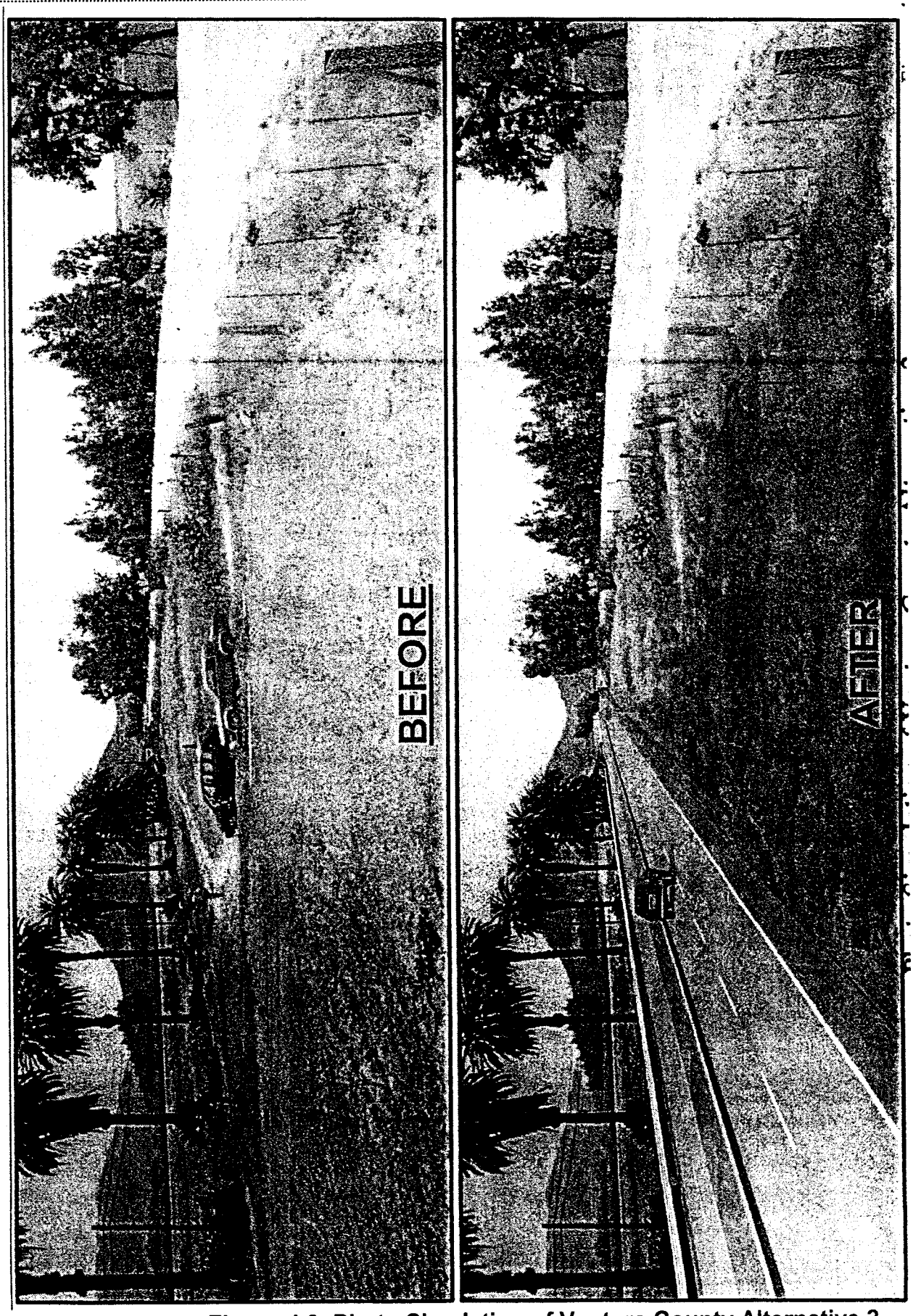


Figure 4.3 Photo Simulation of Ventura County Alternative 2

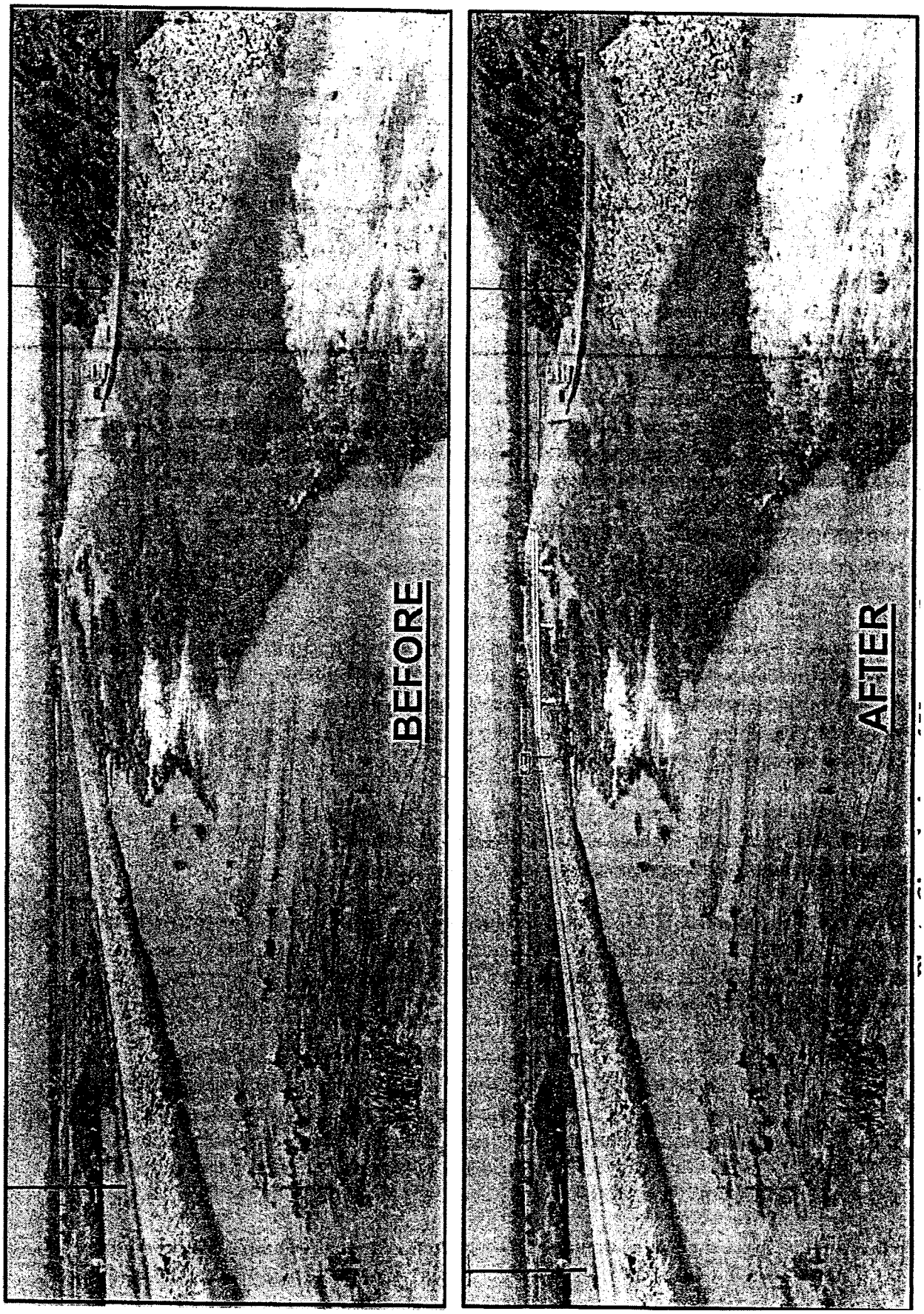


Figure 4.4 Photo Simulation of Ventura County Alternative 3

monolithic effect.

Under Alternative 2, Lewis Road would be straightened at the S-curve adjacent to the Lewis Road Bridge over Calleguas Creek and would be widened from two to four lanes along most of its length (Figure 4.3). The Lewis Road Bridge would be removed and replaced with a wider structure. Although the alignment varies from Ventura County Alternative 1, the primary and secondary effects on visual resources are similar to those described above. Only two tree rows would be removed however. Sound walls are also likely to be constructed under this alternative.

Under Alternative 3, Lewis Road would be widened from two to four lanes as previously described, but would also be realigned south of the Lewis Road Bridge. At this bridge, Lewis Road would not cross over Calleguas Creek, but rather run along its western edge through agricultural and ruderal fields until intersecting with Hueneme and Laguna Roads to the south. An additional bridge would be created to span Calleguas Creek at the proposed Santa Barbara Street to access the adjacent CSUCI campus to the east (Figure 4.4). As a result of this realignment, traffic would be routed primarily along the new Lewis Road footprint. Traffic could still utilize the old alignment, however. As a result, an additional road would be created within the area. One cottonwood tree row near Pleasant Valley Road and portions of the eucalyptus tree row at the Lewis Road Bridge over Calleguas Creek would be removed. Sound walls are also likely to be constructed under this alternative.

None of the trees found along the corridor have been determined to be of historical value (see Section 4.5, *Cultural Resources*). Trees on site, however, may provide important habitat to birds and monarch butterflies as discussed in more detail in Section 3.3 and 4.3, *Biological Resources.* The potential agricultural impacts of the removal of the single eucalyptus and the two cottonwood agricultural tree rows in the Ventura County segment are discussed in more detail in Section 4.2, *Agriculture.*

There would be no adverse visual effects to rock outcroppings associated with Round Mountain because all proposed road improvements would be within the existing disturbed or paved portion of that segment of the roadway.

Mitigation Measures. The following measures apply to the visual impacts within the project corridor. Mitigation would minimize the project's effects on visual resources and ensure consistency with the County of Ventura and City of Camarillo policies pertaining to the protection of visual resources.

AES-1 (a) Vegetation shall be planted along the retaining and sound walls proposed to be constructed within the both the Caltrans and County segments of the project corridor in order to breakup the massing effect. Vegetation shall be selected that complements adjacent vegetation and adds to the rural character of the area. Weedy or other species incompatible with the adjacent agricultural use shall not be utilized.

AES-1 (b) Trees removed or impacted within the Caltrans segment, shall be transplanted, or, replaced in a 1:1 ratio with other trees. Trees shall be maintained for a period of two years as outlined by a qualified landscape architect or biologist.

Irrigation shall be utilized as necessary over this period, but slowly decreased so that by the second winter it is no longer necessary.

Impact After Mitigation. With the implementation of the above measures, visual effects of the project would be mitigated to the extent feasible and would be consistent with the County of Ventura and City of Camarillo policies pertaining to the protection of visual resources.

4.1.4 Cumulative Impacts

For the purposes of this EIR, the cumulative geography of the proposed project area includes the southeastern edge of the Oxnard Plain, in the vicinity of Calleguas Creek. The Lewis Road Widening Project was proposed as mitigation for traffic impacts to the adjacent California State University Channel Islands (CSUCI) campus to the east (Rincon June 2000). As part of the development of CSUCI, potential impacts to visual resources ~~were~~ identified and mitigated. Additional development identified in the area consists of a single-story mental health facility located adjacent to University Drive. The proposed project is not expected to add to cumulative aesthetic impacts in the area. Implementation of recommended mitigation measures identified above would further reduce the project's cumulative visual impacts.

4.2 Agriculture

Project implementation would result in impacts to agricultural resources through farmland conversion, agricultural tree row removal, and the creation of potential incompatibilities with adjacent farmland. Approximately 10.2 to 14.9 hectares (25.3-36.8 acres) of agricultural land designated as Prime/Statewide Importance would be removed from agricultural use under the various Ventura County Alternatives, the majority of which would be removed through the direct conversion of agricultural lands into a widened Lewis Road. This exceeds the County's 5-acre threshold for impacts to Prime/Statewide Importance farmland within areas designated as Agricultural under the County General Plan, and although mitigation is outlined to reduce impacts to the degree feasible, the residual impact is considered adverse and unavoidable. Removal of agricultural tree rows adjacent to wind sensitive crops is considered less than significant with mitigation under CEQA. Because the proposed roadway would be located along the periphery of agricultural areas, it may also create conflicts with adjacent agricultural activity. Only the potential removal of a locked gate prohibiting access to an adjacent agricultural property is considered potentially significant as it could potentially increase vandalism and/or crop theft. Appropriate mitigation is provided to reduce effects to a less than significant level under CEQA.

4.2.1 Methodology

As discussed in Section 3.2 Agriculture, federal, state, and local policies and standards were utilized for the determination of potential impacts to agricultural resources. At the federal level, the project was reviewed by the Natural Resources Conservation Service (NRCS), (formally known as the Soil Conservation Service), as required by the Farmland Protection Policy Act (7 C.F.R. 658) for federally funded projects. Ventura County impact thresholds, as outlined in the Initial Study Assessment Guidelines (Ventura County November 1992) and the Ventura County General Plan policies, were utilized to assess agricultural impacts at the local level. Other local agricultural programs reviewed were: the Important Farmlands

Inventory, Land Conservation Act (LCA) (or Williamson Act) contracts, greenbelt agreements, the Right to Farm Ordinance, conservation programs, and the Save Open Space and Agricultural Resources (SOAR) Ordinance.

4.2.2 Impact Thresholds.

a. Farmland Policy Protection Act. According to the Farmland Protection Policy Act (FPPA), additional project alternatives or sites must be considered if the Farmland Conversion Impact Rating (from NRCS form AD 1006), which is calculated jointly by the NRCS and the lead agency, exceeds 160 points. This impact rating is broken into two sections, the land evaluation rating and the site assessment rating. The land evaluation rating is assigned by NRCS and is on a scale from 0 to 100 points. The lead agency conducts the site assessment with rating ranging from 0 to 160 points. Assigned point values are determined using criteria found in section 658.5 of the FPPA (7 CFR 658.5). The lower the combined score, the lower the impact to farmlands. The FPPA requires that alternative sites and/or project configurations to be considered by the lead agency when the total combined point value from the land evaluation and site assessment exceeds 160 points (Appendix D, Agricultural Calculations).

b. Ventura County Impact Thresholds. The County of Ventura Initial Study Assessment Guidelines (revised June 2000) includes standards to determine the thresholds of impacts to agricultural soils as classified by the Important Farmlands Inventory discussed in Section 3.2, *Agriculture*. Within land designated as Agricultural under the Ventura County General Plan the following acreage thresholds apply for direct and/or indirect loss of soils suitable for agricultural crop production:

- Prime/Statewide - 5 acres;
- Unique - 10 acres; and
- Local – 15 acres.

Any project that entails a General Plan amendment and would result in a direct and/or indirect loss of agricultural soils greater than the above thresholds is considered to substantially contribute to a significant cumulative impact.

Other impacts identified by the Initial Study Assessment Guidelines as potentially significant are:

- Agricultural tree row removal;
- Conflicts with the availability and quality of water resources being used by agriculture;
- 10% or greater increase in airborne-dust due to construction;
- Project elements which could result in a substantial increase or introduction of farmland pests; and
- Any non-agricultural uses that would substantially conflict with nearby agricultural operations.

Actions that would conflict with the goals of LCA contracts, greenbelt agreements, Right to Farm Ordinance, and SOAR are considered to result in potentially significant effects.

4.2.3 Project Impacts and Mitigation Measures

Impacts to agriculture would be limited to the Ventura County Segment of the proposed project. As such, only Ventura County Alternatives 1 - 3 are discussed below. After each identified "effect", specific agricultural impacts resulting from each Ventura County alternative are analyzed.

Effect AG-1 The Farmland Conversion Impact Rating calculated by the NRCS and lead agency ranges from 145 to 153 points for the proposed alternatives. This impact is considered less than significant (L).

This value does not exceed 160 points for any of the project alternatives, the threshold above which additional alternatives or site locations are required to minimize farmland impacts (Appendix D, Agricultural Calculations). As a result, no further alternatives are required for consideration under the FPPA.

Mitigation Measures. No mitigation is required.

Impact After Mitigation. As no mitigation is required, impacts remain less than significant.

Effect AG-2 Under any of the proposed alternatives, conversion of Prime and Statewide Importance Farmland would exceed the County of Ventura threshold of significance for agricultural land conversion. This impact is considered adverse and unavoidable (U).

All impacts to agriculture would occur within the Ventura County segment of the project, and primarily along the length of the current alignment of Lewis Road. Under Alternatives 1 and 2, the stretch of Lewis Road north of the Lewis Road Bridge over Calleguas Creek would impact agricultural lands along its western edge, while to the south of the bridge the project would affect farmland along the eastern edge of Lewis Road. Under Alternative 3, the same areas north of the Lewis Road/Calleguas Creek Bridge would be affected as under Alternatives 1 and 2. South of the bridge, however, Lewis Road would be realigned to the western side of the creek and impact a strip of farmland extending to Hueneme Road.

As summarized in Table 4.2 on the following page, approximately 11.7-16.5 hectares (29-41 acres) of farmland would be impacted under the existing project alternatives (Appendix D, Agricultural Calculations). Some of these impacts would be permanent and some would be temporary as a result of the required construction easements needed to implement the project. Permanent impacts occur either directly, through conversion of agricultural land to a non-agricultural use, or indirectly, as farmland becomes fragmented and is no longer accessible or of a functional size. Short-term construction related impacts would also occur. Impacts for each of the Ventura County alternatives is described below.

Between approximately 10.2 and 11.05 hectares (25.3 to 27.3 acres) of farmland would be permanently converted under Alternatives 1 and 2. This acreage is located primarily along the edge of the current footprint of Lewis Road. In general, the amount of farmland removed from field edges is usually limited to a strip no more than 21 meters (68 feet) wide. Temporary impacts are due primarily to the 2.4 meter (8 foot) construction zone. This loss of farmland exceeds Ventura County thresholds and is therefore considered an adverse and unavoidable impact.

The permanent loss of approximately 14.9 hectares (36.8 acres) of farmland to be directly converted under Alternative 3 is substantially greater than either Alternative 1 and 2. Temporary loss of farmland due to construction also occurs under Alternative 3. This is also an adverse and unavoidable impact.

Table 4.2 Agricultural Land Impacted Under Ventura County Alternatives

	Alternative 1	Alternative 2	Alternative 3
Permanent Conversion of Prime/Statewide Farmland (hectares/acres) [1]	10.2/25.3	11.1/27.3	14.9/36.8
Temporary Conversion of Prime/Statewide Farmland (hectares/acres) [1]	1.5/3.7	1.4/3.5	1.74/4.3
TOTAL Conversion Prime/Statewide Farmland (hectares/acres) [1]	**11.7/29.0**	**12.5/30.8**	**16.6/41.1**

1 = Appendix D, Agricultural Calculations

Mitigation Measures. As the loss of Prime/Statewide farmlands exceeds Ventura County thresholds under any of the project alternatives, this loss is considered adverse and unavoidable for each of the Ventura County alternatives. Although the following mitigation would reduce impacts to farmland of Prime and Statewide Importance to the degree feasible, net impacts would remain significant and unavoidable after mitigation. It is further noted that under federal laws no mitigation measures are required as none of the project alternatives exceeded established federal thresholds.

AG-2 A farmland protection program should be implemented and funded by the County in order to mitigate impacts to loss of farmland due to the proposed project. Components of the farmland protection program may include the following: transfer or purchase of development rights, conservation easements (mitigation banking), agricultural impacts fees, agricultural trusts, and the removal, stockpiling, and respreading of agricultural soils. Farmland shall be replaced or funded at a ratio of 1:1 (1 acre replaced for one acre removed) with similar or better quality farmland.

Impact After Mitigation. Although the above mitigation would minimize impacts to farmland to the degree feasible, a total of 10.2-14.9 hectares (25.3-36.8 acres) would be lost permanently from the total available farmland in the County because once farmland is developed, it is unlikely to be reconverted to farmland at some future date. Impacts associated with the conversion of agricultural land to non-agricultural use would remain adverse and unavoidable under any of the Ventura County alternatives.

Effect AG-3 The removal of the agricultural tree rows within the Ventura County segment would be considered adverse, as they shelter adjacent crops from wind. Mitigation would reduce impacts to a less than significant level (M).

Under the County Initial Study Guidelines (revised June 2000), removal of agricultural tree rows associated with agriculture is considered to be a potentially significant agricultural impact. Tree rows serve several functions: to protect adjacent croplands from wind; to limit trespassing and theft of crops; to mark property boundaries; and for aesthetic purposes. Agricultural tree rows would be impacted under all three Ventura County alternatives.

Under all three Ventura County alternatives a cottonwood tree row (Populus sp.) approximately 750 meters (2,460 feet) long that is located along the eastern edge of strawberry fields south of Pleasant Valley Road would be removed. A eucalyptus tree approximately 430 meters (131 feet), located directly north of the Lewis Road bridge and along the western edge of Lewis Road, would be impacted under Ventura County Alternatives 1 and 3. A second cottonwood tree row approximately 503 meters (1,650 feet) that runs along the western edge of a citrus orchard would also be removed north of the current Lewis Road bridge under Alternatives 1 and 2.

In order to determine the specific importance of these tree rows to adjacent farming, property owners with potentially impacted tree rows on site were contacted (Appendix D). Property owners responded that removal of each tree row would be considered an adverse impact (B-H Farms September 2000, Vujovitch September 2000, Walsh September 2000). Tree rows adjacent to citrus orchards are considered beneficial as they shelter fruits from wind and dust which in turn can decrease the value of a crop via wind scarring and adverse impacts to beneficial insects. Vegetables and strawberries would also be affected by wind damage and increased exposure to dust.

Mitigation Measures. The following measure is recommended to ensure compliance with Ventura County agricultural protection policies.

AG-3 The agricultural tree rows, or affected parts thereof, in the Ventura County segment of the project corridor shall be replaced with a functionally equivalent windbreak. When feasible, the replacement agricultural tree row shall be planted prior to the removal of those currently onsite.

Impact After Mitigation. With the implementation of the above mitigation measure impacts associated with agricultural tree row removal would be less than significant.

Effect AG-4 Project construction could result in conflicts with activities on adjacent agricultural land; specifically, air quality and microclimate impacts, pesticide use, and farm vehicle use of Lewis Road. These are considered less than significant (L). Removal of a locked gate for the property owner to the west of the Lewis Road Bridge could potentially occur under Ventura County Alternatives 1 and 3, and would be considered adverse as it could encourage vandalism or theft of crops.. This is considered less than significant with mitigation (M).

Ventura County General Plan Policy 1.6.2.6. states that discretionary development adjacent to Agricultural-designated lands shall not conflict with agricultural use of those lands. Potential conflicts with agricultural lands, above and beyond direct and indirect conversion of those lands to non-agricultural uses and removal of tree rows, can be in the form of air quality and microclimate impacts, pesticide use, and farm vehicle use of adjacent roads. Air quality and microclimate impacts would be limited to the construction period and therefore, of short duration. These impacts are discussed in more detail in Section 4.3, Air Quality. Pesticide use on agricultural lands is regulated by the State Department of Pesticide Regulations and enforced by the Agricultural Commissioner's Office. Compliance with state law regulating pesticide use would limit the potential impacts of pesticide on passing traffic to a less than significant level. Although the increased speeds proposed for Lewis Road may make access

more difficult for slower farm vehicles, the widening of Lewis Road from two to four lanes would allow faster traffic to pass safely via the inner lane. Therefore, in the long-term the proposed road widening is not expected to significantly impact agricultural operations under any of the proposed Ventura County alternatives. Short-term construction impacts could significantly affect traffic flows in the area, including farm vehicle usage. This issue and mitigation measures needed to mitigate potential short-term construction traffic flow impacts are addressed in Section 4.11, Traffic and Circulation.

The property to the west side of the Lewis Road Bridge over Calleguas Creek has a dirt road accessing the eastern perimeter of the site and a Ventura County Flood Control District (VCFCD) access road located on the adjacent Calleguas Creek berm. Under Ventura County Alternatives 1 and 3, the locked gate restricting entrance to this area would be removed. Increased vandalism and theft are a concern of the property owner (Vujovitch September 2000), especially as the site is not easily visible from Lewis Road.

Mitigation Measures.

AG-4 In the event the gate controlling access to the agricultural property northwest of the Lewis Road Bridge over Calleguas Creek is removed during project construction, a functionally equivalent gate shall be replaced in the appropriate location.

Impact After Mitigation. Substantial incompatibilities of the project with adjacent agricultural uses would be less than significant after mitigation.

Effect AG-5 Development of the project could conflict with local land use policies, including General Plan Policies, and Land Conservation Act contracts. These impacts are considered less than significant (L).

Ventura County General Plan Policy 1.6.2.1. This policy states that discretionary development located on land designated as Prime or Statewide Importance shall be planned and designed to remove as little land from agricultural production as possible and minimize impacts on topsoil. As described in *Effect AG-1*, all Ventura County alternatives would result in Class I impacts; Alternative 3 would have a slightly greater impact, however.

Land Conservation Act (LCA) (or Williamson Act) Contracts. Between five to seven LCA parcels under Ventura County Alternatives 1-3 would be affected as areas along the edges of the current Lewis road were converted for road use (Figure 3.4). Loss of land within or along the edge the LCA contract parcel does not necessitate loss of the contract or its tax benefits, however.

Alternative 1 or 2 would result in fewer impacts to LCA parcels than Alternative 3. Nevertheless, these impacts are considered less than significant under all alternatives.

Other Land Use Programs. As described in Section 3.2, *Agriculture*, Ventura County land use programs and policies such as greenbelt agreements, Right to Farm Ordinance, and the Save Open Space and Agricultural Resources (SOAR) Ordinance would either not apply or would not be affected by implementation of Ventura County Alternatives 1, 2 or 3.

Mitigation Measures. No mitigation is required.

Impact After Mitigation. As no mitigation is required, impacts remain less than significant.

4.2.4 Cumulative Impacts

The project entails a General Plan Amendment and would result in a loss of agricultural soils greater than the County of Ventura thresholds for project specific impacts. As a result, the Lewis Road widening project is considered to substantially contribute to a significant cumulative impact. This incremental contribution to the general urbanization of the area, as observed in the development of the CSUCI campus (Rincon, March 2000) and areas within the City of Camarillo, is adverse and unavoidable. The County's SOAR ordinance and its Right-to-Farm ordinance are two regulatory mechanisms intended to ensure the viability of agriculture within the County, and would provide some degree of mitigation for this impact. Mitigation measures identified in this document for agricultural tree row removal and short-term construction impacts to agricultural operations (see Mitigation Measure ~~AG-~~3, Section 4.3 Air Quality and Section 4.11, Traffic and Circulation) would mitigate the project's contribution to cumulative impacts in those areas to less than significant.

4.3 Air Quality

Construction-related activities would result in the emission of more than 25 pounds per day of ROC and NOx, an impact that would be reduced to a less than significant level with mitigation. Implementation of emission reduction measures would reduce this temporary impact to acceptable levels. Traffic traveling along Lewis Road as well as other traffic in the area would also generate carbon monoxide emissions. However, carbon monoxide concentrations would not exceed established State and Federal standards. This is considered a less than significant impact. To allow development of Lewis Road as a four-lane roadway, an amendment to the Ventura County General Plan would be required. This amendment would be consistent with the adopted plans and programs for the region. Therefore, the project is considered in conformance with the Federal Clean Air Act.

4.3.1 Methodology and Impact Thresholds

The analysis of the proposed project's air quality impacts follows the guidance and methodologies recommended in the Ventura County Air Pollution Control District's *Guidelines for the Preparation of Air Quality Impact Analyses* (APCD Guidelines) (1994) and Air Quality Management Plan (1994). Caltrans' *Project Level Carbon Monoxide Protocol* and *Project Level PM_{10} Hot Spot Analysis* were also used to determine the level and type of air quality analysis required for the proposed project.

a. Construction Emissions. Construction exhaust emissions were taken from the Environmental Protection Agency's (EPA) Compilation of Air Pollutant Emission Factors, (AP-42, Volume II, 1985) and the South Coast Air Quality Management District's (SCAQMD) CEQA Air Quality Handbook (1993).

APCD impact thresholds do not apply to construction-related emissions because such emissions are temporary in nature. However, because the region does not meet the federal or state standards for ozone or the state standard for PM10, the APCD does require standard dust control mitigation for all phases of construction. If construction-related reactive organic

compounds (ROC) and nitrogen oxides (NOx) emissions exceed 25 pounds per day, appropriate mitigation measures to reduce these emissions are also required.

b. Carbon Monoxide. The California Ambient Air Quality Standards (CAAQS) establish an allowable CO concentration of 20 ppm for the one-hour period and 9.0 ppm for the eight-hour period. These concentration standards have been used to determine the impact of CO emissions.

c. Operational Emissions and Policy Consistency. As outlined in the APCD Guidelines, operational impact thresholds in Ventura County are as follows:

- Daily emissions exceeding 25 pounds of ROC or NO_x;
- Emissions causing an exceedance or making a substantial contribution to an exceedance of a state or federal ambient air quality standard;
- Projects inconsistent with the Ventura County Air Quality Management Plan (AQMP) and emitting greater than 2 pounds of ROC or NO_x per day;
- Projects that directly or indirectly cause the existing population to exceed the population forecasts in the most recently adopted AQMP.

4.3.2 Project Impacts and Mitigation Measures

Project operational impacts are considered significant if project buildout would generate emissions exceeding APCD thresholds or cause or substantially contribute to an exceedance of a federal or state air quality standard. Because inconsistency with AQMP forecasts is not in itself a physical change, this analysis does not identify any inconsistencies as significant environmental impacts. Rather, potential inconsistencies are identified for informational purposes.

Effect AQ-1 The proposed project would generate temporary emissions from grading activities and the use of heavy-duty construction vehicles. Construction emissions are not counted toward APCD thresholds due to their temporary nature. Nevertheless, because construction-related ROC and NO_x emissions would exceed 25 lbs per day, air quality impacts associated with the proposed project are considered less than significant with mitigation (M).

Bridge Variations A and C of Caltrans Alternatives 1 and 2, and Ventura County Alternatives 1 and 2. For the Bridge Variations A and C of Caltrans Alternatives 1 and 2, and Ventura County Alternatives 1 and 2,construction activities would result in temporary short-term air quality impacts. These impacts are associated with fugitive dust (PM10) and exhaust emissions from heavy construction vehicles. Construction would generally involve site preparation, roadway paving, and erection of the bridge and overhead within the project corridor. The site preparation phase of construction uses substantial heavy-duty construction equipment, which are the primary sources of ROC and NOx emissions during construction, and generates the largest amount of fugitive dust. Therefore, this phase is used to gauge the potential impact of project construction upon local and regional air quality.

Using construction equipment information provided by Boyle Engineering (June 2000), the project engineer, emission estimates were calculated for the excavation phase of the proposed

project. Construction of County Alternatives 1 and 2 would require similar amounts of heavy-duty equipment. The same is true for both Caltrans alternatives. The type and number of pieces of construction equipment required to construct the proposed project under these alternatives are shown in Appendix E.

The emissions estimates shown below in Table 4.3 assume that the Caltrans and County portions of the proposed project would be constructed concurrently. In actuality, the probability of the funding for each of these portions of the project being secured and the awarding that both the Caltrans and County segments would be constructed concurrently is low. This is due in part to the fact that the two segments are being funded by different sources and the construction contracts may be awarded by different agencies. However, though this scenario has been used to represent a worst-case scenario for daily construction emissions.

Table 4.3 Construction Emissions for Caltrans and Ventura County Alternatives 1 and 2

	ROC	NOx
Emissions (lbs/day)	30.0	488.8
APCD Threshold	**25**	**25**

See Appendix E for calculations

As shown in the table above, construction of the project would generate ROC and NOx emissions in excess of 25 pounds per day. In addition to the emissions associated with the construction equipment, the construction workers traveling to the site contribute a small amount of mobile emissions. The contribution of emissions from this source would be negligible, less than one pound of NOx and ROC per day. With the implementation of standard mitigation measures construction related emissions of ROC and NOx would be reduced to the degree feasible. Though these measures may not reduce construction-related emissions to below the 25 lb threshold for ROC and NOx, the reductions achieved through implementation of these measures are considered adequate according to the Ventura County APCD Guidelines due to the temporary nature of construction emissions. In addition, though, the APCD does not require quantification of the PM_{10} emissions resulting from construction of the project, mitigation measures are required to reduce impacts to the extent possible because the project site is within a state nonattainment air basin for PM_{10}.

Bridge Variation B of Caltrans Alternatives 1 and 2, and Ventura County Alternative 3. As discussed above, construction activities would result in temporary short-term air quality impacts. Information provided by Boyle Engineering indicates that the amount of equipment used per day for construction for Bridge Variation B-Remove and Replace Existing Railroad Overhead for Caltrans Alternatives 1 and 2, and County Alternative 3 and would be similar to the other project alternative and bridge variations. Due to the additional roadway footprint associated with Ventura County Alternative 3 compared to the other Ventura County alternatives, and the more extensive demolition and construction associated with Bridge Variation B when compared to Variations A and C, the number of days of construction would be greater for these design options. However, daily emissions occurring as a result of construction of these alternatives would be similar to those shown in Table 4.3 above. Because ROC and NOx emissions would exceed 25 pounds per day under this scenario,

implementation of mitigation measures would be required. In addition, though the APCD does not require quantification of the PM_{10} emissions resulting from construction of the project, mitigation measures are required to reduce impacts to the extent possible because the project site is within a nonattainment air basin for PM_{10}.

Mitigation Measures. Mitigation measures AQ-1(a) through (d) are required to minimize the amount of PM_{10} and NOx emitted, per the Ventura County APCD guidelines for each of the alternatives.

AQ-1(a) During clearing, grading, earth moving, or excavation operation, excessive fugitive dust emissions shall be controlled by regular watering, paving construction roads, or other dust preventive measures using the following procedures:

1) All material excavated or graded shall be watered to prevent excessive amounts of dust. Watering shall occur at least twice daily with complete coverage, preferably in the late morning and after work is done for the day.

2) All material transported off site shall be watered or securely covered.

AQ-1(b) After clearing, grading, earth moving, or excavation operations, and during construction activities, fugitive dust emissions shall be controlled using the following procedures:

1) All inactive portions of the construction site shall be periodically treated with environmentally safe chemical dust suppressants.

2) All active portions of the construction site shall be watered to prevent excessive amounts of dust.

AQ-1(c) At all times, fugitive dust emissions shall be controlled using the following procedures:

1) All unpaved areas with vehicle traffic shall be watered periodically.

2) Streets adjacent to the project site shall be swept daily to remove dirt.

AQ-1(d) At all times, ozone precursor emissions shall be controlled using the following procedures:

1) Equipment engines shall be maintained in good condition and in proper tune as per manufacturer's instructions.

2) Construction activities shall utilize new technologies to control ozone precursor emissions, as they become available and feasible.

Effect AQ-2 **Project traffic generation, together with other cumulative traffic in the area would generate carbon monoxide at area intersections, but not in sufficient concentrations to create carbon monoxide (CO) "hotspots."**

The Ventura County portion of the South Central Coast Air Basin is in attainment for carbon monoxide under both the federal and state standards in all areas. A project's localized air quality impact is considered significant if the additional CO emissions resulting from the project create a "hot spot" where the California one-hour standard of 20 parts per million is exceeded. This typically occurs at severely congested intersections (LOS D or lower). Although traffic at nearby intersections would increase as a result of cumulative growth to the year 2025, these intersections would operate at LOS C or better. Therefore, the increase in traffic would be insufficient to create CO hotspots at these locations.

Mitigation Measures. No mitigation measures would be required.

Effect AQ-3 To allow development of Lewis Road as a four-lane roadway, an amendment to the Ventura County General Plan would be required. The amendment of the General Plan would be consistent with the adopted plans and programs for the region, including the Ventura County AQMP, the Regional Transportation Plan (RTP), the Regional Transportation Improvement Plan (RTIP), and the Congestion Management Plan/Capital Improvement Plan (CMP/CIP). As the project is identified in these approved transportation plans and programs, the proposed project conforms to the requirements of the Clean Air Act Amendments of 1990 (L, B).

The Clean Air Act Amendments (CAAAs) of 1990 require that transportation plans, programs and projects, which are funded by or approved under Title 23 U.S.C. or Federal Transit Act (FTA), conform with state or federal air quality plans. In order to be found to conform, a project must come from approved transportation plans and programs such as the State Implementation Plan (SIP), the Regional Transportation Plan (RTP) and Regional Transportation Improvement Program (RTIP) prepared and updated by the Southern California Association of Governments (SCAG).

The proposed project is identified in the federally approved (October 6, 2000), 2000/01 - 2005/06 RTIP and there have been no substantial changes in the project design concept and scope as used in the RTIP. This document is in accordance with SIP and is consistent with the 1998 RTP. The 2000/01 - 2005/06 RTIP conformity findings are based on five analyses: Consistency with the 1998 RTP; Regional Emissions Analysis; TCM Analysis; Fiscal Constraint Analysis; and Interagency Consultation and Public Involvement. Assumptions used in the 2000/01 - 2005/06 RTIP regarding population, employment, travel and congestion were the most recent develop by SCAG for the 1998 RTP, and included the most recent approved planning assumptions by SCAG's Regional Council. SCAG conducted a regional emissions analysis of the 2000/01 - 2005/06 RTIP. California Air Resources Board (CARB) emissions factors EMFAC7F.1, and EMFAC7G were used to estimate the regional emissions impact from implementation of the 2000/01-2005/06 RTIP.

The proposed project is identified in the Ventura County Transportation Commission's (VCTC) 1999 Ventura County Congestion Management Program/Capital Improvement Program (CMP/CIP) adopted on December 3, 1999. Further, the project is consistent with SCAG's 1998 RTP that was adopted by SCAG on April 16, 1998 and approved by FHWA on June 9, 1998.

However, Lewis Road is not identified as a four-lane road in the Ventura County General Plan. As part of the proposed project the General Plan would be amended to show the portion of the corridor south of Pleasant Valley Road as a four-lane roadway. The change in designation of Lewis Road south of Pleasant Valley Road would not result in an inconsistency with the adopted Ventura County AQMP. Projects are generally considered inconsistent with the AQMP if they result in a change in population forecasts contained within that document. The redesignation of Lewis Road within the General Plan from a two-lane to a four-lane roadway would not result in a change in the population forecasts for the region. Therefore, while the General Plan amendment would be required, the proposed project would remain consistent with the adopted regional planning programs used in determining conformance with the Federal Clean Air Act.

Mitigation Measures. No mitigation measures would be required.

4.3.3 Cumulative Impacts

The air basin is currently in non-attainment for the state PM10 standard and the state and federal ozone standard. The proposed project, in combination with pending development elsewhere in Ventura County, could contribute to the cumulative degradation of regional air quality (Rincon, June 1998). Any contribution to cumulative air quality impacts in the study area are expected to be minimal for three reasons: 1) project construction impacts are of short-term duration; 2) there is no expected generation of travel demand or other direct sources of air pollutants; and 3) air quality is expected to improve via the improvement of traffic congestion along Lewis Road.

4.4 Biological Resources

Biological resources were assessed on site during Winter 1999 and Spring 2000 by Rincon Consultants Inc. biologists. Surveys were conducted for the following resources: vegetation, wildlife, fisheries, special-status species, waters of the U.S., and wetlands. Additional focused surveys were conducted for: least Bell's vireo, southwestern willow flycatcher, southwestern pond turtle, two-striped garter snake, bat and raptor roosts, swallow nesting sites, and monarch butterfly aggregation sites.

Four categories of potential impacts were identified within the project corridor: 1) impacts to special-status vegetation (Baccharis and Venturan Coastal Sage Scrubs), 2) impacts to potentially occurring special-status species and their habitats (tree rows, Venturan Sage Scrub, Arroyo Willow Riparian Scrub, and under the Lewis Road Bridge), 3) temporary and permanent impacts to waters of the U.S. and wetland habitats (Coastal and Valley Freshwater Marsh, and Arroyo Willow Riparian Scrub, and 4) construction related impacts to wetland vegetation, soils, and water quality. Measures are outlined that would mitigate impacts on biological resources to a less than significant level(CEQA). Specifically, preconstruction surveys are suggested for the special-status species that have the highest likelihood of occurrence on site. Appropriate construction timing is also outlined for specific project components. Replacement ratios are outlined for sensitive habitats. Measures to reduce impacts to wetlands vegetation, soils, and water quality are also discussed.

None of the alternatives found in the Caltrans or Ventura County segments are clearly superior in regards to minimizing impacts to biological resources. The most distinguishing factor between the three Ventura County Alternatives, which is the portion of the project corridor where the majority of biological resources occur, is the relative loss of farmland and the addition of paved surface in the area. Ventura County Alternatives 1 and 2 would impact approximately 10.2 hectares (25.3 acres) and 11.0 hectares (27.3 acres) respectively, while Alternative 3 would impact approximately 14.9 hectares (36.8 acres). Alternative 3 would additionally create a new road in the area. Although farmland does function as habitat for wildlife, it is of relative poor quality. Loss of farmland in general, is more of an agricultural, than a biological issue.

4.4.1 Methodology

Prior to initiation of the botanical and faunal field surveys, a list of state and federally threatened and endangered plants and animals occurring in this portion of Ventura County was compiled from the California Department of Fish and Game Natural Diversity Date Base (CDFG CNDDB April 2000) and from conversations with California Department of Fish and Game (CDFG), U.S. Fish and Wildlife (USFWS), and National Marine Fisheries Service (NMFS) staff. Documents of biological surveys in adjacent areas were reviewed. Representatives of Ventura County Flood Control Department (VCFCD), the Natural Resources Conservation Service (NRCS), and the U.S. Army Corps of Engineers (USACE) were also contacted regarding potential waters of the U.S. and wetlands located on site.

Survey efforts for rare species were focused towards areas supporting native plant communities and wildlife habitats where listed species had the greatest potential to occur (e.g. Round Mountain and along Calleguas Creek). Wildlife observed during the reconnaissance was documented, and focused surveys were conducted for sensitive wildlife species or their habitat.

An initial biological field reconnaissance of the site was performed in Winter 1999 and Spring 2000 by Rincon biologists. For the spring surveys dominant vegetation and the location of unique biological resources at the site were noted. Focused surveys were conducted for selected sensitive species considered to potentially present within the project corridor. In particular, searches for the following species were conducted: least Bell's vireo (*Vireo bellii pussilus)*, southwestern willow flycatcher (*Empidonax traillii extimus*), southwestern pond turtle (*Clemmys marmorata pallida*), the two-striped garter snake (*Thamnophis hammondi*), bat and raptor roosts, swallow colonies, and monarch butterfly aggregation sites.

A wetlands delineation and a functional evaluation of wetlands were conducted for the project corridor on May 26, 2000 by Rincon biologists. Potential waters of the U.S. and wetlands were surveyed utilizing the methods detailed in the 1987 USACE Wetlands Delineation Manual where dominant vegetation, soil characteristics, and hydrology were noted and recorded. Areas surveyed, from north to south included the VCFCD flood channel along the east side of Lewis Road between Ventura Boulevard and the large curve south of Pleasant Valley Road; portions of Calleguas Creek within 30 meters (100 feet) of the edges of the Lewis Road and proposed Santa Barbara Avenue Bridges (Alternative 3); the

agricultural pond and channel at the confluence of Long Grade Canyon and Calleguas Creeks; and the agricultural channel northwest of the Hueneme Road Bridge.

4.4.2 Impact Thresholds

The importance of impacts on biological resources were based upon the Environmental Checklist Form in Appendix G of the State CEQA Guidelines (December 1998), which state that a project would have an significant impact if the project would:

- Change the diversity or number of any plant or wildlife species, including sensitive species;
- Reduce or deteriorate existing wildlife habitat;
- Introduce new plant or wildlife species into the area or result in a barrier to normal replenishment of plant or wildlife species;
- Interfere substantially with the movement of any resident or migratory wildlife species;
- Reduce or encroach upon the critical habitat of sensitive plants or animals;
- Adversely affect wetlands under the jurisdiction of Section 404 of the Clean Water Act.
- Conflict with applicable habitat conservation plan, or other approved local, regional, or state habitat plan; or
- Involves the use, production or disposal of materials that pose a hazard to animal or plant populations in the area affected.

No specific tree preservation ordinance exists for the City of Camarillo (Richardson, 2000), while the tree preservation ordinance of the County of Ventura does not apply to public road widening projects.

Project impacts, and related mitigation measures, are summarized and discussed in three sections: 1.) Vegetation, Wildlife and Fisheries, 2.) Special-Status Species; and 3.) Waters of the U.S. and Wetlands. Each of these sections addresses the specific impacts resulting from each of the project alternatives, and the appropriate mitigation. The *Vegetation, Wildlife, and Fisheries* section is limited to a discussion of "common" species. Special-status species are discussed in the *Special-Status Species* section, including those found in found in wetland habitats. Although impacts to agriculture have a biological component, they are discussed in more detail in Sections 3.2 and 4.2, *Agriculture*.

4.4.3 Project Impacts and Mitigation Measures

Impacts to vegetation and wildlife within upland habitats are analyzed below. No important fisheries are affected by the proposed project and are therefore not discussed herein (Rincon Consultants, Inc., 2000). Riparian vegetation is discussed in the *Waters of the U.S. and Wetlands* section below.

Effect BIO-1 Implementation of any of the project alternatives would reduce the amount of upland habitat within the project corridor and potentially increase the presence of invasive species. As Venturan and Baccharis Sage Scrub are considered sensitive), removal of these habitats would require mitigation to reduce impacts to a less than significant level (M).

The proposed project would permanently impact the following upland habitats through removal: tree rows, Venturan Coastal Sage Scrub, Baccharis Scrub, Agricultural, Ruderal,

and Urban Landscaping/Development. Invasive species may also increase in the project area due to disturbance resulting from construction.

Caltrans Alternative 1. The impacts resulting from implementation of Bridge Variations A, B, or C would be the same. A row of 29 eucalyptus trees would be removed along the west side of Lewis Road just south of Dawson Place and Pleasant Valley Road. Approximately three additional eucalyptus trees would be impacted within their driplines along the east side of Lewis Road, just north of the Imation Plant Main entrance. Of these 32 total trees, at least 15 trees would be considered "heritage" trees by Ventura County standards, as their circumference is greater than 2.3 meters (90 inches).

As these trees are non-native and are abundant in adjacent areas, they are not important biological resources in and of themselves. They may function as habitat for special-status species, however. Specifically, they may serve as nesting sites for raptors and loggerhead shrikes, or as aggregation sites for monarch butterflies. The role of trees as habitat for sensitive species issues will be discussed in more detail in the Special-Status Species section below. As habitat for common wildlife species, eucalyptus is not considered an important biological resource.

By the standards of the City of Camarillo, these trees within the Caltrans segment are considered aesthetically valuable. This issue is discussed in Section 4.1, *Aesthetics*.

Caltrans Alternative 2. Impacts to upland habitat for this alternative are the same as for Caltrans Alternative 1. Impacts would be the same under Bridge Variations A, B, and C.

Ventura County Alternative 1. A cottonwood windbreak (*Populus* sp.) approximately 750 meters (2460 feet) long south of Pleasant Valley Road would be removed. A eucalyptus windbreak approximately 131 meters (430 feet) long would be removed directly north of the Lewis Road Bridge, while a second cottonwood (*Populus* sp.) windbreak approximately 503 meters (1650 feet) would be removed to the south. As extensive tree stands are available outside of the project corridor to provide habitat to birds and other species, loss of these tree rows are not considered biologically significant.

These tree rows have at least historically functioned to shelter adjacent crops from wind and dust (Bulla, 2000), and thus, may be valuable as agricultural resources. This issue is discussed in Section 4.2, *Agriculture*. Tree rows would also be considered aesthetically valuable by the City of Camarillo as they line a City identified scenic highway and are discussed in Section 4.1, *Aesthetics*.

Where the base of Round Mountain is closest to Lewis Road, the existing road shoulder is approximately 2.3 meter (7.6 feet) wide. The County will avoid grading beyond the existing shoulder area. As a result, the Venturan Coastal Sage Scrub habitat in this area is not expected to be impacted. Approximately 0.1 hectare (0.2 acre) of Baccharis Scrub would be removed south of the future Santa Barbara Street. Approximately 10.2 hectares (25.3 acres) of farmland would also be removed. Ruderal areas and various landscape trees along the current Lewis Road footprint would also be impacted. Loss of Baccharis and Venturan Coastal Sage Scrubs would be considered less than significant with mitigation.

Ventura County Alternative 2. Impacts are very similar to those under Ventura County Alternative 1. The eucalyptus tree row adjacent to the Lewis Road Bridge over Calleguas Creek would not be removed, however. Approximately 11.0 hectares (27.3 acres) of farmland would be removed. Slightly less ruderal habitat would be removed than under Alternative 1. Loss of Baccharis and Venturan Coastal Sage Scrubs would be considered less than significant with mitigation.

Ventura County Alternative 3. A cottonwood windbreak (*Populus* sp.) approximately 750 meters (2460 feet) long south of Pleasant Valley Road would be removed. Approximately nine mature eucalyptus that are part of an agricultural tree row would be removed from the area directly northwest of the current Lewis Road Bridge and approximately 14.9 hectares (36.8 acres) of farmland would be converted. As discussed above, none of these habitats are considered sensitive *biologically*; impacts to these areas are therefore considered less than significant. Loss of Baccharis and Venturan Coastal Sage Scrubs would be considered less than significant with mitigation.

The greatest potential impacts to upland habitats due to implementation of the proposed project would be to agricultural areas. At least 3.6 additional hectares (9 acres) would be removed under Ventura County Alternative 3 than either Ventura County Alternatives 1 or 2. Farmland, however, is not as high of a quality of habitat for wildlife as native habitats because it consists of monotypic stands of crops, is frequently disturbed during cultivation, and is sprayed with pesticides. Yet animals will forage or nest within these areas.

Mitigation Measures. The following measure is required to mitigate project related impacts to Baccharis and Venturan Coastal Sage Scrubs to a less than significant level.

BIO-1 (a) Permanent and temporary construction related impacts to Baccharis and Venturan Coastal Sage Scrub vegetation shall be mitigated at a ratio of 1:1 (1 acre replaced for every acre removed) on site.

Executive Order 13112, *Invasive Species*, signed by President Clinton on February 3, 1999 requires that federal agencies "not authorize, fund, or carry out actions that it believes are likely to cause or promote the introduction or spread of invasive species in the United States...". The FHWA Guidance on Invasive Species, dated August 10, 1999 requires Caltrans to use the state noxious weed list from the California Department of Food and Agriculture (see attached in Appendix N) to define invasive plants.

A portion of this project is located in close proximity to relatively undisturbed areas of the Santa Monica Mountains. Some of the roadside areas within the project limits were observed to contain invasive plant species during botanical surveys conducted for this project. Also, the project will require revegetation in some areas. Therefore, there is a potential for this project to result in the release of invasive species into the natural environment. This release can be avoided by implementing the following Measures to Minimize Harm:

BIO-2 (a)
1) All invasive species located within the work limits of the project will be removed;
2) All equipment cleaning shall be conducted away from areas containing native plant assemblages;

3) Regionally appropriate native plant materials shall be used whenever possible for revegetation; and
4) The use of non-native plant materials, in particular those identified on the state noxious weed list, shall be avoided in areas near natural open space or wildlands.

These conditions should be followed when developing the landscaping plant palette for this project and throughout project construction.

Impact After Mitigation. Impacts would be less than significant after mitigation.

Effect BIO-2 Wildlife can be impacted in both the short- and long-term from implementation of the proposed project under any of the alignment alternatives. Direct mortality during project construction ~~and~~ indirect and cumulative impacts through habitat loss could result in short term impacts to wildlife. The incremental degradation of wildlife corridors or habitat linkages that traverse the project area could affect wildlife over the long-term. Due to the limited area and extent of road widening, however, impacts to wildlife are less than significant impact (L).

The proposed project could result in wildlife mortalities through project construction and indirectly through the loss of vegetation serving as habitat. As potential wildlife habitats within the project corridor are generally located along roadsides and are dominated by ruderal areas, they are therefore considered of marginal value to the wildlife present. The small areas of native habitat that would be removed, which are also located along the edge of Lewis Road, are part of larger swathes of wildlife habitat. With the noise and vibration generated during construction, most wildlife could be expected to move into adjacent areas outside of the project area and away from habitat disturbance. Short-term impacts to wildlife directly through construction related mortality, and indirectly through habitat loss, are considered less than significant under all Ventura County project alternatives.

Long-term impacts to wildlife could occur through the degradation of the habitat linkages that traverse the site. Additional background information on the definition and importance of habitat linkages can be found in the *Biological Assessment of the Lewis Road Widening Project* (Rincon Consultants, Inc., 2000).

Although no extensive survey of wildlife corridor usage was conducted for the greater project area, topography, animal sign, and road kill frequency can be utilized to determine some of the areas that are currently used as wildlife corridors. Although terrestrial animals may cross through the project area at any location along Lewis Road, as noted by the two roadkills observed during the field survey (one coyote and one unidentifiable small mammal), wildlife movement is anticipated to be concentrated along the creeks corridors as these areas offer cover and foraging opportunities. Within the project area, terrestrial animals currently appear to use the Calleguas and Long Grade Canyon creeks as pathways for movement to the north, south, and east. Extensive agricultural areas on the west side of the project area form a distinct barrier to all but the most mobile wildlife.

Calleguas Creek functions as a north-south path offering cover and foraging opportunities along its length within the project area. Outside of the project corridor, it connects with

Conejo Creek to the northeast of the Lewis Road Bridge, while to the south it continues offsite approximately 8 kilometers (4 miles) to eventually drain into the Mugu Lagoon. Long Grade Canyon Creek, located on the eastern edge of the site, follows the contours of the northern edge of Round Mountain and functions as a corridor between the Calleguas Creek corridor and less developed areas to the east.

Wildlife movement along Calleguas Creek does not require crossing Lewis Road, as the creek crosses under the roadway at the Lewis Road Bridge. As a result, road widening is not expected to affect this corridor. Movement between the Calleguas and Long Grade Canyon corridors does require crossing over Lewis Road. Although culverts connect these two areas under Lewis Road, they are closed with flap valves in order to prevent Calleguas Creek from backing up into Long Grade Canyon Creek during periods of high flow and thereby flooding adjacent farmland (Clabaugh 2001). Widening of Lewis Road would be limited along this segment; the total width of the traffic lanes would be increased only about 5 meters (15 feet) and the existing two-lane configuration of the roadway would be maintained. As a result, project development would not substantially affect wildlife movement compared to existing conditions. In addition, the majority of future traffic accessing the University will be traveling from areas north of CSUCI and would therefore not utilize the stretch of Lewis Road located south of the campus, which is where the corridor is located. Impacts to wildlife crossing between Calleguas and Long Grade Canyon Creeks would therefore be limited.

Wildlife movement was also observed to occur between Calleguas Creek and the arroyo willow riparian scrub habitat flanking an agricultural channel directly west. This area does not comprise a defined corridor, as the area between the two waterways is open ruderal habitat with scattered saltbush along the edges. The channel and associated scrub continue approximately 2.3 kilometers (1.4 miles) to the north and appears to dead-end in agricultural fields. As a result, this area is of generally less importance for wildlife movement.

Caltrans Alternative 1. The Caltrans segment of the project is currently developed with urban uses and little wildlife is expected. A wildlife corridor is unlikely to exist in this area. Short- and long-term impacts to wildlife from Bridge Variations A, B, or C of this alternative would be the same and less than significant.

Caltrans Alternative 2. Impacts to wildlife under this alternative are the same as for Caltrans Alternative 1.

Ventura County Alternatives 1. As described above, short-term impacts to wildlife due to construction related mortality and indirectly, through removal of habitat, are considered less than significant due to the limited areas of native habitat affected and the availability of similar habitat adjacent to the corridor. Long-term impacts to wildlife would also be less than significant due to the limited impact to wildlife corridors. Wildlife utilizing the Calleguas Creek corridor are able to cross under Lewis Road at the bridge. The crossing at the confluence of Calleguas and Long Grade Canyon Creeks would be widened only 5 meters (15 feet) and maintained in a two-lane configuration, and is therefore not expected to significantly increase wildlife mortality. Impacts to wildlife in both the short- and long-term are therefore expected to be less than significant.

Ventura County Alternatives 2. Impacts to wildlife under this alternative are the same as for Ventura County Alternative 1.

Ventura County Alternative 3. As described above, short-term impacts to wildlife due to construction related mortality and indirectly through removal of habitat are considered less than significant. Like Ventura County Alternatives 1 and 2, Alternative 3 impacts to wildlife movement would be less than significant. By moving the main flow of traffic to the east side of the creek, wildlife movement between Long Grade Canyon and Calleguas Creek would likely result in fewer mortalities. However, movement between Calleguas Creek and the arroyo willow riparian scrub to the west could be hindered. As this area is a dead end to the north and reconnects to Calleguas Creek to the south via crossing of Hueneme Road, placement of Lewis Road in this area would not significantly change the functionality of this area as a corridor and would result in a less than significant impact to wildlife movement.

Mitigation Measures. The following mitigation is recommended to reduce the incremental impact to wildlife associated with widening of Lewis Road.

BIO-2 "Wildlife Crossing" signage shall be placed along Lewis Road approximately 200 meters on either side of the confluence of Long Grade Canyon and Calleguas Creeks.

Impact After Mitigation. Less than significant (CEQA).

Effect BIO-3 Implementation of the proposed Lewis Road Widening project could affect special-status species that utilize trees, Venturan Coastal Sage Scrub, Arroyo Willow Riparian Scrub, and the Lewis Road Bridge as habitat. This is considered less than significant with mitigation (M).

As described under the *Special-Status Species* heading in Section 3.4, *Biological Resources*, several sensitive species have been identified that could be using trees, Venturan Coastal Sage Scrub, or Arroyo Willow Riparian Scrub in the project area, although none have been observed doing so. Among the species that may occur within the project corridor are: 1.) Monarch butterfly, Cooper's hawk, white tailed kite, loggerhead shrike, and the small-footed, Yuma myotis, and pallid bats within trees; 2.) Coastal western whiptail, coastal patch-nosed snake, ashy rufous-crowned sparrow in Venturan Coastal Sage Scrub habitat; and 3.) Yellow-breasted chat and coastal western whiptail in Arroyo Willow Riparian Scrub. The cliff swallow nests under the Lewis Road Bridge were the only observed protected species within the project corridor.

Monarch butterflies are considered locally sensitive as they use tree groves in Ventura County as winter aggregation sites. Sites of observed aggregation tend to be used repeatedly over time. Typically seen between November and early January, groups can span from tens to thousands of individuals. The nearest locations of observed monarch butterfly aggregations to the project area are in the vicinity of Oxnard and Saticoy (CNDDB, June 2000). Although no monarch butterflies were observed during the winter 1999 survey within the project corridor, this does not preclude their use of the site.

The birds contained in Table 3.8 of Section 3.4, *Biological Resources,* are considered special-status species primarily because their preferred habitats have been fractured and extensively reduced by agriculture and urbanization. The birds of prey (Cooper's hawk, sharp-shinned hawk, northern harrier, prairie falcon, American peregrine falcon, white-tailed kite, merlin, and ferruginous hawk) all have extensive ranges that cover many habitats, and can be

expected as rare to common transients at the project site. Most of these are not expected to breed at the site. Project development is not expected to cause a significant impact to those raptors that only forage at the site or occur as transient migrants.

The two species that may potentially breed within the project area are Cooper's hawk and white tail kite. No direct evidence of nesting was observed at the site, but they could potentially nest in the larger trees within the isolated tree rows. Construction or site preparation may remove a nesting tree, or cause the abandonment of an active nest during the breeding season, which occurs from February 1 to October. As all active raptor nests are protected under Section 3503.5 of the California Fish and Game Code, such an occurrence would be a violation of this code and considered a significant impact. These species are somewhat tolerant of development, and are capable of continuing to use the open space habitats adjacent to the project area.

The loggerhead shrike has declined throughout portions of its range, probably due to habitat destruction, but also due to declines in its prey base of songbirds and large insects. If this species were to occur within the project area, it would likely be nesting in shrubs and at the top of trees with dense foliages near ruderal areas.

Several sensitive bat species could utilize the project site for foraging. Most bats require crevices for roosting and breeding which trees on site may provide. No bats appeared to be using the Lewis Road Bridge. The presence of bats in the project corridor would tend to be limited to foraging, however. Alteration of the natural foraging habitat of bats at the site would not be expected to cause a marked decrease in population levels, as extensive additional areas exist just off site.

Venturan Coastal Sage Scrub within the project corridor at Round Mountain may potentially host three sensitive species: coastal western whiptail, coastal patch-nosed snake, and ashy rufous-crowned sparrow. This habitat is not expected to be impacted by the proposed project, however, as grading will not occur in these areas. As a result, the proposed project is not expected to affect resident species population or distribution.

The yellow-breasted chat and coastal western whiptail could potentially occur within the project corridor within the thicket of Arroyo Willow Riparian Scrub to the northwest of the Hueneme Road Bridge. Although the yellow-breasted chat has a low likelihood of occurrence in general (USDA, 1999), it has been found upstream at the confluence of Calleguas and Arroyo Conejo Creeks (Greaves, 1998). As only a very small segment of Arroyo Willow Riparian Scrub habitat would be removed from implementation of the project no significant impacts are expected. The coastal western whiptail, which has been seen on the CSUCI campus directly east (Rincon, 1998) and at the confluence of Arroyo Conejo and Calleguas Creeks (Greaves, 1998), may also be found in this area.

Monarch butterfly aggregations are often site specific, and will reoccur year after year at the same location. The specific site characteristics that attract Monarchs to a specific grove are unclear, although protection from wind is likely a primary factor. Removal of a utilized tree row or grove could impact reoccurrence of the monarch in the area. Nectar and water sources are typically close to utilized tree rows (CNDDB, June 2000). The vegetative understory may also play an important role in site selection (CNDDB, June 2000). As a result, tree replacement away from the original aggregation site as discussed in Mitigation Measure

AES-1 (b) (which mitigates for aesthetic impacts due to tree removal) would not completely mitigate impacts to monarch butterflies. In the case Monarch butterflies are found to aggregate in trees in the project corridor, the trees and associate understory should be either transplanted or replaced directly offsite and adjacent to the original location of the aggregation.

A colony of inhabited cliff swallow nests was observed under Lewis Road Bridge in May 2000. Migratory birds, and their nests and eggs, are protected under the Migratory Bird Treaty Act (U.S.C. 16(7)(II)) and the California Fish and Game Code. If removal or reconstruction of the Lewis Road Bridge occurred during the nesting season, cliff swallows could be impacted.

Caltrans Alternative 1. Although none were observed during surveys, the eucalyptus or urban landscaping trees slated for removal within the project area could host raptor ~~or lo~~ggerhead shrike nests, or aggregation sites for monarch butterflies. Impacts would be the same for Bridge Variations A, B, and C.

Caltrans Alternative 2. Impacts are the same as for Caltrans Alternative 1. Impacts would be the same for Bridge Variations A, B, and C.

Ventura County Alternative 1. Although none were observed during surveys, the windbreaks or landscape trees also found within the project right of way could host raptor or loggerhead shrike nests, or monarch butterfly aggregation sites. Cliff swallow nests were found under the Lewis Road Bridge and could be impacted by project development.

Ventura County Alternative 2. Impacts are the same as for Ventura County Alternative 1.

Ventura County Alternative 3. Approximately 0.02 hectare (0.04 acre) of Arroyo Willow Riparian Scrub would be permanently impacted and 0.01 hectare (0.02 acre) would be temporarily impacted under Alternative 3. One cottonwood and one eucalyptus windbreak, and various landscape trees would also be removed. Raptors, loggerhead shrikes, cliff swallow nests, and monarch butterflies could be potentially affected.

Potential impacts on the habitats of special-status species that may occur within the project corridor, and thus, special-status species themselves, would not differ appreciably between alternatives within the Caltrans and Ventura County segments of the project.

Mitigation Measures. The cliff swallows nesting under the Lewis Road Bridge are the only special-status species that have been identified on site to date. In order to avoid conflicts between construction activities and the potential occurrence of special-status species onsite, the following mitigation measures are recommended:

BIO-3 (a) In the winter (November- early January) prior to construction, a survey for monarch butterfly aggregation sites within tree rows in the project area shall be conducted by a qualified biologist. If found, all construction work must be conducted at least 50 feet from the nest until the area is no longer being utilized by monarch butterflies. Impacts to trees (and their associated vegetative understory) utilized by monarch butterflies shall be avoided when

feasible, or replaced in kind with mature specimens of the same species adjacent to their prior location.

BIO-3 (b) Two weeks prior to any trees being removed during the raptor nesting season (February through October), a survey or raptor nests shall be made by a qualified biologist. If active nests are located, then all construction work must be conducted at least 500 feet from the nest until the adults and young are no longer dependant upon the nest site.

BIO-3 (c) Immediately prior to ground disturbing construction within Venturan Coastal Sage Scrub and Arroyo Willow Riparian Scrub, a preconstruction survey for sensitive species should be conducted by a qualified biologist. As all potential special-status species that may occur in these habitats are Species of Concern and not formally listed, any individuals found shall be captured, when possible, and transferred to adjacent and appropriate habitat outside of the project corridor.

BIO-3(d) In the event that demolition or construction of the Lewis Road Bridge would overlap with the cliff swallow nesting season (approximately April – August), exclusion devices shall be installed under the Lewis Road Bridge prior to the nesting season in order to avoid impacts to active swallow nests and eggs.

Impact After Mitigation. After mitigation, impacts to sensitive species are considered less than significant under CEQA.

EFFECT BIO-4 **Implementation of the proposed Lewis Road Widening project would result in temporary and permanent loss of wetland habitat onsite. With mitigation, this impact would be considered less than significant (M).**

Functional Evaluation. The active floodplain of Calleguas Creek and the wetlands in the project area are a dynamic system, subject to frequent change. Scattered sandbars and newly deposited alluvium are abundant within Calleguas Creek. The densities and location of hydrophytic vegetation that are present onsite today could be adversely altered by the scouring and elevated water volumes resulting from both normal rainfall and flood events. The Long Grade Canyon Creek and the agricultural channel northwest of Hueneme Road Bridge, on the other hand, are smaller and appear to be more stable channels.

These wetland areas within the project site serve an important role for local wildlife species and transients as it is part of the greater Calleguas Creek watershed. Calleguas and Long Grade Canyon Creeks are utilized as wildlife corridors for movement into area to the north, south, and east of the project, as noted by coyote and other mammal sign seen within the project corridor. Migrating birds such as the great blue heron, great white egret, and various ducks and raptors, utilize the wetland and adjacent areas for foraging and cover. A variety of local species such as the red-winged blackbird, killdeer, and striped racer would be expected to live and feed in these areas. Sensitive species that might utilize these areas would likely be migrant birds. However, due to the limited size and general low quality of the wetland habitats included specifically within the project site, and the availability of higher quality and

extensive wetland habitat in adjacent areas, the impacts to wetland vegetation and wildlife under any of the project alternatives would be minimal.

In general, the Coastal and Valley Freshwater Marsh within the vicinity of Lewis Road over Calleguas Creek is limited to herbaceous vegetated strips whose widths ranges from approximately 0.6-23 meters (2 – 75 feet) and generally averages about 8 meters (25 feet) (Figures 3.7 to 3.11). Robust emergent vegetation (e.g. *Typha* sp. and *Salix* spp.) is an additional component of this habitat type found in two areas within the project corridor: 1) within the footprint of the proposed low water crossing for Ventura County Alternative 2, which is downstream of the Lewis Road Bridge, and 2) in the vicinity of the proposed Santa Barbara Street Bridge under Ventura County Alternative 3. The swathes of robust emergent vegetation line less disturbed areas of the Calleguas Creek channel and range between 12-25 meters (40-75 feet) wide.

Coastal and Valley Freshwater Marsh habitat at the confluence of Long Grade Canyon and Calleguas Creeks is of decreased quantity and quality. Approximately 13 meters (43 feet) of the pond and 2 meters (7 feet) of the channel fall within the right of way of Ventura County Alternatives 1 and 2. Although hydrophytic vegetation exists within these areas, it is scarce. Ruderal vegetation dominates the channel and along the bank.

Arroyo Willow Riparian Scrub is found within the project area of effect along the eastern edge of the agricultural channel northwest of the Hueneme Road Bridge. This habitat patch is of relatively high quality, but low quantity. Although the strip of vegetation is approximately 23 meters (75 feet) wide in the vicinity of the Hueneme Road Bridge, only 19 meters (63 feet) lies within the project right of way.

All of the anticipated impacts on waters of the U.S. and wetland habitats require a permit or authorization from the Army Corps of Engineers under Section 404 of the Clean Water Act. Impacts to perennial and intermittent streams also fall under the jurisdiction of the CDFG under Sections 1601-1603 of the Fish and Game Code (Streambed Alteration Agreements). Through the permitting process, both agencies typically require mitigation to offset losses of wetlands and waters of the U.S.

Implementation of any of the project alternatives would result in temporary and permanent impacts on wetland vegetation. Temporary impacts would result from construction within Calleguas Creek during the modification, removal, or construction of a new bridge. The installation of a low water crossing adjacent to the Lewis Road Bridge would be used as a detour during bridge construction. Permanent impacts would occur as portions of the Calleguas Creek and Long Grade Canyon confluence and the agricultural channel northwest of Hueneme Road Bridge would be filled to accommodate road widening or realignment in those areas. As discussed above under Effect Bio-1, invasive species could also become more prevalent in wetland areas due to construction related disturbance.

Caltrans Alternative 1. The VCFCD concrete channel that runs along the east side of Lewis Road would be converted into a reinforced concrete box with top under Bridge Variations A, B, and C. As this water of the U.S. already has a concreted bed and bank, and is located within a relatively urban area, the proposed modification is not expected to appreciably impact biological resources.

Caltrans Alternative 2. Impacts would be the same as under Caltrans Alternative 1.

Ventura County Alternative 1. 0.04 hectare (0.09 acre) of Coastal and Valley Freshwater Marsh would be temporarily impacted during construction of the widening of the 106-meter (350 feet) long Lewis Road Bridge over Calleguas Creek. Approximately 0.02 hectare (0.05 acre) of Freshwater Marsh would be lost at the confluence of Long Grade Canyon and Calleguas Creeks through infilling.

Ventura County Alternative 2. Approximately 0.06 hectare (0.16 acre), of Coastal and Valley Freshwater Marsh would be temporarily impacted during removal and construction of the 152-meter (500 feet) long Lewis Road Bridge. Of this, approximately 0.02 hectare (0.04 acre) is of the higher quality robust emergent vegetation. Approximately 0.02 hectare (0.05 acre) of Freshwater Marsh would be lost at the confluence of Long Grade Canyon and Calleguas Creeks through infilling.

Ventura County Alternative 3. 0.04 hectare (0.09 acre) of Coastal and Valley Freshwater Marsh would be affected by construction impacts for the proposed 48-meter (160 foot) bridge at Santa Barbara Street. At the proposed junction of Laguna and Lewis Roads, to the northwest of Hueneme Road Bridge, a net loss of approximately 0.02 hectare (0.04 acres) of Arroyo Willow Riparian Scrub may occur via infilling of the current agricultural channel, and 0.01 hectares (0.02 acres) would be impacted temporarily due to construction.

Impacts are greatest to Coastal and Valley Freshwater Marsh as this habitat is more extensive within the project corridor than Arroyo Willow Riparian Scrub. Alternative 2 has slightly greater acreage impacts to wetland vegetation. This is primarily due to the additional temporary impacts of the low water crossing that exists only for this alternative. Due to the quality of the wetland habitats impacted, Ventura County Alternative 3 has the greatest adverse effect.

Mitigation Measures. The following mitigation measures are required.

BIO-4 (a) Permanent and temporary construction related impacts to wetland vegetation shall be mitigated at a ratio of 1:1 (1 acre replaced for every acre removed) on site.

The amount of area needed to mitigate impacts to wetland habitat would vary per Alternative but would range between 0.05-0.08 hectares (0.13-0.21 acres) (Table 4.4). Wetland replacement should take place within the project corridor, when feasible, or directly offsite of the area. Control of existing exotic plants within and adjacent to the project area may be credited by CDFG and USACE as partial mitigation for wetland impacts.

Table 4.4 Impacts and Mitigation Needed per Wetland Habitat (hectares/acres)

Ventura County	Arroyo Willow Riparian Scrub	Coastal Valley and Freshwater Marsh	Total Area Needed
Alternative 1	0.00/0.00	0.05/0.13	0.05/0.13
Alternative 2	0.00/0.00	0.08/0.21	0.08/0.21
Alternative 3	0.02/0.05	0.04/0.09	0.06/0.15

BIO-4 (b) Construction of the low-water crossing adjacent to the Lewis Road Bridge and the infill of portions of the agricultural pond and channel at the Long Grade Canyon and Calleguas Creek confluence shall avoid the robust emergent vegetation (i.e. *Typha* sp.).

Robust emergent vegetation serves an important role in the wetland ecosystems. Within an active channel little vegetation can withstand the scouring by water and alluvium during flood events. Cattails, sandbar willow and larger perennial species are more successful than most due to their height, root systems and their robust structure and, therefore, tend to have a relatively extended presence compared to more herbaceous wetland species. Although less likely to be dislodged than herbaceous species, they also take longer to reestablish an area once removed. When present, this vegetation provides nesting opportunities for bird species such as the red-winged blackbird and is utilized for cover by local and migrating species.

Robust emergent vegetation is found approximately 34 meters (110 feet) from the Lewis Road Bridge and falls within the footprint of the low water crossing detour that would be used during removal and replacement of the bridge under Ventura County Alternative 2. At the confluence of the Long Grade Canyon and Calleguas Creeks this vegetation is also found right at the edge of the right of way. These areas should be avoided where feasible.

BIO-4 (c) The upper six inches of wetland soils that would be impacted within the project area shall be scraped prior to project construction, stockpiled on site, and respread after construction is completed. The preexisting grade and contour shall be restored.

Removal, stockpiling, and replacement of wetland soils and the restoration of existing grade and contour ensure that impacts to the current seed bank, soil properties, and hydrology within the project corridor are minimized.

Impact After Mitigation. Impacts to wetland soils would be less than significant after mitigation.

EFFECT BIO-5 Project implementation could impact a potential farmed wetland. This is considered a less than significant impact (L).

The farmland currently under cultivation along Lewis Road was considered as a potential wetland. Although hydric soils are found extensively within the project area of affect (USDA 1970), the relevant landforms associated with these hydric soils are not present within agricultural areas. Most notable is the "Alluvial Fan or Flat" landform. Historically present throughout the project area, alluvial fan/flat areas are currently limited to the Calleguas Creek channel. VCFCD banks on either side of Calleguas Creek protect adjacent farmland from a 50-year flood event. As a result, areas alongside the creek but outside of the VCFCD banks no longer experience frequent flooding or the deposition of alluvium. In addition, no riparian vegetation was observed during site surveys in areas outside of the Calleguas Creek, Long Grade Canyon and agricultural channels. Therefore, the only wetlands within the project corridor appear to be limited to the freshwater marsh and arroyo willow riparian scrub habitat.

If wetlands were determined to exist within the agricultural areas by NRCS, however, they would be considered a "prior converted cropland", and not a "farmed wetland" (McNeil May 29, 2000), as farming has occurred in the area prior to 1985 (Ventura County 1984). In addition, due to the modifications to local hydrology through farming since the 1940s and flood control within the project corridor, agricultural areas would not likely revert back to wetlands with the cessation of farming. If these areas are indeed "prior converted cropland" as they appear to be, then impacts to these areas would be less than significant. In 1993, the USACE issued a final regulation (58 FR 45008) clarifying that "prior converted cropland" is not subject to Section 404 jurisdiction.

Mitigation Measures. As "farmed wetlands" do not appear to exist within the project area of effect, and the "prior converted cropland" that may exist is not subject to Section 404 jurisdiction, no significant impacts are expected and no mitigation is required.

4.4.4 Cumulative Impacts

Agricultural and urban development of the Oxnard Plain has eliminated many of the natural communities that once existed within the lowland areas. Development of the adjacent CSUCI campus to the east has further modified the general vicinity. Due to the linear nature of the project, however, the contributions of the proposed project would be minimal to cumulative impacts to biological resources in the region. Through the widening of Lewis Road, long and narrows strips would be "shaved" from the edges of existing habitat, resulting in a relatively minor impacts to vegetation, wildlife and fisheries, special-status species, and wetlands. Mitigation measures have been proposed that will reduce these impacts within the project corridor, but they nonetheless are part of the cumulative loss of habitat in the area that has resulted in the regional decrease in wildlife populations. Regional programs such as the County Open Space and Conservation Element, greenbelt agreements, and etc., are in place to minimize cumulative impacts to biology.

4.5 Cultural and Historic Resources

This section is a summary of the Negative Historical Property Survey Report prepared August 2000 by archeologist Robert Wlodarski and Caltrans architectural historian Andrea Morrison, which is attached in Appendix K. These studies included a detailed literature search and a site reconnaissance of the project corridor.

Based on the above surveys, no important cultural or historical resources are known to exist along any of the alternative project corridors. However, because archaeological resources are not fully predictable by surface surveys, there is the possibility that previously unrecorded sensitive cultural resources may be impacted by onsite grading activities.. Mitigation would reduce impacts, however.

4.5.1 Methodology and Impact Thresholds

To determine impacts to cultural resources, it is necessary to assess the importance of the resources and the effects of the project on their value. The value of cultural resources in the project area is based on their importance to scientific-historic research, their importance to Native Americans, and their educational and community value for the general public

T o determine impacts to cultural resources, it is necessary to assess the importance of the resources and the effects of the project on their value. The value of cultural resources in the project area is based on their importance to scientific-historic research, their importance to Native Americans, and their educational and community value for the general public.

The CEQA Guidelines state that the project may have a significant effect on the environment if the project may cause damage to an important archeological resource. For the purposes of CEQA, an important archaeological resource is defined as one which:

- Is associated with an event or person of:
  - Recognized value in California or American History; or
  - Recognized scientific importance in prehistory;
- Can provide information which is both of demonstrable public interest and useful in addressing scientifically consequential and reasonable archaeological research questions;
- Has special or particular quality such as oldest, best example, or last surviving example of its kind;
- Is at least 100 years old and possesses substantial stratigraphic integrity; or
- Involves important research questions that historical research has shown can be answered only with archaeological methods.

Significant effects from a development project include those that disrupt or adversely affect a prehistoric or historic site, or, a property of historical or cultural significance to a community, ethnic, or social group.

4.5.2 Project Impacts and Mitigation Measures

Effect CR-1 No important cultural resources have been identified along the project corridor for any of the potential alignment alternatives. However, project implementation under any of the alignments has the potential to impact presently unknown and potentially valuable cultural resources. With mitigation, this is considered a less than significant impact (M) for all alternatives and associated variations.

The Negative Archaeological Survey Report (NASR) concluded that no cultural resources were identified within the area of potential effect (APE) (the proposed project right-of-way and/or areas of direct ground disturbance). Extensive disturbances have occurred to the entire APE in the form of road construction, and maintenance, agricultural activities since the late 1800s, channelization of Calleguas Creek, other water related channels and activities, access roads and junction roads connecting to Lewis Road, and landscaping. The project will not affect natural soils, since the areas proposed for modification have been sufficiently altered due to prior man-made impacts since the turn-of-the-century. Therefore, there is minimal potential for the encountering prehistoric or historic archaeological materials with the APE. No further archaeological work will be necessary unless project plans change to include unsurveyed areas.

Mitigation Measures. The following mitigation measure is required to address potential cultural resources impacts that could occur as a result of project implementation along any of the alternative alignments.

CR-1 If any cultural resources are encountered during construction, then procedures established by the Advisory Council on Historic Preservation concerning the protection and preservation of historic and cultural properties shall be followed. In this event, construction in that area shall halt until a qualified archaeologist evaluates the nature and importance of the find based on policies and guidelines established by the Advisory Council on Historic Preservation concerning the Protection and Preservation of Historic and Cultural Properties (36 CFR 800).

CR-2 If human remains are unearthed, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has determined origin and disposition of the findings pursuant to Public Resources Code Section 5097.98. If the remains are determined to be of Native American descent, the coroner has 24 hours to notify the Native American Heritage Commission (NAHC).

Impact After Mitigation. Implementation of the project at any of the candidate sites would have a less than significant impact on cultural resources.

4.5.3 Cumulative Impacts

Build-out of the proposed project in conjunction with development in the greater Ventura County area has the potential to cumulatively impact cultural resources. However, cultural resource issues are typically addressed on a case-by-case basis and where necessary, mitigation measures are required to avoid or minimize impacts resulting from individual projects. However, there are no cultural resource impacts that are currently foreseeable as a result of this project. Therefore, no cumulative impacts to cultural resources are anticipated to result from the proposed project or in conjunction with other projects in the area.

4.6 Drainage and Hydrology

Ongoing use of the proposed four-lane road would introduce petroleum hydrocarbons, heavy metals, rubber and other vehicular pollution byproducts to Calleguas Creek via runoff from the widened roadway. Installation of the stormwater control and filtering system into road design, recommended as a mitigation measure herein, would reduce the amount of roadway pollution flowing into the creek below existing levels. Therefore, the proposed project would result in a residual beneficial impact to creek water quality. Construction of the proposed project could result in a temporary increase in sediment and pollutant runoff from the site. Compliance with the National Pollutant Discharge Elimination System requirements would reduce this impact. Portions of the project site are located within the federally designated 100-year flood zone. Incorporation of appropriate hydraulic design measures into final project design shall be implemented in order to meet the design year flooding characteristics. The proposed project could result in increased surface runoff from the site with a subsequent increase in offsite flooding. These impacts are considered less than significant with mitigation.

4.6.1 Methodology and Impact Thresholds

A significant impact (CEQA)would result if the proposed project would:

- Result in a change in the water quality of offsite drainages or groundwater that would prevent the achievement of water quality goals or objectives for this drainage area.
- Result in uncontrolled discharge of sediment or other pollutants.
- Increase surface water runoff or water related hazards such as flooding.

4.6.2 Project Impacts and Mitigation Measures

Effect D-1 **The proposed project could reduce the quality of surface water flowing to Calleguas Creek. This is considered less than significant with mitigation (M).**

Ongoing use of the proposed four-lane road would introduce petroleum hydrocarbons, heavy metals, rubber, and other vehicular pollution byproducts to Calleguas Creek via runoff from the widened roadway. This increase in roadway runoff could result in degraded downstream water quality, thereby affecting riparian plants and resident and migrating animals. In addition, contaminated runoff could degrade surface and subsurface water quality for downstream domestic, agriculture and industrial uses.

Mitigation Measures. The following measure is recommended for all project alternatives and associated variations for the bridge overhead in order to reduce pollutant concentrations in roadway runoff and ensure long-term functionality of the runoff filtration devices.

D-1 (a) Final project design shall include a stormwater control and filtering system along the length of the roadway to capture and treat all first flush runoff from the roadway prior to discharge to Calleguas Creek.

D-1 (b) A maintenance program for the stormwater control and filtering system shall be developed in accordance with the California BMP handbook to eliminate the potential for odor problems, provision of mosquito habitat, and to prevent clogging.

D-1 (c) The County shall limit the use of pesticides, herbicides, and inorganic fertilizers applied to roadway landscaping or weed abatement to those quantities necessary to treat specific problems.

Impact After Mitigation. Treatment of the first flush stormwater runoff along with the required maintenance plan would reduce water quality impacts to the Calleguas Creek. Because no water quality controls are currently in place, the implementation of the proposed pollutant control system would result in a potentially beneficial impact on water quality within Calleguas Creek.

Effect D-2 **Construction of the proposed project could result in the runoff of sedimentation and other pollutants that would affect local drainages and subsurface aquifers, and thus, stream use. However, implementation of BMPs, as required under the NPDES regulations, would reduce impacts to less than significant (L).**

The proposed project would be required to comply with the National Pollutant Discharge Elimination System regulations for surface discharge by acquiring a general permit or a waiver to meet the water quality objectives for Storm Discharge Permits from the Regional Water Quality Control Board.

Construction of the proposed project could increase pollutant loading to offsite drainages and aquifers as materials from the site (such as oil and grease from construction vehicles, and sediment from construction activities) are transported into the drainages by stormwater runoff and deep percolation. As a result, impacts to wildlife habitat, warm freshwater habitat, and municipal and domestic water supplies, could occur.

Because the project site occupies more than one acre, a National Pollution Discharge Elimination System (NPDES) permit would be required. As part of this permit, implementation of a Stormwater Pollution Prevention Plan (SWPPP) would be required. The SWPPP must contain specific Best Management Practices (BMPs), which involve the proper handling, storage and disposal of materials to prevent pollutants from entering storm drains and channels. Because no new point discharges are proposed by the project, the areawide discharge permit would regulate stormwater runoff.

The Ventura County Flood Control District (VCFCD) requires that the construction contractor be responsible for implementation of a SWPPP as part of its standard specifications. The contractor is responsible for preparing a SWPPP in accordance with the Ventura Countywide Stormwater Quality Management Program, National Pollutant Discharge Elimination System Permit No. CAS063339 and the County Ordinance No. 4142. Also, the SWPPP will also need to comply with the requirements of the State General Permit for Stormwater Discharges Associated with Construction Activity, NPDES General Permit No. CAS000002.

The SWPPP will need to be approved by the VCFCD and a Notice of Intent regarding the General Permit will need to be sent to the State Water Resources Control Board prior to construction activity.

Mitigation Measures. No mitigation beyond implementation of the required SWPPP as per the NPDES is necessary.

Impact After Mitigation. Effective implementation of a SWPPP during construction would reduce the potential for water quality impacts of construction to a less than significant level.

Effect D-3 **The County portion of the project site is within the 100-year flood zone as indicated by the Federal Flood Insurance Rate Maps. This is considered a less than significant impact (L) if the Calleguas Creek flood channel is maintained in its current configuration. It is noted however that if Calleguas Creek is improved to contain the 100-year storm event, this could adversely affect Ventura County Alternative 1 (existing bridge widening) that may require redesign or replacement of the bridge at that time. This is considered to be a potentially significant impact of the future flood control improvement project and not a specific effect of this project. As such, no mitigation is necessary at this time.**

As shown in Figure 3.12, the County portion of the project site would be located within the 100-year flood zone, as identified by FEMA, for Calleguas Creek. This portion of the project includes both the Lewis Road Bridge as well as the widened roadway. None of the project alternatives would affect stream locations or meander patterns. Project construction could result in the decreased exposure of the Lewis Road Bridge to flood flows, however.

The height of the existing bridge is above the 100-year flood elevation because the 100-year flood flows are not currently contained within the existing banks of Calleguas Creek. Therefore, while the bridge would not flood during the 100-year storm event, portions of the widened roadway would be subject to periodic flooding during 100-year storm events. The proposed project is not subject to existing flood insurance requirements, which require that all new habitable structures be elevated above the 100-year flood elevation. Since the roadway does not meet the definition of a habitable structure, potential flooding is not considered an impact.

Though no plans for the channelization of Calleguas Creek currently exist, if the creek were to be channelized it could result in flooding of the Lewis Road Bridge. Therefore, the following discussion pertaining to potential flooding impacts to the bridge, in the unplanned event that the creek was channelized.

Caltrans Alternatives 1 and 2. The Caltrans Alternatives and associated Bridge Variations would not affect flooding in the project area.

Ventura County Alternative 1. Ventura County Alternative 1 includes the widening of the existing Lewis Road Bridge. This alternative does not include raising the elevation of the existing bridge. If Calleguas Creek were to be channelized, the restriction of water flows within the channel during a 100-year flood event would increase the elevation of this waterway and could potentially result in flooding of the Lewis Road Bridge at its current elevation.

Ventura County Alternative 2. The restriction of 100-year storm flows within a channelized Calleguas Creek would increase the elevation of flood flows, as discussed above. This alternative is designed to accommodate the increase in flood elevations that would occur as a result of channelization as it includes reconstruction of the entire Lewis Road Bridge.

Ventura County Alternative 3. This alternative would result in similar impacts as those discussed for Ventura County Alternative 2.

Mitigation Measures. Provided that the Calleguas Creek channel is maintained in its current configuration, no mitigation measures are required. In the event that Calleguas Creek is improved to contain 100-year storm flows bridge redesign or replacement may be required for Ventura County Alternative 1 at some future time. However, since this channel improvement is not planned, this measure is not necessary at this time and would be a future requirement of any subsequent channel improvement project.

Impact After Mitigation. Impacts related to flooding of the widened roadway and the Lewis Road Bridge would be less than significant without implementation of mitigation.

Effect D-4 **Implementation of the proposed project could result in increased surface water runoff and flooding, which could affect the regulatory floodway. In addition, the proposed Lewis Road Bridge over Calleguas Creek improvements for any of the Ventura County Alternatives, if not properly designed, could be adversely affected by storm flows within the Calleguas Creek. This is considered less than significant with mitigation (M).**

The proposed roadway consists of roughly 7.69 to 10.9 hectares (19 to 27 acres) of new paved road and shoulder improvement. The proposed roadway width ranges from 18 to 31.7 meters (60' to 104') from shoulder to shoulder. Roadway filtration devices, as required in Mitigation Measure D-1 (a), would be used to intercept runoff to maintain or minimize any changes to the existing watershed runoff characteristics. However, the increase in paved area could result in an increase in the runoff quantities of 10-year and 100-year storms and could cause storm flows to exceed the capacity of existing stormwater facilities in the area, including the existing VCFCD flood control channel adjacent to the segment of the roadway between Dawson Place and Pleasant Valley Road. In addition, impacts to downstream flows could also result in off-site flooding.

In addition, storm flows in Calleguas Creek have the potential to damage or cause maintenance impacts for the Lewis Road Bridge if appropriate flood considerations are not incorporated into project design.

As such, the proposed project could be adversely affected by storm flows in Calleguas Creek and has the potential to result in impacts to downstream properties and existing stormwater control facilities.

Mitigation Measures. The following mitigation measures would be required to reduce impacts related to downstream flooding and increased surface runoff.

D-4 A detailed hydrological study shall be prepared for the final alternative selected. Based on the results of this analysis, drainage design for the project corridor shall re-route storm flows such that local peak flows are not increased and no additional flooding is created by the new drainage system. This may include delivery of flood flows into the Calleguas Creek system prior to the peak event, or the routing of storm flows into the a suitably sized detention or retention basin. This study shall also address flooding characteristics of the Calleguas Creek and establish appropriate bridge design measures to mitigate against scouring and other flood related impacts to the bridge structure. Appropriate coordination with VCFCD and FEMA shall occur.

Impact After Mitigation. Effective implementation of all measures identified in the detailed hydrological study required above would reduce the potential runoff and flooding impacts to a less than significant level. No revisions to the regulatory floodway would be expected with the above mitigation.

4.6.3 Cumulative Impacts

Existing development and future growth within the Calleguas Creek Watershed could result in decreased water quality and continued flooding and erosional problems along this

drainage. As previously stated, watershed planning efforts are being directed at resolving the current problems that exist in this drainage. Future projects within the Calleguas Creek Watershed are also subject to the requirements of the state and federal Clean Water Acts. Such requirements would include the use of Best Management Practices for construction and operations and discharge requirements for point sources. The magnitude of cumulative impacts will be dependent on the success of this continuing planning effort and effective implementation of the water quality control requirements. However, containing and capturing surface stormwater runoff prior to entering Calleguas Creek, as required in Mitigation Measure D-1 (a), would reduce the amount of petroleum hydrocarbons, heavy metals, rubber that would enter the creek from the road surface from current levels. Therefore, the proposed project would not be expected to contribute to cumulative impacts with regards to water quality.

In addition, cumulative development within the floodplain has the potential to result in increased stormwater flows and flooding. Depending upon management strategies employed upstream, cumulative development has the potential to result in flooding impacts on the area. However, regional planning efforts, together with site-specific flood control planning, such as onsite detention, are being used to minimize the effects of cumulative development on the Calleguas Creek floodplain.

4.7 Geologic Hazards

This section addresses the potential impacts associated with geologic and soil conditions in the immediate site vicinity. Mitigable impacts related to geologic and soil conditions have been identified for the project corridor. Future seismic ground accelerations along regional faults, ground displacement along the Camarillo and Bailey faults, seismically induced liquefaction of soil, and expansive soils have been identified as potentially impacts. Standard mitigation measures described herein and other measures to be developed as part of more detailed design studies shall be implemented, as necessary, in order to reduce these effects to less than significant levels (CEQA).

4.7.1 Methodology and Impact Thresholds

The County of Ventura has established methodology and impact thresholds for most geological conditions. The Ventura County Initial Study Assessment Guidelines (November 1992) contains guidelines to evaluate ground shaking, fault rupture, liquefaction, slope stability, expansive soils, and subsidence.

Ground Shaking. An impact is considered significant when considering development of high-rise structures, critical facilities and projects of unique design not covered by the ordinary provisions of the Ventura County Building Code.

Fault Rupture. An impact is considered significant when potential fault rupture is determined to affect a site and either cannot be mitigated or the mitigation is questioned by the Ventura County Public Works Agency.

Seismically-Induced Liquefaction. An impact is considered significant when the site is definitely susceptible to liquefaction that poses a hazard that cannot be mitigated to a less than significant level.

Slope Instability. An impact is considered significant if the site is affected by unmitigable landslide or mudflow hazards.

Expansive Soil. An impact is considered significant for any unique structures known to be particularly susceptible to soil expansion on sites with a known expansion index of 91 or higher (Expansion Index = high to very high); or for pavement areas with subgrade soils whose "R" value is below 15.

Subsidence. An impact will be considered significant if the project will cause or be subject to an unmitigable subsidence hazard.

4.7.2 Project Specific Impacts and Mitigation Measures

Effect GH–1 Future seismic events in the project area could produce strong ground shaking along the any of the alternative road/bridge/overhead alignments. Strong ground shaking has the potential to damage bridges, overheads, and embankments. The level of earthquake ground shaking is consistent with other portions of Ventura County. This is considered less than significant with mitigation (M).

Faults generally produce damage in two ways: ground shaking and surface rupture. Seismically induced ground shaking covers a wide area and is greatly influenced by the distance of the site to the seismic source, soil conditions, and depth to groundwater. Surface rupture is limited to very near the fault. Other hazards associated with seismically induced ground shaking include earthquake-triggered landslides and tsunamis.

Recent seismic hazard analyses by Caltrans (Mualchin, 1996) indicate that the site could experience a horizontal ground acceleration between about 0.5g to 0.6g. In comparison, recent seismic hazard analyses for the southern California area by the CDMG (1999), indicate that the Camarillo area could experience a horizontal ground acceleration in the range of 0.7g to 0.8g (10 percent probability of exceedance in 50 years). A reasonable design earthquake magnitude is between 6.5 and 7.5, based on Mualchin (1996).

Mitigation Measures. The following measure is required to mitigate the project effects.

GH-1 Detailed geotechnical and seismic studies shall be performed prior to final roadway design. Such studies shall evaluate the level of ground shaking anticipated for the project corridor and identify design measures that are needed to comply with Uniform Building Code and Caltrans building/design codes. All measures identified in subsequent design studies shall be implemented.

Impact After Mitigation. With implementation of the above mitigation measure, and of the recommendations contained in the geotechnical report prepared for the proposed project, impacts would be reduced to a less than significant level.

Effect GH–2 The northern portion of the proposed road widening project crosses the Earthquake Hazard Zone for the Camarillo Fault and may be subject to fault rupture. In addition, a portion of Lewis Road also parallels the postulated Bailey Fault. The existence/location of Bailey fault is uncertain. Movement along either fault zone could damage the existing and proposed improvements. This is considered less than significant with mitigation (M) for all project alternatives.

Previous geotechnical studies in the project area have documented fault offsets of about one meter on the Simi-Santa Rosa fault. Ground movement of one meter has the potential to damage or possibly destroy a overhead that crosses over the fault. Normally mitigation for fault rupture is to avoid the fault zone by establishing an appropriate setback. However, since the road alignment crosses the Camarillo fault zone and possibly the postulated Baily fault zone, it may not be possible to establish an appropriate setback from these faults.

Bridge Variation A for Caltrans Alternatives 1 and 2 would widen the existing Union Pacific Rail Road (UPRR) overhead. This variation may not be sufficient to avoid substantial impacts due to rupture conditions if the overhead spans an existing fault. In the event that rupture conditions are determined to exist, Variation B (removal and replacement of the overhead) or Variation C (construction of a separate twin structure) for Caltrans Alternatives 1 and 2 would be the only feasible variations as they would be designed to withstand fault rupture conditions per Caltrans design standards.

Mitigation Measures. The following mitigation measure is required for the proposed project:

GH–2 Subsequent design studies shall evaluate the location and quantify the seismic risk associated with the Camarillo and Bailey faults. All seismic design recommendations contained in subsequent geotechnical and seismic design studies shall be implemented. Resulting recommendations shall include an analysis of which Bridge Variation is preferable for Caltrans Alternatives 1 and 2.

Impact After Mitigation. With implementation of the above mitigation measure impacts associated with fault rupture would be reduced to a level consistent with current design thresholds for similar structures. These impacts are therefore considered less than significant.

Effect GH–3 There is a potential for liquefaction of granular soil lenses beneath the road alignment. This is considered less than significant with mitigation (M) for all of the proposed project alternatives and associated bridge variations.

Existing data from the project vicinity suggests that groundwater may occur within 20 feet or less of the ground surface along much of the project alignment and that low blowcount soils may exist within the upper 50 feet of the soil column. Review of Tinsley et al. (1985) indicates that the relative liquefaction susceptibility for the project area ranges from moderate to high. Impacts that could result form liquefaction typically include settlement of structures

(bridges, overheads, and roads), cracking of pavement and lateral spreading toward areas of low relief, such as Calleguas Creek.

Mitigation Measures. The following mitigation measure is required for the proposed project.

GH-3 Perform geotechnical studies to evaluate site-specific conditions and liquefaction potential along the project corridor. Design and implement measures needed to comply with current UBC and Caltrans building/design codes to reduce settlement associated with liquefaction.

Impact After Mitigation. With implementation of the above mitigation measure, impacts associated with liquefaction would be reduced to a less than significant level.

Effect GH- 4 There is a potential for erosion and possibly seismically-induced settlement or failure of fill slopes along the corridor. This is considered less than significant with mitigation (M) for all of the project alternatives and associated bridge variations.

Slope instabilities can be the result of naturally occurring mudslides, landslides, or rockfalls, or of man-made disturbances such as undercutting natural slopes or improper construction of cut or fill slopes. Proposed improvements are located in areas of low relief with no nearby steep native slopes. Proposed fill slopes are generally less than about 10 meters (30 feet) high. No landslides were observed along the project corridor, and the likelihood of seismically induced landslides is remote. However, if not properly constructed manufactured slopes could become unstable and could create slope stability problems.

Mitigation Measures. With the implementation of the above mitigation measures identified for GH-1, GH-2, and GH-3, and standard measures required in the Ventura County Grading Ordinance, no further mitigation is required to mitigate potential slope stability impacts.

Impact After Mitigation. With implementation of the above mitigation measures, potential impacts associated with slope stability would be less than significant.

Effect GH–5 Fine-grained silt and clay soils along all of the alternative road alignments have the potential to be expansive. This is considered less than significant with mitigation (M) for all of the project alternatives and associated bridge variations.

The presence of potentially expansive soils within the road widening corridor has the potential to effect the subject project. The wetting/drying cycle causes fine-grained soils to expand and contract which has the potential to cause damage such as cracking to asphalt pavement.

Mitigation Measures. With the implementation of the above mitigation measures identified for GH-1, GH-2, and GH-3, and standard measures required in the Ventura County Grading Ordinance, no further mitigation is required to mitigate potential impacts associated with expansive soils.

Impact After Mitigation. With implementation of the above mitigation measures, potential impacts associated with expansive soils would be less than significant.

Effect GH–6 According to the geologic review, placement of fill could cause an unknown but relatively minor amount of settlement in the vicinity of road alignment. Regional subsidence is not likely. Therefore, potential impacts related to soil settlement and subsidence are considered less than significant (L) for all of the alternative alignments and associated bridge variations.

Given the nature of the proposed roadway improvements and soil and geologic conditions in the project vicinity, soil settlement and subsidence are not expected to adversely affect the subject project provided that standard design measures are used and construction monitoring practices employed.

Mitigation Measures. With the implementation of the above mitigation measures identified for GH-1, GH-2, and GH-3, and standard measures required in the Ventura County Grading Ordinance, no further mitigation is required to mitigate potential settlement/subsidence impacts.

Impact After Mitigation. With implementation of the above mitigation measures, potential impacts associated with settlement/subsidence would be less than significant.

4.7.3 Cumulative Impacts

The proposed Lewis Road widening project along with other proposed projects in the vicinity such as the California State University, Channel Islands campus (Rincon, June 1998) and development within the City of Camarillo would expose additional people and property to seismically related hazards. If subsequent new development is properly designed, the project would have a less than significant cumulative impact related to future seismic ground accelerations along regional faults, fault rupture, ground displacement along the Camarillo and Bailey faults, seismically induced liquefaction of soil, slope failure, settlement, and expansive soils.

4.8 Hazardous Materials

This section is based on the findings of an Initial Site Assessment (ISA) performed by Rincon Consultants, Inc. and follow-up limited soil investigations completed by Weston (reports dated April 2000 and June 2000). Based on these technical reports and as discussed in Section 3.8, Hazardous Materials, several areas of concern were determined to be non-issues for the project corridor. Asbestos Containing Materials (ACM) and Lead Based Paints (LBP) were determined not to be components of the bridge and overhead structures onsite. Encountering contaminated ground or surface waters are also not anticipated.

Several issues of concern were identified for the project area. Lead levels along the Caltrans portions of the project and pesticides identified in the Ventura County portion of the project may require special handling during construction in order to minimize impacts on human

health and safety. Lead and chromium content in existing paint striping was also identified as less than significant with mitigation.

The ISA identified twenty-eight properties along the project corridor that have involved the use, storage, or past spillage of hazardous materials. Based upon records reviewed, four abandoned oil wells and an underground natural gas pipeline were identified along the Ventura County Segment of the project corridor. Given the limited right of way acquisition required for the project, it is unlikely that these past activities on adjoining properties would impact the proposed project. However, mitigation measures are suggested to avoid potentially significant effects that could result if such facilities have caused contamination to occur within the project corridor. As a result, effects associated with the documented and potential presence of hazardous materials are considered less than significant with mitigation.

4.8.1 Methodology and Impact Thresholds

The methodology used in this assessment included contact with regulatory authorities and review of readily available information sources. As described in Section 3.8, Hazardous Materials, this included limited subsurface testing by Roy F. Weston, Inc. to assess the potential presence of hazardous materials and contamination along the project corridor. Impacts are considered significant if the project activities are anticipated to result in the exposure of people and environmental resources to adverse levels of contamination, or, if contaminated conditions could adversely impact future development as a result of costly assessment and remediation.

4.8.2 Project Specific Impacts and Mitigation Measures

Effect HM-1 Soil testing identified the presence of lead concentrations along the Caltrans segments of the corridor that will require special handling during construction. This is considered less than significant with mitigation (M). Lead concentrations were also identified along the Ventura County segment of the corridor but at concentrations that will not require any special management practices and are therefore considered less than significant (L) for this segment.

Soils exceeding hazardous waste thresholds that are disturbed during construction along the Caltrans Segment must be either hauled from the site and properly disposed of in a Class I disposal facility, or handled in accordance with the requirements of the Caltrans/Department of Toxic Substances Control (DTSC) variance. The new variance was issued to Caltrans on September 22, 2000 in order that soils contaminated by aerially deposited lead, otherwise regulated as hazardous waste, could be reused for fill along Caltrans rights-of-way while mitigating potential threats to human health and the environment. Depending on the concentrations of total or soluble lead, affected soils to be reused may be placed beneath a one-foot thickness of clean soil, placed beneath a paving cap, or may still require disposal off-site. The criteria and respective handling practices for soils affected with aerially deposited lead are summarized in Table 4.5 on the following page. A copy of the DTSC fact sheet discussing the variance is included in Appendix J.

The lead results for the Caltrans Segment indicate that mitigation measures will be required along that portion of the corridor (See Table 3.9) (Weston, 2000). Impacts and mitigation for Bridge Variations A, B, and C of Caltrans Alternatives 1 and 2 are expected to be the same.

The lead results for the County Segment indicate no mitigation is necessary for the Ventura County portion of the corridor (See Table 3.10) (Weston, 2000).

Table 4.5 Caltrans/DTSC Variance Handling Criteria for Aerially Deposit Lead

Extractable Lead	Total Lead	Allowable Handling Method
Less than 0.5 mg/L	Less than 350 mg/kg	Soil may be reused as fill provided it is placed at least five feet above the maximum water elevation and covered with one foot of non-hazardous soil.
Greater than 0.5 mg/L and less than 50 mg/L	Less than 350 mg/kg	Soil may be reused as fill provided it is placed five feet above the maximum water table elevation and covered with pavement or similar cap.
Greater than 50 mg/L	Greater than 350 mg/kg	Soil must be hauled off-site, manifested, and disposed of in a permitted Class I disposal facility as hazardous waste.

Source: Weston, 2000
Note: Extractable lead refers to the Soluble Threshold Limit Concentration (STLC), using deionized water extractant.

Mitigation Measures. The following measures are required for both of the Caltrans alignment alternatives:

HM-1(a) All soils to be excavated or disturbed along the Caltrans Segment that were identified as containing hazardous waste concentrations of lead shall be properly handled during construction. These soils shall be either transported off-site, manifested, and disposed of at a Class I disposal facility as a hazardous waste; or segregated and managed in accordance with all provisions of the Caltrans/DTSC variance for re-use on-site. All provisions of the variance shall be incorporated into the design and specifications, and implemented during construction. Portions of the Caltrans Segment with lead contaminated soil requiring mitigation are summarized in Table 4.6.

Table 4.6 Lead Soil Mitigation, Caltrans Segment

Approximate Location		Removal Depth (m)	Mitigation
West Side	STA. 210+40 to STA. 211+00	0.305	Remove soil. Load and transport soil off-site accompanied by hazardous waste manifest. Dispose of in permitted Class I disposal facility.
West Side	STA. 215+60 to STA. 216+60	0.305	Re-use soil as compacted fill. Place 1.5 meters above water table. Place beneath 0.305 meters of clean fill.
West Side	STA. 216+60 to STA. 217+65	0.61	Re-use soil as compacted fill. Place 1.5 meters above water table. Place beneath 0.305 meters of clean fill.
	STA. 206+50 to STA. 207+50	0.61	Re-use soil as compacted fill. Place 1.5 meters above water table. Place beneath 0.305 meters of clean fill.
	STA. 209+80 to STA. 210+80	0.305	Re-use soil as compacted fill. Place 1.5 meters above water table. Place beneath 0.305 meters of clean fill.

Approximate Location	Removal Depth (m)	Mitigation
STA. 211+80 to STA. 212+80	0.305	Re-use soil as compacted fill. Place 1.5 meters above water table. Place beneath 0.305 meters of clean fill.
STA. 216+00 to STA. 217+00	0.305	Re-use soil as compacted fill. Place 1.5 meters above water table. Place beneath 0.305 meters of clean fill.

Source: Weston, 2000

The estimated linear extent of lead contamination listed in Table 4.6 shall be used in the development of the design and specifications for the proposed earthwork. The cut/fill estimate for work areas with lead-contaminated soils must be established to determine the volume and define the locations on excavation plans. Construction specifications should include Caltrans' Final Draft Specifications Standard Special Provision, Section 5-1, "Aerially Deposited Lead General" and Section 10-1, "Earthwork Material with Aerially Deposited Lead."

HM-1 (b) The contractor shall prepare a project specific Lead Compliance Plan to prevent or minimize worker exposure to lead contamination in soil. A Health and Safety Plan (HASP) shall also be implemented. Prior to beginning grading activities, the areas should be cleared and grubbed. Water should be applied to mitigate generation of soil dust. The vegetation and organic debris are presumed not to be adversely affected by concentrations of lead and may be hauled off-site and disposed of as non-hazardous organic waste. Removal of organic materials (such as roots) present within the soil by raking or other hand methods so that soils are suitable for fill (from a geotechnical standpoint) should utilize personnel properly trained and medically monitored for work with hazardous materials per Title 29 of the Code of Federal Regulations (29 CFR), section 1910.120.

Impact After Mitigation. With the implementation of the measures identified above, impacts associated with lead contaminated soil would be less than significant.

Effect HM-2 Lead and chromium in the existing thermoplastic paint stripes and pavement markers along the length of the project corridor may be impacted during delineation of the roadway. This is considered less than significant with mitigation (M) for both the Ventura County and Caltrans segments.

Mitigation Measures.

HM-2 Lead and chromium in the existing thermoplastic paint stripes and pavement markers shall be handled, removed, and disposed of in strict accordance with Caltrans standards.

Impact After Mitigation. With the implementation of the measures identified above, impacts associated with lead contaminated soil would be less than significant.

Effect HM-3 Limited soil testing identified the presence of pesticide concentrations along the Ventura County Segment of the corridor that will require special management. This is considered less than significant with mitigation (M) for all of the alternatives being considered for this

segment. Pesticide contamination was not identified as a significant issue in the Weston report for the Caltrans Segment of the project corridor and is therefore considered to be a less than significant impact (L).

Evident potential sources for pesticide contamination were not observed along the Caltrans Segment of the corridor. Therefore, the possibility of impacts to soils from pesticides for Bridge Variations A, B, and C of Caltrans Alternatives 1 or 2, were considered to be unlikely (Weston, 2000). Considering this, no sampling for pesticides was conducted along the Caltrans Segment.

For the County of Ventura Alternatives 1 and 2, shallow soils at the two locations where DDD/DDE/DDT concentrations were detected at concentrations above hazardous waste thresholds should be removed and transported off-site for disposal at a permitted Class I disposal facility. Prior to excavating the affected soils, further sampling at discrete distances surrounding the elevated samples should be conducted to characterize the extent of the higher concentration soils at each of the two locations.

For the proposed Ventura County Segment Alternative 3, no soil sampling was conducted. However, it was concluded that it is likely that some soils along this alignment contain residues of DDT and its daughter products, DDD and DDE, in similar concentrations to those detected elsewhere along the alignments for Alternatives 1 and 2 (Weston, 2000). .

The possible presence of pesticide contamination is therefore considered to be a potential impact for any of the alignment alternatives considered for the Ventura County Segment of the project (Weston, 2000).

Mitigation Measures. The following measures are required for all of the Ventura County Alternatives. According to recommendations contained in the Weston report, no special measures for management of pesticide contamination are required for any of the Caltrans Alternatives or associated Bridge Variations.

HM-3 The recommended mitigation measures are summarized in Table 4.7. The estimated linear extent to be removed as shown in the table is based on half the distance in either direction between the high concentration samples and the nearest lower concentration sample. The actual extent of soils to be removed is likely to be somewhat less, once the locations have been characterized.

Table 4.7 Pesticide Soil Mitigation – Ventura Co. Segment

	Approximate Extent	Removal Depth (ft)	Mitigation
West Side	STA. 182+05 to STA. 183+55	1.5	Conduct additional sampling at radii of 10 to 40 feet around original sample to characterize extent of high concentration soils. Remove soil. Load and transport soil off-site accompanied by hazardous waste manifest. Dispose of in permitted Class I disposal facility.
East Side	STA. 132+00 to STA. 137+00	1.5	Conduct additional sampling at radii of 10 to 40 feet around original sample to characterize extent of high concentration soils. Remove soil. Load and transport soil off-site accompanied by hazardous waste manifest. Dispose of in permitted Class I disposal facility.

Impact After Mitigation. With the implementation of the measures identified above, impacts associated with pesticide-contaminated soil would be less than significant. No pesticide impacts were identified along the Caltrans Segment of the proposed project.

Effect HM-4 Based on the Initial Site Assessment (ISA), 28 properties located along the project corridor use, store, or have reported past spillage of hazardous materials. The majority of these properties are located along the Caltrans Segment of the proposed corridor. Field reconnaissance performed by Weston (2000) in conjunction with sampling indicated that due to topographic differences and distances between areas of potential concern and the proposed limits of construction, the likelihood of these properties having affected soils that will be encountered during the proposed construction is considered to be low. Therefore, the presence of affected properties in the vicinity of the proposed corridor in itself is a less-than-significant impact (L).

While field reconnaissance conducted during the ISA did not find any obvious signs of surface contamination within the project right of way, the records search indicated that 28 properties along the project corridor use, store, or have had past spillage of hazardous materials. Based on the results of the shallow soil sampling conducted by Weston, no sign of environmental impacts was found in any of the soils sampled along the alignment except for a slight hydrocarbon odor noted below one foot in one boring. The sample from 1.5 feet at that same location did not contain detectable petroleum hydrocarbons, suggesting that the affected material occurred only within a very restricted depth interval, or the apparent odor was due to other factors.

Analyses of shallow soils for total recoverable petroleum hydrocarbons (TRPH) yielded detectable, low concentrations ranging to a maximum of 49 mg/kg in five of seven samples. Weston concluded that the detections may be partially attributable to diffuse occurrences of asphalt material or decomposed organic material and that the results do not indicate any substantial petroleum hydrocarbon impacts to shallow soils in the locations sampled.

Mitigation Measures. No mitigation is required for any of the project alternatives or associated variations of the bridge overhead.

Impact After Mitigation. As no mitigation is required, impacts remain less than significant.

Effect HM-5 The ISA identified four abandoned oil wells and a pipeline located along or in the immediate vicinity of the project corridor. Discovery of unanticipated contamination during construction, however, could expose construction workers to adverse health conditions. This is considered less than significant with mitigation (M).

The ISA identified the possible presence of abandoned oil wells or a pipeline within the project construction area. Sampling by Weston in the area of the pipeline found no associated hydrocarbon contaminates (Weston, September 2000). However, discovery of unanticipated contamination during construction could expose construction workers to adverse health conditions.

Mitigation Measures. The following measures are required for all of the Ventura County alignment alternatives. While the ISA did not identify the possible presence of abandoned oil wells along the Caltrans Segment, the following measures are suggested as a precaution to avoid the unanticipated discovery of contamination related to historic oil and gas operations in the project area.

HM-5 Appropriate subsurface testing and/or contingency planning should be in place to manage the unanticipated discovery of petroleum hydrocarbon contamination.

Impact After Mitigation. With the implementation of the measure identified above, impacts associated with petroleum-contaminated soil would be less than significant for all project alternatives.

4.8.3 Cumulative Impacts

The proposed project would mitigate all impacts due to potential hazards within the project corridor to a less than significant level. Cumulative development in the project area has the potential to increase human exposure to hazardous areas. However, the magnitude of hazards for individual projects depends upon the location, type, and magnitude of development as well as the location of individual projects relative to identified hazardous areas. Therefore, hazard evaluations would need to be completed on a case-by-case basis. It is assumed that any necessary remediation would be completed prior to development of sites determined to have hazardous conditions. Therefore, cumulative impacts can be reduced to a less than significant level through mitigation on a project-by-project basis or avoidance of potentially hazardous areas.

4.9 Land Use

The proposed project has the potential to generate land use compatibility conflicts with adjacent land uses. These potential impacts include increased traffic and accessibility, increased noise, visual impacts, and a general change in the intensity of use of the existing road. Most of these issues are addressed in their respective sections in this report. These impacts are a result of current and anticipated increases in traffic volumes along Lewis Road. It is noted that these traffic increases would occur with or without this road-widening project. Land use impacts identified herein have been determined to be less than significant with incorporation of mitigation.

Although the project will require a General Plan Amendment to the County General Plan in order to change its existing designation from a two-lane road to a four-lane road, the project is consistent with other regional planning programs, including the Regional Transportation Plan and Air Quality Management Plan. Further the General Plan Amendment does not involve a land use change since the existing corridor is designated for roadway use. The Caltrans portion of the project would be consistent with the City's existing roadway designation and no General Plan Amendment would be required for that segment in the City of Camarillo.

4.9.1 Methodology and Impact Thresholds

Compatibility issues were analyzed by assessing the proposed uses relative to the current and planned land uses in the site vicinity. Impacts relating to compatibility of the proposed land uses with one another and with adjacent uses are considered significant if project implementation would create considerable physical conflicts, such as visual, noise, air quality, or safety concerns.

This analysis also evaluates the project's consistency with local land use policies (Effect LU-3). Because inconsistencies with land use policies do not in themselves represent physical changes, they are not actually "environmental effects" as defined by the California Environmental Quality Act (CEQA). Therefore, policy consistency issues are not classified in the same way in which physical effects are classified in this EIR (adverse and unavoidable, less than significant with mitigation, less than significant, beneficial). Rather, the project is simply identified as potentially consistent or inconsistent with applicable land use policies.

Several areas that are applicable to land use have already been discussed in detail in preceding sections of this EIR, specifically, agriculture and aesthetics. Impacts relating to the conversion of agricultural lands and potential compatibility conflicts are assessed using federal, state, and local criteria are evaluated in Section 4.2, *Agriculture*. Impacts to the visual resources located along Lewis Road, which is a Ventura County eligible- and a City of Camarillo designated-scenic highway, are evaluated in more detail in Sections 3.1 and 4.1, *Aesthetics*.

4.9.2 Project Impacts and Mitigation Measures

Effect LU-1 The proposed widening of Lewis Road could create both short and long-term land use compatibility conflicts with adjacent agricultural, residential, neighboring commercial, and industrial uses. These impacts are considered less than significant with mitigation (M).

As discussed in Section 3.2 and 4.2, *Agriculture*, the widening of Lewis Road could impact agriculture in several ways through: 1) the direct and indirect conversion of farmland to public road, 2) removal of agricultural tree rows bordering fields, and 3) the potential incompatibility of agricultural activities and traffic utilizing Lewis Road, specifically via construction related air quality and microclimate impacts, pesticide use, and farm vehicle use of Lewis Road. Only the conversion of the agricultural lands within the Ventura County segment of the proposed project is considered an adverse and unmitigable impact and thus, could potentially affect land use in the project vicinity. As detailed, in Section 4.2, *Agriculture*, this impact could be lessened through implementation of Ventura County Alternatives 1 and 2, which decrease the amount of acreage converted. What should be stressed, however, is that despite these temporary and longer-term impacts to agriculture, the agricultural land use pattern of the area would not change.

In addition, under any of the project alternatives and associated bridge variations, project construction would temporarily cause traffic, noise, and air quality impacts. These impacts are fully discussed in Sections 4.11, *Traffic and Circulation*, 4.10, *Noise,* and 4.3, *Air Quality*, respectively.

Mitigation Measures. Mitigation measures in Sections 4.2, *Agriculture,* 4.11, *Traffic and Circulation*, 4.10, *Noise* and 4.3, *Air Quality*, would reduce land use compatibility conflicts with surrounding uses to less than significant levels.

Impact After Mitigation. Land use conflicts would be reduced to less than significant with implementation of the required measures.

Effect LU-2 The proposed widening of Lewis Road could adversely affect the visual and thus land use character along a City of Camarillo scenic highway and an eligible County of Ventura scenic highway. This is considered less than significant with mitigation (M).

As discussed in Section 3.1 and 4.1, *Aesthetics*, the widening of Lewis Road could impact visual resources in several ways through: 1) the removal of tree rows, and 2) t~~he c~~onstruction of retaining and sound walls. All of these factors, which could potentially affect the value of Lewis Road as a scenic highway, have been identified as less than significant with mitigation. Appropriate mitigation is outlined in Section 4.1, *Aesthetics.*

Mitigation Measures. Mitigation to visual impacts are discussed in Section 4.1, *Aesthetics.* No additional mitigation is necessary.

Impact After Mitigation. Impacts are less than significant after mitigation.

Effect LU-3 The proposed project appears to be consistent with other land use guidelines and regional programs for the project area. Land use guidelines include: the Camarillo/Oxnard Greenbelt Agreement, Land Conservation Act (LCA) contracts, and the Ventura County Save Our Agricultural Resources (SOAR) Ordinance. Programs related to the Clean Air Act include: Ventura County Air Quality Management Plan (AQMP); the Regional Transportation Plan (RTP); the Regional Transportation Improvement Plan (RTIP), and the Congestion Management Plan/Capital Improvement Plan (CMP/CIP).

The proposed widening of Lewis Road was evaluated for consistency with the Camarillo/Oxnard Greenbelt Agreement, LCA contracts, the Ventura County SOAR Ordinance, and programs related to the Clean Air Act. The proposed project does not conflict with the goals of these land use programs.

<u>Camarillo/Oxnard Greenbelt Agreement.</u> The widening of an existing road is not construed as a breach of the greenbelt agreement, and is therefore not an issue here for any of the project alternatives.

<u>LCA (or Williamson Act) Contracts.</u> Between five to seven LCA parcels under Ventura County Alternatives 1-3 would be impacted as areas along the edges of the current Lewis road were converted for road use (Figure 3.4). Loss of land within or along the edge the LCA contract parcel does not necessitate loss of the contract or its tax benefits, however. As a result, the proposed project does not conflict with the goals of the LCA contracts.

Ventura County SOAR Ordinance. The SOAR ordinance restricts change to "Agricultural", "Open Space" or "Rural" land use designations as defined under the County of Ventura General Plan. The proposed project would widen Lewis Road only and would not result in a land use change under any of the project alternatives.

Air Quality and Transportation Programs. As discussed in Section 4.3, *Air Quality*, the Federal Clean Air Act Amendments of 1990 require that in order for a project to be in conformance with the Federal Clean Air Act, the project has to be identified in the adopted plans and programs for the region. In order to be found to conform, a project must come from approved transportation plans and programs such as the Ventura County Air Quality Management Plan (AQMP) prepared and updated by the Ventura County Air Pollution Control District (VCAPCD), the Regional Transportation Plan (RTP) and Regional Transportation Improvement Program (RTIP) prepared and updated by the Southern California Association of Governments (SCAG), and the Ventura County Transportation Commission (VCTC), Congestion Management Plan (CMP)/Capital Improvement Program (CIP). As the proposed project was included in the 2000/01 - 2005/06 RTIP prepared by the Southern California Association of Governments (SCAG); this document is in accordance with all applicable State Implementation Plans (SIP) and is consistent with the 1998 RTP. Therefore, the project is considered to be consistent with the most recently enacted Federal Clean Air Act requirements. In addition, the project involves an access improvement that would support development of the CSUCI campus and such improvements have been identified in the County's approved RTP, RTIP, and CMP.

Mitigation Measures. No mitigation is needed, as the proposed project is compatible with the above land use programs.

Impact After Mitigation. Effects would be less than significant.

4.9.3 Cumulative Impacts

Widening of Lewis Road is consistent with the RTP and other locally adopted regional planning programs. Its purpose is to safely accommodate traffic generated by planned growth in the project area, which includes the California State University, Channel Islands campus. In this regard it is seen as a response to cumulative approved and planned growth. Redesign of the existing facility, as envisioned under any of the project alternatives and associated bridge variations, would improve several land use compatibility conflicts that would occur under the no project scenario, primarily traffic flow and safety, noise (through project mitigation), water quality (through implementation of a storm water control and filtering system) etc. It does not represent an important departure from the long range planning vision for the area and is thus not considered to be a significant land use change. Further, given the strict nature of existing regulatory mechanisms in place to guide land uses in the area it is not expected to cause or stimulate any unplanned growth in the area. Existing regulatory programs largely prohibit further development in the area, thereby minimizing the potential for significant changes in land use or the creation of additional compatibility conflicts.

4.10 Noise

Future noise level increases are expected along Lewis Road due to projected increases in vehicular traffic. Noise level increases along the Caltrans segment at the Glen Park Apartments would be the same with or without the road widening. Noise levels at the second floor of these apartments would equal the Federal Highway Administration (FHWA) Noise Abatement Criteria (NAC) for exterior residential uses (Category "B"). Because noise level increases above current levels are less than generally perceptible (<3 dB), this is considered an adverse but less than significant impact. Future noise levels at other land uses adjacent to the Caltrans segment do not approach or exceed the corresponding NAC for that land use.

Within the Ventura County segment, five residences would be subject to future noise level increases of 6 to 9 dBA above current conditions, and 3-5 dBA above No Proj~~ect~~ conditions. The FHWA NAC Category "B" would be exceeded at the five residences. Noise abatement using sound walls of various heights was considered to reduce future noise levels at the five residences. Noise abatement design goals for four of the residences could be met by the implementation of 6- to 8-foot masonry sound walls, but these structures do not meet feasibility and/or reasonableness criteria under Caltrans guidelines. Therefore, the preliminary noise abatement decision per the Traffic Noise Analysis Protocol is that such walls are not feasible and/or reasonable.

The Lewis Road corridor is specifically exempted from County sound level criteria; nonetheless, the noise level increase at the five residences is considered significant under CEQA. Other mitigation funds are available concerning this project from transportation mitigation fees paid by the California State University, Channel Islands Site Authority. Mitigation measures that could potentially be funded from this source include the cost differential for the use of rubberized asphalt, construction of sound walls, or an interior noise insulation program.

Construction of the proposed project would result in temporary increases in noise levels at sensitive receptors in the project area. These are considered less than significant under NEPA and CEQA per FHWA and Caltrans guidelines because of standard contract specifications. Under Ventura County CEQA guidelines, construction noise is considered less than significant with incorporation of proposed mitigation measures.

A technical noise study for the project (Rincon Consultants, July 2001) has been prepared that addresses environmental effects of project alternatives and the "no project" alternative. This study has been incorporated by reference and the following summarizes the pertinent information.

4.10.1 Methodology and Impact Thresholds.

a. FHWA and Caltrans Procedures. The proposed project is identified as a "Type I" project under 23 CFR 772 because it involves a physical alteration of an existing highway that significantly changes the horizontal alignment and increases the number of through traffic lanes. As a result, specific methodology for noise analyses are required by Caltrans and include the following:

- Identification of existing activities, developed lands, and undeveloped lands for which development is planned, designed and programmed, which may be affected by noise from the highway;
- Prediction of traffic noise levels;
- Determination of existing noise levels;
- Determination of traffic noise impacts; and
- Examination and evaluation of alternative noise abatement measures for reducing or eliminating the noise impacts.

Methodology provided in the Caltrans *Traffic Noise Analysis Protocol* (TNAP, October 1998a) and *Traffic Noise Supplement* (TeNS, October 1998b) were followed to meet the requirements of 23 CFR 772, FHWA and Caltrans. Existing and future traffic noise levels were quantified using the SOUND32 model (release 1.41; Caltrans, 1992) and traffic volumes provided by Associated Transportation Engineers, Inc., for this EIR. The noise environment that would occur as a result of each of the proposed County and Caltrans alternatives, as well as the noise environment predicted to occur if the proposed project was not implemented, were quantified with SOUND32. Appendix H contains the SOUND32 model run input and output information.

Sensitive receptors that would be exposed to noise levels that approach or exceed the NAC were identified and noise abatement measures considered. In addition, a reasonableness and feasibility analysis was conducted per the Caltrans TNAP to determine the cost to benefit relationship of sound wall construction adjacent to impacted sensitive receptors. The associated calculations and worksheets (including Worksheets A and B) are found in Appendix H.

b. County Assessment Procedure. Ventura County procedures regarding noise impact assessment are contained in the *Initial Study Assessment Guidelines* (Ventura County, September 2000). The County methodology involves determining whether or not the project is a noise sensitive use, noise generator, or both, and then estimating the potential noise impact based on County General Plan policies. If a potential for noise impacts exists, a detailed analysis as is contained in this EIR is prepared.

c. FHWA and Caltrans Impact Thresholds. Adverse noise impacts are determined to occur when the Noise Abatement Criteria (NAC, see Table 3.12) for any particular land use category is approached (i.e.: within 1 dB) or exceeded. The categories of greatest importance to this project are Category "B" (67 dBA Leq1H) for exterior residential and school uses and Category "E" (52 dBA Leq1H) for interior school and residential uses. Note that the two categories for exterior and interior use are essentially the same given that typical noise attenuation from outdoor to indoor is 15-20 dB with the windows and doors closed. Category "C" (72 dBA Leq1H) for commercial areas with frequent human activity would apply to the Caltrans segment for the potential future commercial use of the land northeast of the intersection of Pleasant Valley Road and Lewis Road.

While the NAC is useful in determining whether or not adverse noise impacts are expected and noise abatement needs to be considered, the finding of significance is based on the relative increase in noise compared to existing and future conditions without the project and to absolute sound levels. Noise increases that are less than 3 dB are generally not perceptible to the general community and therefore may not be deemed significant under NEPA or

CEQA. A significant noise impact is considered to occur when a substantial noise increase above existing levels is predicted without regard to initial levels, with substantial defined as +12 dBA Leq1H.

d. Local County and City Impact Thresholds. Traffic noise impacts on nearby sensitive receptors were evaluated under County of Ventura guidelines based on Policy 2.16.2-1(4) in the County General Plan Goals Policies and Programs document. As stated in Policy 2.16.2-1(4) of the Ventura County General Plan, noise generators located near any sensitive use are required to incorporate noise control measures so that outdoor noise levels at the noise receptor do not exceed:

- One-hour Leq of 55 dBA or the ambient noise level plus 3 dBA, whichever is greater, during any hour from 6:00 AM to 7:00 PM.
- One-hour Leq of 50 dBA or the ambient noise level plus 3 dBA, whichev~~er is~~ greater, during any hour from 7:00 PM to 10:00 PM.
- One-hour Leq of 45 dBA or the ambient noise level plus 3 dBA, whichever is greater, during any hour from 10:00 PM to 6:00 AM.

However, it is noted that the County General Plan Goals Policies and Programs document also states that this policy is not applicable to increased traffic noise along any of the roads identified within the 2010 Regional Roadway Network as shown in the County General Plan. Lewis Road is one of those roadways so designated. The General Plan also states that State and Federal Highways, railroad line operations, aircraft in flight, and public utility facilities are also noise generators with state and federal regulations that pre-empt local regulations, and this policy would not be applicable. Therefore, the primary noise threshold for operational activities used in this EIR is the FHWA NAC criterion discussed above. However, the County policy levels are also reported within this document for comparison purposes with other County environmental documents.

In addition, the City of Camarillo has noise policies concerning residential land uses that establish guidelines of 45 dBA Ldn for interior and 60 dBA Ldn for exterior land use compatibility.

e. Construction Effects Methodology and Thresholds. Land uses and areas of frequent human activity (sensitive receptors) were identified for the project area through on site reconnaissance and review of aerial photography for the area. Impacts associated with construction activity were assessed based on equipment noise emission factors from the U.S. Environmental Protection Agency document *Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances* (1971). Impact thresholds were based on the discussion regarding construction noise in the TNAP for Caltrans, and on Ventura County policies.

4.10.2 Project Traffic Noise Impacts and Mitigation Measures

Effect N-1 **Traffic traveling on the Caltrans segment of the project would equal the NAC Category B at the second story Glen Park apartments. This is considered an adverse, but not significant NEPA and CEQA impact per Caltrans methodology. The future noise level increase is not perceptible**

and would be an adverse, but less than significant CEQA impact under County guidelines.

Table 4.8 includes the predicted exterior noise level expected to occur at the Glen Park apartment buildings and St. Mary Magdalene church and school located west of the Caltrans portion of the roadway based on traffic noise from Lewis Road only. The location of these receptors is shown on Figure 3.17. the apartment buildings are two-story, with first floor located almost 12 feet below the road grade of the Lewis Road railroad overhead. This elevation difference and the overhead create a sound barrier that reduces traffic noise levels at the first floor apartments. However, the second floor apartments have outdoor balconies that are exposed to traffic noise from Lewis Road. The St. Mary Magdalene school/church complex is located at an elevation ranging approximately 15 to 20 feet above the adjacent Lewis Road grade, which forms a noise barrier to traffic noise. Consequently, noise levels are reduced for the school classrooms.

Bridge Variation A, which would widen the existing overhead, would not differ in lane geometry near this location for Caltrans Alternatives 1 and 2 and would therefore have the same future noise levels.

Impact Significance Per FHWA/Caltrans Guidelines. The proposed project would result in noise levels that would be similar to those predicted to occur if the Lewis Road corridor was not widened from its existing width. Under the proposed project alternatives, the increase in noise levels associated with the increase in speed that would accompany the increase in vehicular capacity of the roadway would be offset by the increased distance and barrier effectiveness for the outside lanes. The first floor level of the apartments would not exceed the NAC criterion because of the sound barrier created by the difference in elevation. The second floor of the apartments would experience the same sound levels in the future with or without the project alternatives and would approach the NAC criterion for the external balconies. It is noted that balconies are not explicitly considered by the NAC criteria or the TNAP. Based on the TNAP, it is determined that the increase in traffic under the no project and proposed project alternatives cause an adverse noise impact because the NAC "B" criterion is equaled. However, the increase is not substantial (defined as +12 dBA) and is not generally perceptible (less than 3 dB); therefore, this impact is not considered significant under either NEPA or CEQA per FHWA and Caltrans guidelines. In addition, no mitigation or abatement was considered for the second floor apartments since noise barriers are not to be designed to shield the second story per TNAP.

Traffic noise levels at the school would increase an additional 3 dBA under the proposed project as compared to the no project alternative because of the increased traffic speed. Nonetheless, traffic noise levels at the playground are predicted to be substantially below the NAC "B" criterion. On-site noise measurements indicated that there was a minimum of 10 dBA decrease between exterior to interior noise even with the windows and doors open at the school classrooms (see Appendix H). Therefore, peak hour Leq1H interior noise levels due to both project alternatives are predicted by the model to be 50 dBA, which is below the NAC "E" criterion and the State classroom criterion. This is considered a less than significant impact under NEPA and CEQA.

The vacant land east of the southerly portion of the Caltrans segment is designated for commercial land uses, which is a NAC "C" with a one-hour design noise level of 72 dBA for

Table 4.8 Predicted Future Noise Levels at Nearby Receptors - Caltrans Segment

Receptor				Leq1H,dBA			Noise Increase and Impact	
Location	Type	# of Units	NAC (Criterion)	Current	Year 2025 No Project	Project	No Project	Project
Glen Park Apts. 1st Floor	Residential	15	B (67)	60	62	62	+2 None	+2 None
Glen Park Apts 2nd Floor [b]	Residential	15	B (67)	65	67	67	+2 A/E	+2 A/E
St. Mary Magdalene Complex-Interior [c]	School	1	E (52)	46	47	50	+1 None	+4 None
St. Mary Magdalene Playground	School	1	B (67)	57	58	61	+1 None	+4 None
Commercial (50 feet from ROW)	General land	NA	C (72)	62	62	66	0 None	+4 None

Note: Alternatives 1 and 2 and all variations for the Caltrans segment have the same noise effects.
[a] Impact Categories: S = Substantial (+12 dB); A/E = Approach or Exceed NAC; CR = Classroom Noise (if at or above 52 dBA)
[b] Noise barriers should not be designed to shield the second story of two-story residences, per (1998) Caltrans Traffic Noise Analysis Protocol.
[c] Interior level given based on minimum 10 dB decrease from exterior to interior levels.

Table 4.9 Predicted Future Noise Levels at Nearby Receptors – Ventura County Segment

Receptor				Leq1H,dBA				Noise Increase and Impact		
Location	Type	# of Units	NAC (Criterion)	Current	Year 2025 No Project	Alt. 1	Alt. 2	No Project	Alt. 1	Alt. 2
House 1 (1957 Lewis Rd)	Residential	1	B (67)	62	67	69	68	+5 A/E	+7 A/E	+6 A/E
House 2 (1931 Lewis Rd)	Residential	1	B (67)	61	66	68	68	+5 A/E	+7 A/E	+7 A/E
Villa Calleguas 1	Residential	6	B (67)	55	59	63	63	+4 None	+8 None	+8 None
Villa Calleguas 2	Residential	10	B (67)	48	52	56	56	+4 None	+8 None	+8 None
Las Posadas	Residential	10	B (67)	54	57	62	62	+3 None	+8 None	+8 None
Casa Pacifica	Residential	4	B (67)	55	59	63	63	+4 None	+8 None	+8 None
House 3 (1728/1730 Lewis Rd)	Residential	1	B (67)	62	65	71	71	+3 None	+9 A/E	+9 A/E
House 4 (2710 Calwelti Rd)	Residential	1	B (67)	68	71	75	75	+3 A/E	+7 A/E	+7 A/E
House 5 (1444 Lewis Rd)	Residential	1	B (67)	60	64	69	69	+4 None	+9 A/E	+9 A/E

[a] Impact Categories: S = Substantial (+12 dB); A/E = Approach or Exceed NAC; CR = Classroom Noise (if at or above 52 dBA)
** Please note these noise levels do not include the attenuation effects of a sound wall proposed under the project at this residence south of Cawelti Road. The planned eight-foot sound wall would be expected to attenuate roadway noise levels by about 7 dB.*

exterior exposure. As indicated in Table 4.8, current and future no project noise levels are substantially below this criterion. Both of the proposed alternatives and their associated bridge variations would increase noise levels by about 4 dBA over existing and future no project levels for this area, but this level is still substantially below the applicable criterion and no significant NEPA or CEQA noise impact on the commercially zoned property is expected.

Impact Significance Per County/City Guidelines. The increase in noise levels associated with the project would not exceed the County's threshold for residential uses exposed to noise generators (ambient plus 3 dBA). Also as previously discussed, Lewis Road has been designated as part of the 2010 Regional Roadway Network and as such is exempted under County policy from the hourly noise threshold for noise generating uses; this discussion is included herein for consistency and comparison to other Ventura County environmental documents. The apartments are subjected to noise levels that already exceed City of Camarillo's noise policies for residential land use compatibility, especially if the additional noise from the railroad tracks is considered. Because there would be no difference in traffic noise levels at these apartments under the project alternatives as compared to the no project alternative, impacts under CEQA per County guidelines are considered to be less than significant.

Although the specific alignment of the railroad overhead under Variations B (remove and replace existing overhead) and Variation C (construct a separate, but parallel, twin structure) would not be determined until after the completion of detailed geotechnical studies, it is unlikely to vary substantially from the existing overhead alignment. As a result, noise impacts to the adjacent sensitive receptors in the apartments are not expected to change substantially under these variations for either of the Caltrans alternatives.

Mitigation Measures. No mitigation measures are considered necessary or required for the Caltrans segment.

Impact After Mitigation. Noise impacts related to the Caltrans segment are considered adverse, but not significant as discussed above. It is noted that the Park Glen apartments are exposed to noise from both Lewis Road and the railroad track, which results in overall existing and predicted future noise levels that exceed the City of Camarillo guidelines for compatible residential land use.

Effect N-2 **Traffic traveling on the County segment of the project would generate noise levels that exceed the FHWA NAC and County noise impact criteria. These future noise levels are considered to cause an adverse and significant impact under NEPA (M). While County policies governing noise-generating uses do not apply to roadways designated as part of the Regional Roadway Network, the increase in noise levels is nonetheless considered a significant, but mitigable, impact under CEQA (M).**

Table 4.9 on page 4-65 includes the calculated existing and predicted future noise levels expected to occur along the County portion of the roadway at each of the sensitive receptors shown on Figure 3.17 for each of the alternatives. It is noted that for these noise sensitive receptors, there is no difference between Alternatives 1 and 3 in the section of Lewis Road under consideration.

Future noise levels along Lewis Road are expected to increase by 3 to 5 dBA under the no project alternative. Widening of the road as proposed by the various project alternatives would further increase future noise levels by an additional 2 to 6 dBA above the no project alternative, primarily because of the increase in vehicle speed that would accompany the increase in vehicular capacity of the roadway. The proposed widening alternatives would each result in noise levels that are similar to each other. The only difference in noise levels would be at House 1 (1957 Lewis Road), where Alternative 2 would result in an imperceptibly lower noise level (about 1 dB) compared to that expected under Alternatives 1 and 3.

Impact Significance Per FHWA/Caltrans Guidelines. Exterior noise levels at three of the five houses would approach or exceed the NAC "B" under the no project (no action) alternative due to the expected long term increase in traffic volumes. Under all County alternatives, the five houses near to the road and not currently sheltered by noise barriers would exceed the NAC "B" (67 dBA Leq1H). This is considered an adverse noise impact per Section 2.4.2 of the TNAP. While the noise level increase is not considered "substantial" (ie: +12 dBA), because the NAC is exceeded and the proposed road widening in conjunction with expected traffic volume growth will result in perceptible noise level increases (+3 dB) above both the current conditions and the "no project" alternative, this impact is considered significant under both NEPA and CEQA. The Villa Calleguas, Los Posadas, and Casa Pacifica complexes would not be adversely affected because of their distance from the road and the earthen berm barrier.

Impact Significance Per County Guidelines. Lewis Road has been designated as part of the 2010 Regional Roadway Network and as such is exempt from the County's hourly noise threshold for noise generating uses. This exemption was based in part on the acknowledgement that regional transportation links would need to be improved and that noise levels along these links would cumulatively increase. For comparison to other County environmental documents, it is noted that the increase in sound levels would be significantly greater than the County threshold of ambient plus 3 dB indicated by Policy 2.16.2-1(4). Because the noise level change between the "no project" alternative and the proposed road widening project exceeds 3 dB at three of the residences (1728/1730 Lewis Road, 1444 Lewis Road, and 2710 Calwelti Road) and absolute predicted noise levels are substantially above County guidelines for compatibility with residential land use, this increase is considered a significant CEQA impact.

Mitigation Measures. Noise abatement measures must be considered because the NAC is exceeded at five residences along the County segment. Measures that can be considered for this project include design alternatives (use of different alignments to avoid impacts), construction of noise barriers, acquiring property to provide sufficient setback distance, and use of traffic management measures (TNAP Section 5.3). The project consists of the widening of an existing roadway, which substantially limits design alternatives and none are feasible that would substantially reduce impacts. Property acquisition for setbacks would also not achieve any mitigation since the road and the residences are already present and moving the road to one side of the right-of-way versus the other would result in similar noise impacts. Traffic management measures are not deemed feasible since this is a major arterial serving as a vital connector between Highway 1 and the Pt. Mugu Naval Air Station and US Highway 101. Management features such as traffic controls, limitations on vehicle type, or

time use restrictions are not deemed to be feasible. Speed control, while feasible, would still result in significant impacts as illustrated by the "no project" alternative, which was modeled at a speed of 25 mph. Therefore sound barriers were considered to be the primary method available for mitigation by FHWA and Caltrans.

The effectiveness of sound barriers is primarily dependent on the type of material used (which determines "transmission loss" or the decrease in sound level through the barrier), the height of the barrier, and the length of the barrier. A variety of materials are available for a barrier wall provided that the transmission loss is at least 10 dB more than the desired noise reduction. The most commonly used materials are concrete block, poured in place or modular concrete walls, and earthen berms. These materials have transmission losses greater than 34 dB. Wood is occasionally used, but its base transmission loss is only between 18 and 24 dB, it is subject to having exposed gaps where wood pieces adjoin through which sound can transmit, and it is less durable. Therefore, this study investigated only the use of concrete block or earthen berms for noise attenuation.

The installation of a 2.4-meter (8 foot) high sound barrier at the southwest corner of Cawelti Road and Lewis Road was proposed in the Project Study Report (PSR) for the County Segment (Boyle Engineering, 1999) as part of the Lewis Road widening project to attenuate noise effects of traffic along the roadway. The wall proposed in the PSR extended for approximately 150 feet along the west side of Lewis Road south of the intersection with Calwelti Road. The proposed sound wall was modeled using SOUND32 to determine its effectiveness considering its specific configuration. This wall would reduce predicted future noise levels at 2710 Calwelti Road by only 1 dBA because it was not sufficiently long. Further modeling was conducted to determine the appropriate dimensions for this sound wall and other sound walls that could reduce future peak hour noise levels to an acceptable level. Table 4.10 details the additional sound walls considered (see Appendix H for calculations). Wall lengths were generally based on restrictions such as drainage ditches and existing access routes, and were not extended past driveways.

Table 4.10 Predicted Noise Abatement from Sound Walls

Receptor	Leq 1H W/out Mitigation		Wall Length (ft)	With Barrier					
				H=6' (1.8m)		H=8' (2.4m)		H=10' (3.0m)	
	Alt 1 & 3	Alt 2		Leq1H	IL	Leq1H	IL	Leq1H	IL
House 1 (1957 Lewis Rd)	69	68	145	66 *	3, 2*	66, 65*	3 *	65 *	4, 3*
House 2 (1931 Lewis Rd)	68	68	177	66	2	65	3	65	3
House 3 (1728/1730 Lewis)	71	71	316	67	4	66	5	65	6
House 4 (2710 Calwelti Rd)	75	75	353	69	6	67	8	65	10
House 5 (1444 Lewis Rd)	69	69	113	68	1	67	2	67	2

** Alt 1 & 3 first number, Alt 2 second number where different*
See Appendix H for calculations.

Reduction below the NAC criteria for Category B receptors can be achieved with six-foot walls for the residences at 1957 and 1931 Lewis Road, with an eight-foot wall at 1728/1730 Lewis Road, and a 10-foot wall at 2710 Calwelti Road. Higher walls would be necessary to reduce levels below the threshold of adverse noise impacts (approach within 1 dB the NAC criteria). The NAC criteria for Category B at House 5 (1444 Lewis Road) cannot be met by a sound wall of the length limited by the driveway access. If alternative access is available,

then extending the wall either north or south (preferably both) could result in the design goal being achieved.

A "feasible and reasonableness" analysis was conducted for these sound barriers in the Technical Noise Study per the Traffic Noise Analysis Protocol (Caltrans, October 1998). Per this protocol, a minimum 5 dBA noise reduction must be achieved at the impacted noise receptors in order for the noise abatement to be considered "feasible." A reasonableness determination was also made based on the Traffic Noise Analysis Protocol methodology (see Appendix H) for the above barrier dimensions and for longer barriers that would meet the 5 dBA criteria. The definition of "reasonable" is based primarily upon the relationship of future noise with and without the project, achievable noise reduction, and the cost of noise reduction. Other criteria include the absolute noise level, the life cycle of the abatement measure, the environmental impacts of abatement construction, and any other social, economic, environmental, legal, and technological factors that may be present.

Based upon the analysis performed in the Technical Noise Study, none of the sound wall variations considered for the five residences appear to meet both the feasible and reasonableness criteria of the Caltrans TNAP. As shown in Appendix H, increasing the wall height and length to meet the –5 dBA feasibility criteria would make the sound barriers for Houses 2 and 5 exceed the reasonable allowance and such walls are not considered cost effective. A cost effective wall for House 1 would need to be 10 feet tall to meet the -5 dBA criteria. However, this wall would create a significant visual impact by creating a massive linear structure in an otherwise open vista of farmland. While Lewis Road is not designated a scenic highway, the County of Ventura has indicated that it is "eligible" to be a County Scenic Highway and its aesthetic value has been discussed in prior environmental documentation (Rincon Consultants, 1998; Impact Sciences, Inc. 1997). Environmental impacts of noise abatement measures are considered a factor in the reasonableness determination per Section 2.8.1 of the TNAP. Therefore, the preliminary noise abatement decision is that sound walls may not be reasonable or feasible for each of the proposed project alternatives. It is noted that earthen berms would be more acceptable for aesthetic purposes, but that the costs to build berms of the necessary height would not meet the "reasonableness" criteria. Also, sufficient space for earthen berm is not available at House 4 (2710 Calwelti Road). It is unknown whether or not earthen berms or sound walls would be acceptable to the residents of the five residences.

The proposed sound walls discussed above would not meet FHWA feasible and reasonable criteria; therefore, no noise abatement is required by FHWA or Caltrans. FHWA also does not fund the use of rubberized asphalt or interior insulation, which are alternative forms of noise mitigation discussed below.

Other Mitigation Available to be Funded by CSUCI Transportation Mitigation Fees. Although mitigation for noise impacts is not required by FHWA and Caltrans under NEPA, other measures may be implemented by the County Ventura for the purpose of reducing impacts under CEQA. The Deputy Director of the Ventura County Public Works Agency (February 2001) has indicated that about $5 million will be contributed by the CSUCI Site Authority to fund mitigation (including noise mitigation) along Lewis Road. The availability of funds is a result of mitigation fees paid to minimize or avoid transportation related impacts resulting from long-term development of the University. These funds may be used for noise

mitigation, which may include sound walls, rubberized asphalt, and/or noise insulation. The following is a list of measures that may be implemented as part of the CSUCI mitigation program. Implementation of any of these measures would lessen the effects of noise identified herein.

N-2(a) **Rubberized Asphalt.** Rubberized asphalt paving may be used for the portion of Lewis Road adjacent to residential land uses. CSUCI mitigation funds would be used to pay the cost differential (if any) for the initial installation of this material.

The use of rubberized asphalt was recommended as mitigation for noise impacts along Lewis Road in the Final EIR for the California State University, Channel Islands (1998). Studies conducted for the City of Thousand Oaks (Acoustical Analysis Associates, Inc., 1992) indicated that rubberized asphalt can reduce noise levels by 3 to 5 dBA as compared to traditional asphalt. The long term effectiveness of this material has recently been investigated by the Sacramento County Department of Environmental Review and Assessment and Bollard and Brennan, Inc. (November 1999). The conclusions of the 6-year study indicate that the use of rubberized asphalt on Alta Arden Expressway resulted in an average 4 dB reduction in traffic noise levels as compared to the conventional asphalt overlay used on Bond Road. This noise reduction continued to occur six years after the paving with rubberized asphalt. Studies of an asphalt rubber test project in Flagstaff, Arizona on the very heavily traveled Interstate 40 indicate that after nine years of service the overlay was still virtually crack free, with good ride, virtually no rutting or maintenance, and good skid resistance (Way, November 1999).

Paving Lewis Road with this material would be expected to reduce the predicted future noise levels in Table 4.10 by a minimum of 3 dBA. As a result, use of rubberized asphalt alone would reduce predicted future noise levels below the NAC for Category "B" receivers at Houses 1, 2, and 5 and would reduce noise levels at the other two residences such that smaller walls could meet the noise reduction goals.

N-2(b) **Sound Wall - Corner of Cawelti Road and Lewis Road.** As part of the proposed project a sound wall may be constructed that attenuates roadway noise levels to 67 dBA Leq at the exterior of the residence located at the southwest corner of Cawelti Road (House 4). Preliminary analysis indicates that a sound wall 2.4 meters (8 feet) in height extending about 91.5 meters (300 feet) south along Lewis Road and about 15 meters (50 feet) west along Cawelti Road would be required to achieve a noise level of 67 dBA Leq1H. To reduce the massing effect of the wall along the Lewis Road frontage, the wall shall be equipped with planter wells every 40 feet of linear length. In addition, the wall shall be landscaped with native vegetation to soften the wall's appearance and to discourage graffiti.

N-2(c) **Sound Barriers.** As part of the proposed project, sound barriers may be constructed at the existing sensitive receptors south of Pleasant Valley Road. If sufficient right-of-way or easements are available, landscaped earthen berms should be used similar to that fronting the Villa Calleguas apartments. If masonry walls are used, then they shall be equipped with planter wells every

40 feet of linear length. In addition, the walls shall be landscaped with native vegetation to soften the wall's appearance and to discourage graffiti.

As an alternative to the use of rubberized asphalt, sound walls, or other exterior sound barriers to meet noise reductions in exterior and interior areas, the following measure would serve to reduce traffic noise to an acceptable level within interior spaces.

N-2(d) **Interior Noise Insulation.** A program may be established for the Lewis Road corridor for those residences within 250 feet of the road right-of-way that provides for the retrofitting of exposed portions of a residence to add additional noise insulation. This would include the addition of new solid core doors, noise insulating windows, and caulking of exterior surfaces sufficient to result in a future peak hour Leq1H of 52 dBA within inhabitable interior rooms.

Impact After Mitigation. The above mitigation measures can be used in a variety of combinations to reduce noise impacts to an acceptable level. Use of Measure N-2(a) by itself would be sufficient to reduce noise levels to the NAC criteria for Category B uses at Houses 1, 2, and 5 for all alternatives without the need for additional sound barriers. Sound barriers as discussed under measures N-2(b) and (c) could be used at Houses 3 and 4 to reduce adverse noise impacts, or sound barriers (either walls or berms) alone at each of the residences could also mitigate noise impacts. If sound barriers are not found to be feasible, then measure N-2(d) would provide for a suitable interior noise environment.

The feasibility of these measures are in part dependent on the individual landowners and what would be an acceptable measure for them. For some residents, the imposition of a wall or berm between the residence and the road and the lost visual aesthetic of the farmland may not be acceptable, whereas others would be more concerned about the increase in noise levels.

4.10.3 Cumulative Traffic Noise Impacts and Mitigation Measures

Effect N-4 **Cumulative growth along the Lewis Road corridor could result in additional sensitive noise uses being located near to the road. Such uses would be required to have noise mitigation under County policies and no significant cumulative impacts are expected.**

Cumulative growth in this portion of Ventura County is the cause of the substantial increase in traffic volumes that contribute to the need to build the proposed project. This traffic would cause noise levels that would contribute to an exceedance of noise thresholds for existing residential uses (see Tables 4.8 and Table 4.9). With regard to the immediate project vicinity, no further residential growth is expected along the Caltrans segment as the residential land uses in this area are fully developed, with commercial use being proposed for the vacant land east of Lewis Road. As discussed above, noise levels associated with the Lewis Road widening project would not exceed the NAC Category "E" criteria for general land use and no significant cumulative impacts would be expected for this segment.

The County segment is adjacent to areas that are primarily designated for agricultural use. The County has General Plan policies that are intended to maintain agricultural use in this area, including a requirement for citizen vote for any General Plan changes from agricultural use (SOAR), and no substantial residential development is expected to occur in this area in the future. The only other properties in the area designated for other purposes are three properties owned by the State and occupied by the Association for Retarded Citizens, Las Posadas Mental Health Care Facility, and Casa Pacifica Crisis Care Center, all of which are designated "State or Federal Facility." Future residential growth is anticipated to occur at the Casa Pacifica and Las Posadas sites as demand for these services continue to increase and the County has had discussions regarding expansion of these facilities. Such expansion would occur nearer to the road, potentially exposing these new residences to noise levels that exceed FHWA/Caltrans and County standards. County policies require that new residential growth should not be located in high noise areas, and if so, should provide adequate mitigation to reduce noise levels to an acceptable level. Therefore, it is expected that any new growth in these areas will be required to install sound barrier berms similar to that recently installed at the Villa Calleguas apartments. While sound walls could also be used to mitigate noise effects, it is expected that berms would preferentially be used because of the significant aesthetic issues in this area. Similarly, any other residential development would be expected to be required to mitigate the effect of traffic noise per County policies. Implementation of the measures proposed above in coordination with those that would be required of other development would reduce potential cumulative impacts to less than significant levels.

Mitigation Measures. No mitigation measures are necessary beyond those that would be imposed on development in the future per County policies.

Impact After Mitigation. No significant cumulative impacts are expected.

4.10.4 Project Construction Noise Impacts and Mitigation Measures

Effect N-4 **Project construction would create temporary short-term noise levels that could affect nearby residences and other sensitive receptors. Temporary construction impacts would be less than significant under the National Environmental Policy Act (NEPA) (L) and less than significant with mitigation under the California Environmental Quality Act (CEQA) (M).**

The TNAP (October 1998a) indicates that construction noise is only substantial in exceptional cases, such as when pile drivers are used and during crack and seal pavement rehabilitation operations. Typical road widening and repaving are not considered to cause significant noise effects since standard specifications and standard special provisions used by Caltrans provide limits on construction noise levels. Since pile-driving is not expected to be necessary for the railroad bridge overcrossing widening and other construction work is expected to be typical of road widening projects, construction noise is not considered to be significant from a NEPA or from a Caltrans CEQA basis.

The operation of heavy equipment during construction of the proposed project would result in temporary increases in noise in the immediate vicinity of the construction site. As illustrated in Table 4.11, average noise levels associated with the use of heavy equipment at construction sites can range from about 78 to 88 dBA at 15 meters (50 feet) from the source,

depending upon the types of equipment in operation at any given time and the phase of construction. The highest noise levels generally occur during excavation, which involves the use of such equipment as backhoes, bulldozers, shovels, and front-end loaders.

Table 4.11 Typical Noise Level Ranges at Roadway Construction Sites

Construction Phase	Average Hourly Noise Level at 15 meters (50 feet)	
	Minimum Required Equipment On-Site	All Pertinent Equipment On-Site
Ground Clearing	84	84
Excavation	88	88
Foundations	88	88
Erection	79	79
Finishing and Cleanup	84	84

Source: Bolt, Beranek and Newman, "Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances," prepared for the U.S. Environmental Protection Agency, 1971.

The nearest sensitive receptors to the project are the single family residences located along the County portion of the roadway and the apartment complex and adjacent school/church complex located west of the Caltrans segment of Lewis Road. These structures range from within 15 to 30 meters (50 to 100 feet) of the existing Lewis Road corridor. In addition, the Casa Pacifica and Las Posadas developments are located about 130 and 219 meters (425 and 720 feet) from the roadway, respectively. The current ambient daytime noise levels at the single-family residences located along the corridor are about 65 dBA Leq, while the ambient daytime noise level at Casa Pacifica is about 55 dBA at the point closest to the roadway. The noise levels in Table 4.10-4 assume a distance of about 15 meters (50 feet) between the receptor and the construction activity. During construction, noise levels at the receptors within 15 meters (50 feet) of the site would be between 78 and 88 dBA Leq. At the receptors located 30 meters (100 feet) from the corridor, hourly noise levels would be between 82 and 72 dBA Leq, assuming a 6 dBA attenuation rate per doubling of distance. The Las Posadas and Casa Pacifica developments would experience noise levels in the range of 70 dBA and 64 dBA. The Villa Calleguas apartments would be sheltered in part from construction noise by the existing berm; nonetheless, a substantial increase in ambient noise would occur at these residences. While no specific construction noise thresholds are available, given the length of time and level of noise associated with the construction activities discussed above, construction noise would be significant under County of Ventura CEQA criteria. In addition, each of these noise levels would exceed the County one-hour daytime threshold of ambient plus 3 dBA. Mitigation would reduce impacts related to temporary noise during construction to a less than significant level, however.

Mitigation Measures. The following measures are recommended for all project alternatives and associated bridge variations to reduce construction noise impacts along the Lewis Road corridor.

N-4(a) All diesel equipments shall be operated with closed engine doors and shall be equipped with factory-recommended mufflers.

N-4(b) If electrical service is available within 150 feet, electrical power shall be used to run air compressors and similar small power tools.

N-4(c) Limit construction activity to daytime hours of 8:00 AM to 5:00 PM Monday through Friday, in order to minimize sleep disturbance and interference of speech, and reduce general annoyance. No construction shall occur on weekends or State holidays (i.e. Thanksgiving, Labor Day). Construction equipment maintenance shall be limited to the same hours.

Impact After Mitigation. Implementation of the recommended mitigation measures would reduce construction noise to less than significant levels per the County CEQA criteria. Mitigation measure N-4(c) would also meet the requirements of the City of Camarillo Noise Ordinance regarding construction noise. Because impacts of construction would be temporary and of a short-term duration, construction noise impacts are not considered significant under NEPA.

4.11 Traffic and Circulation

The proposed widening of Lewis Road would result in roadway operations that meet or exceed the City of Camarillo and County of Ventura's Level of Service standards. In addition, the proposed project would result in intersection operations that meet or exceed the City of Camarillo and County of Ventura Level or Service standards. Temporary impacts to roadway operations would occur as a result of construction activities. Though strategies to reduce these impacts have been included as part of the proposed project, impacts to roadway operations would require implementation of Traffic Control and Transportation Management Plans to reduce impacts to a less than significant level. In general, project implementation is expected to improve traffic circulation compared to the no project alternative.

4.11.1 Methodology and Impact Thresholds

The project is proposing to widen Lewis Road between Ventura Boulevard on the north and Hueneme Road on the south from 2-lanes to 4-lanes with related intersection improvements. The segment of Lewis Road from Ventura Boulevard to Pleasant Valley Road is under the jurisdiction of Caltrans and the City of Camarillo. Two alternative designs, each with three bridge variations, were developed for this segment as part of the Lewis Road Widening Project Study Report (PSR). The segment of Lewis Road from Pleasant Valley Road to Hueneme Road is under the jurisdiction of Ventura County. Three alternative designs were developed as part of the PSR for the County segment. With the exception of construction phasing, the following analysis does not provide a separate discussion for each specific alternative, as there is no substantive difference between the roadway and intersection geometries of the alternatives within either the Caltrans or Ventura County Segments.

a. Calculation of Intersection Levels of Service. Levels of service for the signalized study-area intersections were calculated using the Intersection Capacity Utilization (ICU) methodology, as required by Ventura County policy. Levels of service for the intersections controlled by STOP signs were calculated using the unsignalized intersection level of service methodology outlined in the Highway Capacity Manual (HCM). Service levels were determined by calculating the average vehicle delays for the critical turning movements at the intersection. A discussion of the methodologies used to calculate levels of service for the study-area intersections is contained in Appendix I for reference, along with worksheets illustrating the level of service calculations.

b. City of Camarillo Level of Service Criteria. The City's LOS standards were used to assess the portion of the project from Ventura Boulevard to Pleasant Valley Road. The City of Camarillo allows for LOS D for short intervals of the peak hour period.

c. County of Ventura Level of Service Criteria. Ventura County has established LOS D as the design standard for regional roadways and intersections located in the County. Lewis Road is classified as a regional roadway on the County's system.

4.11.2 Project Impacts and Mitigation Measures

Effect T-1 The proposed widening of Lewis Road would result in roadway operations that meet or exceed the City and County Level of Service standards. This is considered a less than significant impact (L).

The operational characteristics of the Lewis Road segments were analyzed assuming the Year 2025 traffic volumes shown on Figure 4.5. Table 4.12 lists the results of the roadway level of service analysis completed for Lewis Road. Based on the Ventura County roadway design capacities, the improved 4-lane roadway segments are forecast to operate acceptably in LOS C- D range with Year 2025 volumes. The two-lane section south of the Santa Barbara Street extension would also operate acceptably in the LOS C range with Year 2025 volumes.

Table 4.12 Year 2025 Roadway Levels of Service

Segment of Lewis Road	Future Geometry	Future ADT	LOS D Capacity	Level of Service
Ventura Boulevard to Pleasant Valley Road	4-lane	32,000	47,000	LOS C
Pleasant Valley Road to Cawelti Road	4-lane	38,000	47,000	LOS C
Cawelti Road to University Avenue	4-lane	41,000	47,000	LOS D
University Avenue to Santa Barbara Street	4-lane	24,000	47,000	LOS B
Santa Barbara Street to Potrero Road	2-lane	8,000	16,000	LOS C

Mitigation Measures. No mitigation measures would be required to reduce impacts to roadway operation.

Impact After Mitigation. Impacts to roadway operation would be less than significant without implementation of mitigation measures.

Effect T-2 The proposed widening of Lewis Road would result in intersection operations that meet or exceed the City and County Level of Service standards. This is considered a less than significant impact (L).

Intersection levels of service were calculated assuming the Year 2025 AM and PM peak hour traffic volumes and the intersection geometry described in the PSR. Tables 4.13 and 4.14 list the results of the intersection level of service calculations. Intersection level of service worksheets are contained in Appendix I.

The data presented in Tables 4.13 and 4.14 indicate that with the Lewis Road widening project the study-area intersections would operate at LOS C or better during the AM and PM peak hour periods.

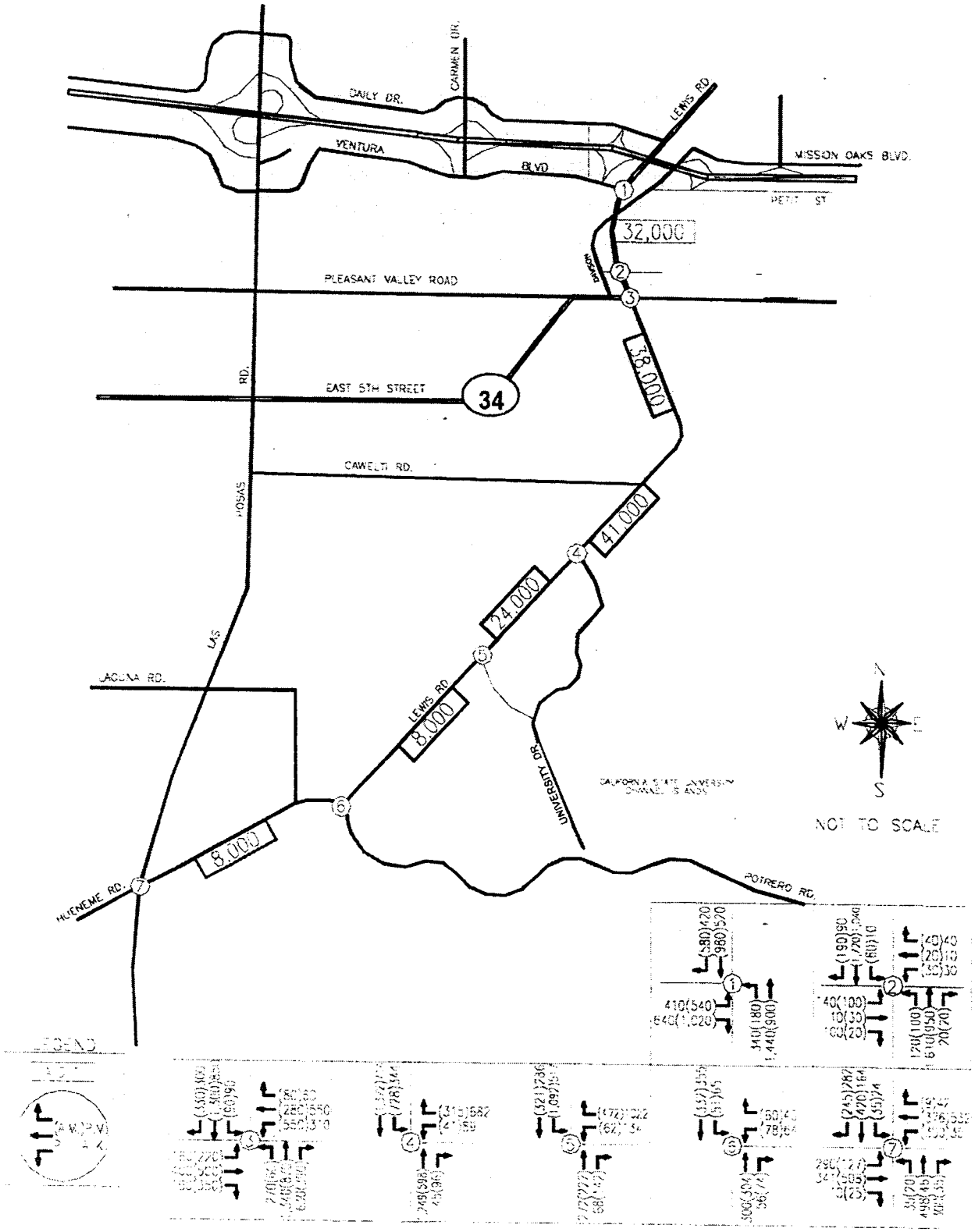


Figure 4.5 Year 2025 Traffic Volumes

Table 4.13 Year 2025 Intersection Levels of Service AM Peak Hour

Intersection	ICU/Delay - Level of Service	
	Existing	Year 2025
Lewis Road/Ventura Boulevard	0.57 - LOS A	0.75 - LOS C
Lewis Road/Dawson Place	N/A	0.72 - LOS C
Lewis Road/Pleasant Valley Road	0.58 - LOS A	0.77 - LOS C
Lewis Road/University Avenue	N/A	0.47 - LOS A
Lewis Road/Santa Barbara Street	N/A	0.52 - LOS A
Lewis Road/Potrero Road	1.0 sec - LOS A	1.5 sec - LOS A

Table 4.14 Year 2025 Intersection Levels of Service PM Peak Hour

Intersection	ICU/Delay - Level of Service	
	Existing	Year 2025
Lewis Road/Ventura Boulevard	0.57 - LOS A	0.72 - LO~~S C~~
Lewis Road/Dawson Place	N/A	0.65 - LOS B
Lewis Road/Pleasant Valley Road	0.72 - LOS C	0.70 - LOS B
Lewis Road/University Avenue	N/A	0.57 - LOS A
Lewis Road/Santa Barbara Street	N/A	0.42 - LOS A
Lewis Road/Potrero Road	1.2 sec - LOS A	1.3 sec - LOS A

Mitigation Measures. No mitigation measures would be required to reduce impacts to intersection operations.

Impact After Mitigation. Impacts to intersection operations would be less than significant without implementation of mitigation measures.

Effect T-3 Construction of the proposed project would temporarily disrupt traffic and circulation on Lewis Road. During the construction phase of the proposed project strategies to reduce impacts to traffic would be implemented. With mitigation, impacts would be less than significant (M).

Construction of the proposed project would involve excavation and paving along the proposed roadway corridor as well as construction on the Lewis Road Bridge. The following is a brief description of the Construction Phasing plan for each of the project alternatives. Included are strategies for avoiding vehicle safety hazards and traffic impacts during construction.

Caltrans Segment Alternative 1. Caltrans Alternative 1, which includes a 6-meter (19.7-foot) clear recovery zone (i.e. a 2.4 meter (7.87 foot) right shoulder and a 3.6 meter (11.8 foot) graded area), requires widening Lewis Road on both sides. In general travel lanes on the existing road would remain in service during construction. The following is a discussion of the construction stages for the segment of Lewis Road from Pleasant Valley Road to Dawson Place. As the railroad overhead is not located along this portion of the project corridor, Bridge Variations A, B, and C would be treated the same for this portion of the project area.

Stage 1: Widen Lewis Road on the southbound (west side). Temporary K-railing would be used to separate the traveling public from the construction area. A reduction in the outside shoulder width and/or minor re-striping may be needed in order to install K-rail.

Stage 2: The second stage would entail installing K-rail and widening the northbound (east side) of the roadway.

Stage 3: After widening both sides of the roadway, traffic would be shifted to the new outside lanes. Then the existing pavement would be overlaid and rehabilitated.

The following is a discussion of the construction stages for the segment of Lewis Road from Dawson Place to Ventura Boulevard. The railroad overhead is located within this segment. Treatment of the construction phasing of the overhead under Bridge Variations A, B, and C would vary.

The specifics for coordinating traffic movement concurrent with reconfiguration of the Union Pacific Railroad (UPRR) Overhead is discussed below.

- Bridge Variation A-Widen Existing Railroad Overhead

Stage 1: Widen Lewis Road on the northbound (east side). Temporary K-railing would be used to separate the traveling public from the construction area. A reduction in the outside shoulder width and/or minor re-striping may be needed in order to install K-rail.

This stage would also include widening the existing Union Pacific Railroad overhead. Again K-rail would be placed to separate moving traffic from the construction area. A new overhead structure would be constructed on the east side and connected to the existing overhead deck with a closure pour. Careful coordination with the railroad would be required for construction of new overhead footings, columns, superstructure and all work within the railroad right-of-way and along the railroad tracks. A temporary closure of one of the tracks under the overhead, the northern spur may be required. This was done in 1972 when the existing overhead was built.

Stage 2: After completion of Stage 1, traffic would be shifted to the newly completed northbound lane and the existing roadway overlaid. One or two traffic lane shifts may be required in order to complete the overlay work. However, one lane in each direction and left-turn lanes at signalized intersections would be maintained at all times.

Removing the existing non-standard railing on the southbound (west side) of the existing Union Pacific Railroad overhead would also be a part of this stage.

- Bridge Variation B-Remove and Replace Existing Railroad Overhead.

Construction staging for Bridge Variation B would be identical to Bridge Variation A with the exception that during Stage 2, instead of removing the existing non-standard railing on the west (southbound) side of the railroad, the entire existing railroad overhead would be removed and replaced.

- Bridge Variation C-Retain Existing Overhead and Build New Parallel Twin Structure.

Construction staging for Bridge Variation C would be identical to Bridge Variation A with the exception that during Stage 2, instead of removing the existing non-standard railing on the west (southbound) side of the railroad, a separate twin structure would be constructed to the east of the existing to service future northbound traffic.

Caltrans Alternative 2. Alternative 2, which widens Lewis Road and provides only 2.4 m of outside shoulder (without a 3.6 m graded area), would also require widening the road on both

sides. Although the new roadway width for this alternative is narrower than Alternative 1, construction phasing of this alternative would be the same as Alternative 1 for all three Bridge Variations. Again, during construction, traffic lanes on the existing road (i.e., one lane in each direction with left turning lanes at signalized intersections for Variations A and B; and both lanes in use under Variation C) will remain in service.

Ventura County Segment Alternative 1. During construction of County Alternative 1, which widens the existing roadway and the existing Lewis Road Bridge over Calleguas Creek, traffic lanes on the existing road would be maintained (i.e., one lane in each direction).

From the intersection of Potrero Road/Hueneme Road to Santa Barbara Street, widening would occur on the northbound (east side) adjacent to the existing 2-lane roadway. K-railing would be used to separate the through traffic from the construction area.

From Santa Barbara Street to Calleguas Creek, 2 new northbound lanes would be constructed along the northbound (east side) but separately from the existing 2-lane roadway. These lanes would be constructed without disruption to through traffic.

As Lewis Road approaches Calleguas Creek, the widening would shift from the east side of the existing roadway to the west side. As when widening on the east side, construction of the new lanes on the west side could be completed separately from the existing roadway without disrupting traffic. Once the new lanes are completed on both the east and west sides, tapered transition connecting the new southbound lanes to the existing roadway would be constructed. Traffic (one lane in each direction) would then be diverted to the new southbound lanes allowing construction of a similar tapered transition to connect the new northbound lanes to the existing roadway.

County Alternative 1 widens the existing Lewis Road Bridge on the west (or downstream) side. Installation of K-rail to protect the bridge construction area from vehicular traffic on the existing 24-foot bridge would require the use of 10-foot lanes.

From Calleguas Creek to Pleasant Valley Road, 2 new southbound lanes would be constructed along the southbound (west side) but separately from the existing 2-lane roadway. These lanes would be constructed without disruption to through traffic.

Ventura County Segment Alternative 2. During construction of County Alternative 2, which widens the existing roadway, eliminates an "S" curve and constructs a new Lewis Road Bridge, traffic lanes on the existing road would be maintained (i.e., one lane in each direction).

From the intersection of Potrero and Hueneme Road to Santa Barbara Street, and from Calleguas Creek to Pleasant Valley Road, County Alternatives 1 and 2 are identical, therefore so the construction phases for this segment will also be identical. The only difference between these alternatives is at Calleguas Creek, where the existing "S" curve alignment would be eliminated and the existing creek bridge replaced. Under the County Alternative 2, a detour around the bridge site would be constructed. After detouring traffic, the new straightened roadway and bridge could be constructed without traffic impacts. After construction, traffic would be shifted to the new roadway and the temporary detour removed.

Ventura County Segment Alternative 3. Existing traffic lanes on Lewis Road would be maintained during construction (i.e., one lane in each direction). With construction of Lewis Road from Hueneme Road to Calleguas Creek, on a new alignment, no disruption to traffic on the existing roadway would occur. From Calleguas Creek to Pleasant Valley Road, two new southbound lanes would be constructed along the west side but separately from the existing 2-lane roadway. These lanes could be constructed without disrupting traffic flows on the existing Lewis Road alignment.

As discussed above, every effort would be made to minimize the traffic impacts associated with the construction of the proposed project. Despite these strategies, some disruption of traffic would occur.

Mitigation Measures. The following measures would be required to reduce temporary impacts to traffic and circulation during the construction phase of the proposed project.

T-3 (a) A Transportation Management Plan (TMP) shall be developed that focuses on informing the motoring public and affected parties of construction dates and activities. The TMP for the proposed project shall include:

1. Additional project signing posted in advance of construction work zone areas. The advanced signing would identify the dates and the times of the construction periods and the possible travel delays.
2. Advertising of the project construction schedules in local and regional newspapers, including the CSUCI campus newsletter. Any recommended detour routes would also be included in these notices.
3. Direct mailings to adjacent property owners and businesses.
4. Staff attendance at local neighborhood or business association meetings to inform residents and merchants/landowners of the project progress.
5. Posting construction and detour information on the VCTC and Ventura County web pages.

T-3 (b) The TMP developed for this project and traffic control plans (TCP) shall be coordinated with the public information campaign and the transportation demand management elements.

Traffic control during construction operations will consist of primarily temporary traffic lane shifts within the work zone areas. The California Vehicle Code (CVC) requires the California Department of Transportation to adopt rules and regulations prescribing uniform standards and specifications for all official traffic control devices placed pursuant the Vehicle Code. Pursuant to the CVC, Caltrans has prepared a manual entitled Manual of Traffic Controls for Construction and Maintenance Work Zones contained in Chapter 5 of the Caltrans Traffic Manual.

T-3 (c) The traffic control plans and devices adopted for the Lewis Road Widening Project shall follow the principles set forth in the Caltrans Traffic Manual but may deviate from the typical drawings to allow for conditions and requirements of Ventura County as determined by the project engineer.

T-3 (d) All traffic control devices used on street and highway construction, maintenance, utility or incident management (temporary traffic control) operations shall conform to applicable specifications of the Caltrans Traffic Manual.

T-3 (e) Coordination with transit South Coast Area Transit (SCAT), Ventura Intercity Service Transit Authority (VISTA), and other highway agencies, as well as police and other emergency units, utilities, California State University Channel Islands, and railroads, shall be conducted to receive input and support for advising the motorists of the traffic operation situations. Special plan preparation shall be conducted as determined necessary through interagency coordination efforts.

Impact After Mitigation. With implementation of the recommended mitigat~~ion~~ measure, impacts associated with the project would be reduced to a less than significant level.

Effect T-4 Bicycle lanes would be provided as part of the proposed widening of Lewis Road. This is considered a beneficial (B) impact.

All of the project alternatives and associated bridge variations would promote bicycle use through provision of a bicycle lane on both sides of Lewis within the project corridor. Other alternative forms of transportation would not be affected.

Mitigation Measures. No mitigation would be required as impacts are beneficial.

Impact After Mitigation. Beneficial.

4.11.3 Cumulative Impacts

The impacts discussed above address full cumulative development within the project area. Consequently, cumulative impacts are considered equivalent to project-specific impacts.

4.12 Pedestrian and Bicycle Facilities

4.12.1 Methodology and Impact Thresholds

The SCAG RTP, the Ventura County Regional Trails and Pathways map, the City of Camarillo General Plan, and the 1998 Final Environmental Impact Report (FEIR) for the CSUCI campus (Rincon 1998) were reviewed to determine the consistency of the proposed project with regional pedestrian and bicycle facilities.

4.12.2 Project Impacts and Mitigation Measures

As discussed in Chapter 1, *Purpose and Need*, the purpose of the proposed project is to mitigate traffic increases associated with regional growth and improve safety. As a result, the provision of safe and functional Class II bicycle lanes along the entire length of Lewis Road would meet a stated need of the project by providing facilities that promote alternative transportation use and to expand the existing bicycle network within the City of Camarillo and the County of Ventura.

Effect PB-1 The proposed project would install a Class II bicycle lane along either side of Lewis Road under all of the project alternatives and associated bridge variations. This is considered a beneficial impact (B).

Mitigation Measures. None required as the effect is beneficial.

Impact after Mitigation. Beneficial.

4.12.3 Cumulative Impacts

Provision of bicycle lanes along Lewis Road as part of a greater regional network is consistent with the stated goals of regional transportation plans and programs. As development of this facility would promote and safely accommodate bicycle use as an alternative form of transportation, it is considered a beneficial impact. Over the long term, the provision of bicycle lanes would result in decreased air and traffic impacts on, ~~and~~ increased recreational opportunities in, the region and would therefore be cumulatively beneficial.

4.13 Construction

This section summarizes construction related impacts discussed previously in Sections 4.3, *Air Quality*, 4.6, *Drainage and Hydrology*, 4.8, *Hazards*, 4.10, *Noise*, and 4.11, *Traffic and Circulation.*

4.13.1 Methodology and Impact Thresholds

Temporary impacts that could occur during construction of the proposed project were assessed and include impacts on traffic congestion, access of facilities along Lewis Road, creation of traffic detours, safety, air, water, hazards, and noise.

According to the National Environmental Policy Act (NEPA) law and litigation, temporary environmental effects, including temporary disruption due to construction activities, are not substantial effects that require an Environmental Impact Statement. As discussed previously in Sections 4.3, *Air Quality*, 4.6, *Drainage and Hydrology*, 4.8, *Hazards*, 4.10, *Noise*, and 4.11, *Traffic and Circulation*, under the California Environmental Quality Act (CEQA), construction related impacts would be considered significant if they meet the following criteria:

- *Traffic and Circulation:* The disruption of traffic flow, an increase of traffic congestion or traffic safety during project construction;
- *Air Quality:* Daily emissions exceed 25 pounds of ROC or NO_x per the Ventura County Air Pollution Control District (APCD) Guidelines (1994) during construction;
- *Hazards:* The exposure of people and environmental resources to adverse levels of contamination during construction;
- *Water Quality:* Uncontrolled discharge of sediment or other pollutants occurs during construction; and
- *Noise:* Although no specific thresholds exist for construction related noise in the Ventura County General Plan, Policy 2.16.2-1(4) would apply:

- ◊ One-hour Leq of 55 dBA or the ambient noise level plus 3 dBA, whichever is greater, during any hour from 6:00 AM to 7:00 PM;
- ◊ One-hour Leq of 50 dBA or the ambient noise level plus 3 dBA, whichever is greater, during any hour from 7:00 PM to 10:00 PM; and
- ◊ One-hour Leq of 45 dBA or the ambient noise level plus 3 dBA, whichever is greater, during any hour from 10:00 PM to 6:00 AM.

4.13.2 Project Impacts and Mitigation Measures

Effect CON-1 The proposed project would result in temporary disruption of traffic during construction and could result in detours, traffic congestion, and safety considerations. This is considered a less than significant impact as measures to control traffic and safety concerns during construction have been included as part of the proposed project (L).

Mitigation Measures. In order to minimize the disruption of traffic flows during construction and maintain safe conditions under any of the alignment scenarios, a Transportation Management Plan (TMP) and Construction Plan are included as part of the proposed project. The TMP will focus on informing the motoring public and affected parties of construction dates and activities and is discussed in mitigation measures T-3(a) through (c) in Section 4.11, *Traffic and Circulation*. The Construction Plan for the proposed project is discussed in detail for each alternative and associated bridge variation in Section 2.4, *Construction Phasing*, and outlines how traffic will be safely routed during different periods of construction along Lewis Road.

Impact after Mitigation. Impacts would be less than significant with the above mentioned mitigation measures.

Effect CON-2 The proposed project would result in temporary impacts to air and water quality and noise levels during construction. Mitigation would reduce impacts to a less than significant level (M).

As discussed in Section 4.3, *Air Quality*, construction emissions for Reactive Organic Compounds (ROC) and Nitrogen Oxides (No_x) are expected to exceed 25 pounds per day. Mitigation measures AQ-1(a) through (d) would mitigate these temporary construction impacts by minimizing the source of these emissions, fugitive dust and ozone emissions.

As discussed in Section 4.6, *Drainage and Hydrology*, construction of the proposed project could result in the runoff of sedimentation and other pollutants that would affect local drainages and subsurface aquifers, and thus, stream use. Implementation of Best Management Practices (BMPs), as required under the National Pollution Discharge Elimination System (NPDES) regulations, would reduce impacts.

As discussed in Section 4.10, *Noise*, construction of the proposed project could result in the temporary exceedance of local noise standards. Implementation of mitigation measures N-1(a) through (c), would reduce impacts by limiting periods of construction and dampening noise sources, where feasible.

Mitigation Measures. No additional mitigation beyond that described in measures AQ-1(a-d) and N-1(a-c), and as required by NPDES regulations is needed.

Impact After Mitigation. Impacts would be less than significant with the above mentioned mitigation measures.

Effect CON-3 The proposed project could expose workers to contaminated soils or materials during project construction. Mitigation would reduce impacts to a less than significant level (M).

As discussed in Section 4.8, *Hazards,* construction of the proposed project could expose workers to contaminated soils and other waste. Implementation of measures HM-1(a) and (b) and HM-2, would reduce impacts levels by requiring a Lead Compliance Plan and a Health and Safety Plan (HASP) Plan, and outlining the appropriate handling and disposal of materials.

Mitigation Measures. No additional mitigation is required beyond those outlined in HM-1(a) and (b) and HM-2.

Impact After Mitigation. Impacts would be less than significant with the above mentioned mitigation measures.

4.13.3 Cumulative Impacts

Construction impacts to traffic flow and safety, air and water quality, hazards, and noise levels are temporary in nature and would be reduced to less than significant levels with implementation of the TMP, Construction Phasing and other project components and through mitigation. Other projects proposed for development in the project area would also be subject to the same guidelines minimizing impacts to traffic, air, water, hazards, and noise levels. As the project construction would result in a less than significant impact, cumulative construction activities in the region are expected to be de minimus.

4.14 Growth and Irreversible Effects

4.14.1 Growth Inducing Impacts

Section 15126(g) of the *State CEQA Guidelines* requires a discussion of a proposed project's potential to foster economic or population growth, including ways in which a project could remove obstacles to growth. Growth does not in itself necessarily cause substantial changes to the environment. However, depending upon the type, magnitude, and location of growth, it can result in significant environmental effects. A proposed project's growth inducing potential is considered significant under CEQA if it could result in substantial population or economic growth that is not currently planned for a region, or because of the location, type, or magnitude of growth that can reasonably be associated with a project, such growth is likely to result in unavoidable significant effects in one or more environmental issue areas. As the proposed project is a road widening project it would not foster regional growth, but would rather provide improved traffic facilities to meet anticipated demand resulting from cumulative regional growth.

a. Economic Growth. The proposed project would be constructed in two principal segments: 1) Caltrans Segment; and 2) Ventura County Segment. The Caltrans Segment will involve an approximately 9-month construction period for Variation A-Widen Existing Railroad Overhead under either Caltrans Alternative, while Variation B-Remove and Replace Existing Railroad Overhead would involve approximately 12 months. Variation C- Retain Existing Overhead and Build a New Parallel Twin Structure is anticipated to involve approximately 10 months. A work force of about 15 full time construction related positions would be utilized under any scenario. For Caltrans Alternative 1, the estimated construction costs for this segment of the project are about 10.8 million dollars for the Variation A, and about 14.6 million dollars for Variation B, and 12.3 million dollars for Variation C. For Caltrans Alternative 2, the estimated construction costs are about 10.1 million dollars for the Variation A, and about 14.0 million dollars for Variation B, and 11.7 million dollars for Variation C.

The Ventura County Segment of the project would involve an approximate 8-month construction period for Alternatives 1 and 2 and an approximate 10-month construction period for Alternative 3. This segment will require a construction workforce of about 30 people over the course of the project under all of the project alternatives. Estimated construction costs are about 14 million dollars for Alternative 1.17 million dollars for Alternative 2, and 17 million dollars for Alternative 3. The timing of the construction of these two segments is not known, but will depend upon the availability and timing of funding. However, it is anticipated that the two segments would be built roughly concurrently.

Jobs associated with project construction are expected to be filled by the existing local labor force. Therefore, the project is not expected to result in any substantial new job growth in the region under any of the project alternatives.

The project is in response to anticipated growth in the area and the recent approval of the California State University. The limited increases in economic activity during the construction period would not be expected to create direct environmental impacts because the road project does not involve new development, such as construction of new residential, commercial, or industrial buildings that would directly stimulate economic activity.

It was noted in the environmental impact report for the CSUCI project that both the retail use located in the residential zone and the University-related retail services to be provided (cafeterias, copy shop, student book store) would meet the majority of the growth demands within that planned facility. The EIR for the new University also noted that any increase in demand for space to provide retail, office, or industrial space that might be generated by the economic activity generated by the University could easily be accommodated, for the foreseeable future, in the City of Camarillo. The City of Camarillo has over 621 acres planned for commercial and industrial uses. In addition to areas the City has planned for this type of development, the existing building stock in the City would likely be able to absorb some of any new University generated demand. The estimated retail building floor space inventory in the City of Camarillo is showed an 11% vacancy rate, and the estimated current office building floor space inventory in the City of Camarillo is over 17%. Therefore, it was concluded that any University generated demand for commercial and industrial services could

be accommodated by such developments either on-campus or within the urban area of the City of Camarillo.

b. Population Growth. The proposed project would not directly generate population growth by adding new housing and therefore is not expected to substantially affect population growth in the region by providing new employment opportunities.

c. Removal of Obstacles to Growth. Development of the proposed University and the widening of Lewis Road would have the potential to create pressure for additional development in the surrounding area. Because such development would involve either the conversion of farmland to the west or open space to the east, it would have the potential to significantly alter the character of the area.

Several existing regulatory mechanisms would serve to limit the potential for development on lands along the project corridor. First, with the exception of Assessor Parcel Number 234-05-19, the County General Plan designates all lands surrounding the site as either "Agricultural" or "Open Space." Therefore, a General Plan amendment would be required prior to development on any of these lands with any use other than one conditionally permitted in such designations.

The County's *Guidelines for Orderly Development* state that development in the County should occur within incorporated cities. The project corridor is within the City of Camarillo's Area of Interest, a County creation which ensures that each of Ventura County's 10 cities plan for discreet areas which do not overlap with a neighboring city. Therefore, the City of Camarillo is the only municipal jurisdiction that could accommodate urban development in the vicinity of the proposed project. The southerly boundary of the City's Sphere of Influence is located roughly at Pleasant Valley Road. The County of Ventura has land use regulatory jurisdiction over areas south of this line. Only through a change in County land use policy or an expansion of Camarillo's Sphere of Influence would additional urban development be allowed outside of the City.

Lastly, the Oxnard/Camarillo Greenbelt, an agreement between the cities of Oxnard and Camarillo not to annex or develop agricultural lands between the two cities, applies to all agricultural lands south of the City of Camarillo Sphere of Influence and adjacent to the project corridor. Although the proposed project together with buildout of the University could create pressure for development of adjacent lands, implementation of these existing policy directives would prohibit such development.

Mitigation Measures. The proposed project is not expected to result in growth inducing impacts and no mitigation measures are required. It is noted that the following mitigation measures in Table 4.15 were recommended in the CSUCI EIR to avoid the potential secondary growth impacts associated with that project. These measures would also be effective at minimizing any potential effects of this project. The following measures, although not required as part of this project, are noted herein because they are being implemented as part of the University development and will affect growth potential in the immediate project area.

Table 4.15 Summary of Growth Inducement Mitigation Measures - CSUCI EIR

◊	Concurrent with its adoption of the Campus Master Plan, the University shall recommend to the County that the General Plan land use designation for Assessor Parcel No. 234-05-19 be changed to "Agricultural" to reflect the existing and planned land use for this parcel.
◊	The University shall agree not to provide easements or land areas for development support infrastructure (water and sewer lines, drainage infrastructure, and general service access roads) to land areas designated "Agricultural" or "Open Space" in the Ventura County General Plan and that lie adjacent to the 629-acre property.
◊	The University and the Site Authority shall cooperate with any viable land conservancy that proposes to purchase land on its borders for the purposes of agricultural land preservation, open space protection, or habitat restoration.

4.14.2 Irreversible Effects

Section 15126.2 of the State CEQA Guidelines requires that an EIR identify substantial irreversible environmental changes associated with implementation of a project. Irreversible changes may include:

- Current or future commitments to using non-renewable resources;
- Growth inducing impacts that can commit future generations to similar uses; and
- Environmental accidents that may be associated with a project.

Under any of the project alternatives, the conversion of a limited amount of agricultural land to road right of way would be irreversible. Mitigation measures identified herein would minimize impacts associated with biological resources, drainage, noise, geologic hazards, hazardous materials, land use, and visual resources and although some of these effects would be irreversible, the residual impacts have been determined to be less than significant under CEQA.

Consumption of materials and energy are associated with any new development project and these commitments are not unique or unusual to this project or region. This impact is considered less than significant because the project would not use unreasonable amounts of materials or energy in its construction, and demolition and construction contractors increasingly recycle discarded materials such as masonry, concrete, and lumber in response to regulatory requirements and a growing demand for recycled materials.

The project corridor is identified as a roadway on the City and County General Plans and thus the project would not represent an unplanned commitment of the corridor to this use. The widening would require amendment to the County General Plan to designate the road as a four-lane facility verses its current designation as a two-lane facility.

The project is planned to widen and upgrade the current road alignment to existing safety standards and will improve the forecasted level of service. In this regard, the project is considered to be an improvement over the current physical condition and would reduce the probability of accidents and environmental damage associated with such accidents.

Chapter 5 Comments and Coordination

5.1 Notice of Preparation

An Initial Study was prepared for the proposed project that determined the road widening could result in substantial adverse effects on the environment. Therefore, this EIR/EA has been prepared to identify and, when feasible, mitigate those potentially significant impacts.

The Notice of Preparation (NOP)/Initial Study was circulated on April 28, 2000 for a 30-day public comment period that ended May 30, 2000. A public Scoping Meeting was also held on June 15, 2000 at the Ventura County Hall of Administration. This meeting was advertised in the Ventura County Star on May 25, 2000. The NOP/Initial Study and comments on the NOP are contained in Appendix A and B. The following issues were identified by the Initial Study and EIR/EA scoping process as having potentially significant impacts:

- Aesthetics
- Agriculture
- Air Quality
- Biological Resources
- Cultural and Historic Resources
- Drainage/Hydrology
- Geologic Hazards
- Hazardous Materials
- Land Use and Planning
- Noise
- Transportation/Circulation
- Growth and Irreversible Effects

The EIR/EA evaluates site-specific and cumulative impacts for each of these areas. The focus of this EIR/EA is to address potentially significant environmental issues identified in the Initial Study and to recommend feasible mitigation measures, where possible, that reduce or eliminate substantial environmental impacts. Consistency with local zoning, General Plan, land use policies, and long range air-quality planning programs, as well as the project's potential to induce growth, are examined in the EIR/EA.

Public participation in the development of the EIR/EA and in the selection of the final design concept occurs at several points in the planning process. The first input involves the Notice of Preparation (NOP) (Appendix A) and a Public Scoping Meeting (Appendix B). The NOP was sent to all concerned resources agencies and other potentially interested parties and the notice of the public scoping meeting was published in the local newspaper as discussed above. These notices were intended to solicit public input in the environmental document preparation process. Responses to the NOP are contained in Appendix C. These comments and the location of their inclusion within this document are included in Table 5.1.

Table 5.1 NOP Comments Received

Correspondent	Key Comments	Comments Addressed in Document
U.S. Fish and Wildlife	1. Identify presence of listed species potentially present in project corridor, especially in the vicinity of Round Mt. 2. Contact NMFS regarding endangered steelhead trout in Calleguas Creek. 3. Evaluate downstream water quality and quantity impacts.	1. Addressed in Sections 3.4 and 4.4, *Biological Resources*; 2. Verbal communication, Southern California Ecologically Significant Unit as not present within the Calleguas hydrologic unit as outlined in the Federal Register. Addressed in Sections 3.4 and 4.4, *Biological Resources;* 3. Addressed in Sections 3.6 and 4.6, *Drainage and Hydrology*

Correspondent	Key Comments	Comments Addressed in Document
Native American Heritage Commission	1. Complete appropriate records search, Sacred Files Check and report; and 2. List appropriate native American contacts for consultation	1, 2. Addressed in Sections 3.5 and 4.5, *Cultural Resources,* and *Appendix K*
California Regional Water Quality Control Board	Estimate the following for construction and operations: concentrations and loads from non-point and point source discharges, runoff quantity, change in percolation, change in ground and surface water contributions under varied floods conditions.	Addressed in Sections 3.6 and 4.6, *Drainage and Hydrology*
Southern California Association of Governments	Discuss inconsistencies between the project and the applicable general and regional plans which include: 1. Current SCAG forecast for population, household, and employment; 2. Regional Transportation Plan; 3. Regional Air Quality Policies; 4. Quality of Life, Social, Political and Social Equity Policies; and 5. Water Quality Policies.	1-4. Addressed primarily in Chapter 3, *Affected Environment*, Sections 3.3 and 4.3, *Air Quality*, Sections 3.9 and 4.9, *Land Use*, and Section 4.11, *Traffic and Circulation.*
County of Ventura, Resource Management Agency	1. Describe Lewis Road as an "Eligible" scenic highway; and 2. Address Ventura County General Plan policies to water, biological and cultural resources.	1. Addressed in Sections 3.1 and 4.1, *Aesthetics*; and 2. Addressed in Sections 3.4 and 4.4, *Biological Resources*; Sections 3.5 and 4.5, *Cultural Resources, and* Sections 3.6 and 4.6, *Drainage and Hydrology;*
County of Ventura, Office of Agricultural Commissioner	No significant written comment. Verbal comments to include mitigation for impacts to agricultural tree rows	Addressed in Sections 3.2 and 4.2, *Agriculture.*
County of Ventura, Air Pollution Control District	Calculate PM_{10}, No_x and ROC emissions from project per County Guidelines.	Addressed in Sections 3.3 and 4.3, *Air Quality.*
Ventura County Fire District	Maintain access during project construction	Access is during project development.
Harbor Freight Tools	Concerned about the following: 1. Agricultural integrity; 2. Future access to site; 3. Impacts to utilities; and 4. Impacts to Flood Control, Drainage, and Water Quality.	1. Addressed in Sections 3.2 and 4.2, *Agriculture*; 2. Addressed during project design phase; 3. Addressed during project design phase; and 4. Addressed in Sections 3.6 and 4.6, *Drainage and Hydrology.*
John W/ Hughan, Resident	1. Safety Concerns related to traffic speeds and property access; 2. Traffic conflicts with agricultural vehicles; 3. Impacts to tree rows; and 4. Potential impacts to historical buildings along Lewis Road;	1-4. Addressed in Section 4.11, *Traffic and Circulation;* Sections 3.2 and 4.2, *Agriculture;* Sections 3.5 and 4.5, *Cultural Resources*
Patricia Feiner Arkin, Resident	1. Concern that alternative forms of transportation to CSUCI campus were not considered; and 2. Concerned with cumulative impacts to multiple resources.	This issued is addressed in the 1998 Final EIR for the CSUCI campus; and Addressed in relevant cumulative sections under each discussion section.
B-H Farms, Land Owner	Concerned about impacts to agricultural tree rows	Addressed in Sections 3.2 and 4.2, *Agriculture*
Thomas P. Vujovich, Land Owner	Concerned about potential impacts to agricultural tree rows and an existing gate.	Addressed in Sections 3.2 and 4.2, *Agriculture*
Noelle and James Burkey, Land Owners	Concerned about impacts to agricultural tree rows	Addressed in Sections 3.2 and 4.2, *Agriculture*

Coordination with federal, state, and local agencies has occurred throughout the preparation of this document. Coordination has been established with the US Army Corps of Engineers,

US Department of Fish and Wildlife, National Marine Fisheries Service, US Department of Agriculture Natural Resources Conservation Service, California Department of Fish and Game, City of Camarillo, Ventura County Transportation Commission, and various Ventura County agencies.

Other agencies, organizations, and individuals contacted during the preparation of this project included the following:

- B-H Farm, Property Owners;
- Britt, Butch, Deputy Director, County of Ventura Public Works Agency;
- Bulla, Julie, Planner, Ventura County Agricultural Commissioner's Office;
- Crull, Mike, P.E., Boyle Engineering;
- Buettner, David, Chief Deputy, Ventura County Agricultural Commissioner's Office;
- Ellison, Scott, Ventura County Resource Management Agency;
- Greaves, Jim, Ornithologist and Wildlife Photographer;
- Harris, Scott, California Department of Fish and Game;
- Hawkins, Dennis, County of Ventura Resource Management Agency;
- Hooke, Chris, County of Ventura Public Works Agency;
- Michael Ip, Boyle Engineering;
- Jewett, Stephen, Soil Conservation Scientist, Natural Resources Conservation Services;
- Lohmus, Natasha. California Department of Fish and Game;
- McNeil, Spencer. United States Army Corp of Engineers (USACE);
- Noda, Diane K., Field Supervisor, U.S. Fish and Wildlife Service;
- Pilas-Treadway, Debbie, Native American Heritage Commission;
- Ramos, Alfred, Soil Conservation Scientist, Natural Resources Conservation Services;
- Richardson, Randy, Associate Planner, City of Camarillo;
- Sakovich, Nick, Ventura County Farm Advisory Office;
- Smith, Bruce, County of Ventura Resource Management Agency;
- Travis, Tom, Ventura County Flood Control District;
- Taylor, Delores, Senior Hydrologist, Ventura County Flood Control District;
- Vujovitch, Tom, Property Owner; and
- Wehtje, Morgan, Environmental Specialist, California Department of Fish and Game.

5.2 Notice and Circulation of Draft Environmental Document

A Notice of Availability (NOA) Draft EIR/EA will be sent to all parties listed in Section 7.1, *Distribution List*. Copies of the Draft EIR/EA will be distributed to those parties designated in Section 7.1, *Distribution List*, which includes Federal, State, and local agencies, and political representatives. Copies of the environmental document and associated technical reports will be made available at Caltrans District 7, the County of Ventura, and at local libraries as identified in Section 7.2, *Document Availability*.

A public hearing will be held for public comment on the Lewis Road EIR/EA. This hearing will be noticed twice in local newspapers prior to the public meeting and also through distribution of the NOA. After receipt of public, private, and governmental comments during the 45-day public review period on the Draft EIR/EA, a Final Environmental Impact Report (EIR)/Finding of No Significant Impact (FONSI) will be prepared.

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Chapter 7 Distribution List and Document Availability

7.1 Distribution List

This section provides a list of public officials, agencies, and organizations that will receive a copy of the Notice of Availability of the Draft Environmental Impact Report/Environmental Assessment (DEIR/EA). * Designates individuals/ organizations that will receive a copy of the (DEIR/EA).

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7.2 Document Availablity

The Lewis Road Widening EIR/EA and supporting documents will be available for public review at the following locations:

Camarillo Library
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Camarillo, CA 93010

Foster Library
651 E. Main St.
Ventura, CA 93003

Newbury Park Library
2331 Borchard Rd.
Newbury Park, CA 91320

Oxnard Library
251 South A Street
Oxnard, CA 93030

CALTRANS
Environmental Planning Division
120 S. Spring Street
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Ventura Co. Public Works Agcy.
Transportation Department
Government Center Office
800 S. Victoria Ave.
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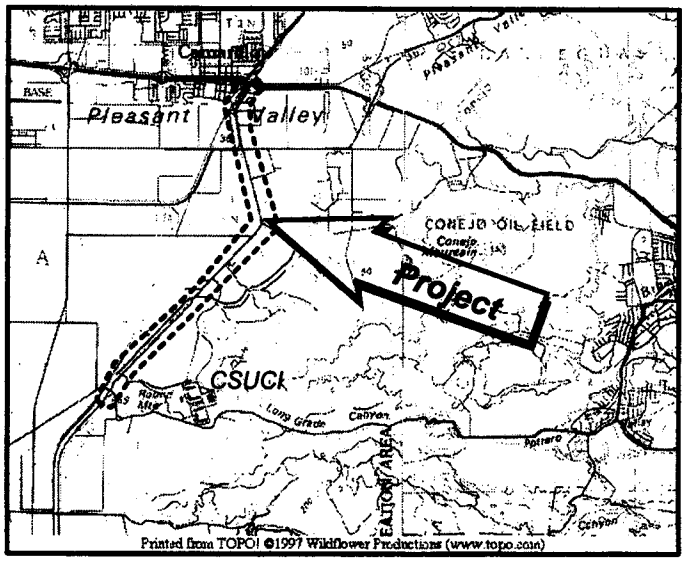
SCH # 2000041146
EA #07-195800

DRAFT
ENVIRONMENTAL IMPACT REPORT/ ENVIRONMENTAL ASSESSMENT (EIR/EA)

LEWIS ROAD WIDENING PROJECT

Ventura Boulevard to Hueneme Road Bridge
Ventura County, California

Submitted Pursuant to Public Resources Code 42 U.S.C.4332(2)(c)



Caltrans, District 7
Office of Environmental Planning
120 South Spring Street
Los Angeles, California 90012

County of Ventura
Public Works Agency
800 South Victoria Avenue
Ventura, California 93009

June 2001

Appendix A

Initial Study/Notice of Preparation

SCH_____

NOTICE OF PREPARATION

SUBJECT: Pursuant to Division 13, Public Resources Code (State 42 U.S.C. 4332 (2) © Federal)

This is to inform you that the County of Ventura and the California Department of Transportation in cooperation with the Federal Highway Administration will prepare an Environmental Impact Report/Environmental Assessment (EIR/EA) for the project described below. An EIR is being prepared to satisfy California Environmental Quality Act (CEQA) requirements while the EA fulfills the requirements of the National Environmental Policy Act (NEPA). Your participation as a responsible/cooperating agency is requested in the preparation and review of this document.

We need to know the applicable permit and environmental review requirements of your agency and the scope and content of the environmental information that is germane to your agency's statutory responsibilities in connection with the proposed project. Your agency will need to use the EIR/EA prepared by our agencies when considering your permit or other approval for the project.

Proposed Project

The purpose of this project is to widen an approximately 5.75-km (3.57-mile) segment of Lewis Road between the Hueneme Road Bridge on the south and Ventura Boulevard on the north in order to accommodate increased traffic, primarily from the new CSU, Channel Islands University. The EIR prepared for the University in 1998 recommended widening of Lewis Road from two to four lanes as mitigation for the increased traffic volumes from U.S. 101 south to the CSUCI campus entrance. The road will be widened from two to four lanes between Ventura Boulevard and the proposed CSU Santa Barbara Avenue extension. From the proposed Santa Barbara Avenue extension to the Hueneme Road Bridge, the roadway will remain two lanes but will have increased lane widths and right of way. The Calleguas Creek bridge will be replaced with a wider structure, the approach to the bridge will be straightened, and the a curve in the road north of Cawelti Road will be straightened from the existing 130-meter (900-foot) radius to a 457-meter (1,500-foot) radius in order to increase the design speed of the roadway from 50 to 60 mph.

Alternatives

The following alternatives will be evaluated in the EIR/EA in addition to the proposed project.

1. No Project Alternative

This alternative assumes no improvements to Lewis Road. This alternative would not meet the demands of the area's projected increase in traffic or the conditions of the 1998 CSUCI EIR. Intersection and roadway levels of service would gradually decline as the university reached buildout and traffic increased correspondingly.

2. Widening of Calleguas Creek Bridge Alternative

This alternative proposes widening the bridge over Calleguas Creek on the west side instead of replacing the bridge entirely. This alternative would minimize construction costs and avoid encroachment on vertical clearance over the channel; however, it would not allow for the straightening of the alignment of Lewis Road as it approaches the bridge.

3. Alignment West of Calleguas Creek Alternative

This alternative would construct a roadway west of Calleguas Creek for the segment of Lewis Road between the existing Calleguas Creek bridge and Hueneme Road. The existing right of way south of the Calleguas Creek bridge would be abandoned, with a new right-of-way passing through the agricultural corridor on the west side of the creek. While plans for this alternative are still pending, preliminary designs indicate that the roadway would connect to Hueneme Road in the vicinity of Laguna Road for westbound traffic and to the Hueneme Road bridge for eastbound traffic. A new bridge would be constructed across Calleguas Creek directly opposite the proposed CSUCI Santa Barbara Avenue extension in order to provide efficient access to the university. This alternative would result in larger right-of-way acquisitions and conversion of agricultural land to urban use.

Probable Environmental Effects of the Proposed Project

The proposed project would potentially result in: aesthetic impacts to Lewis Road as a scenic highway and impacts to the surrounding area's scenic features; construction-related air quality impacts; impacts resulting from the loss of prime farmland; impacts to endangered, threatened, and rare species, wetlands, and locally important species/communities; impacts to cultural resources in the vicinity of Round Mountain, a documented sensitive cultural and archaeological resource site; impacts to historical resources resulting from the removal of 29 eucalyptus trees; impacts to surface water quantity and quality, flooding, and construction-related erosion; potential seismic hazards (fault rupture, ground shaking, and liquefaction) as well as geologic hazards (subsidence); impacts related to agricultural chemicals, lead, and neighboring hazardous materials usage; short and long term noise impacts; and short-term disruption of traffic and rail service and long-term impacts to parking. Consistency with local zoning, General Plan, land use policies, and long range air-quality planning programs as well as the project's potential to induce growth will be also be examined in the EIR/EA.

Consultation

A public hearing regarding the project will be held following completion of the draft document. Any questions or comments concerning this project should be directed to:

Kate Parrot, Associate
Rincon Consultants, Inc.
790 East Santa Clara Street
Ventura, CA 93001
(805) 641-1000
kparrot@rinconconsultants.com

Due to the 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.

Date 4-12-00

Signature Ronald Kosinski

Ronald J. Kosinski, Chief
Caltrans Office of Environmental Planning

Date 4/17/00

Signature N. B. Britt

Butch Britt
Deputy Director of Public Works
Ventura County Transportation Department

INITIAL STUDY FOR
LEWIS ROAD WIDENING PROJECT
VENTURA COUNTY PUBLIC WORKS AGENCY

SECTION A

INITIAL STUDY PROJECT DESCRIPTION

1. Project Title: Lewis Road Widening Project

2. Lead Agency Name and Address:

County of Ventura
800 Victoria Avenue
Ventura, CA 93003

Caltrans District 7
120 South Spring Street
Los Angeles, CA 90012-3606

Contact Person and Phone:

County of Ventura
Butch Britt, Deputy Director of Public Works
(805) 654-2048

Caltrans District 7
Ronald J. Kosinski
(213) 897-6017

3. Applicant/Sponsoring Agency:

County of Ventura Public Works Department
800 S. Victoria Avenue
Ventura, CA 93009

Project Engineer
Boyle Engineering Corporation
5851 Thille St # 201
Ventura, CA 93003

4. Project Location: The proposed project involves the widening of Lewis Road between the Hueneme Road bridge on the south and Ventura Road on the north. The project is located in unincorporated south central Ventura County and is south of U.S. Highway 101. Figure 1 shows the site's regional location in Ventura County. Figure 2 shows the immediate site location.

5. General Plan Designation: General Plan land use designations along either side of Lewis Road include Urban (City of Camarillo), Agricultural (40-acre minimum), and State and Federal Facility. The State and Federal Facility designation includes the CSU Channel Islands Campus and a separate 57.6-acre parcel south of Cawelti Road that includes the Association for Retarded Citizens (ARC) facilities, Casa Pacifica Crisis Care Center, Las Posadas Mental Health Care Facility, and a 24-unit independent living facility (Via Calleguas project) that is currently under construction.

6. Description of the Project: The project involves widening of an approximately 5.75-km (3.57-mile) segment of Lewis Road between the Hueneme Road Bridge on the south and Ventura Boulevard on the north in order to accommodate increased traffic, primarily from the new CSU,

Channel Islands University. The EIR prepared for the University in 1998 recommended widening of Lewis Road from two to four lanes as mitigation for the increased traffic volumes from U.S. 101 south to the CSUCI campus entrance.

The segment of Lewis Road between Ventura Boulevard and Pleasant Valley Road (hereafter referred to as the Caltrans segment) is within the City of Camarillo and is under Caltrans jurisdiction. It is therefore subject to Caltrans design review and approval. The segment of Lewis Road south of Pleasant Valley Road to the Hueneme Road Bridge (hereafter referred to as the County segment) is under the jurisdiction of Ventura County and is subject to design review by the Ventura County Public Works Department. Caltrans is also a reviewing authority for the County segment of the project because of the involvement of federal funds. Caltrans, in this instance, acts as an intermediary agency between the federal funding source and the local agency (the County), and as such becomes a reviewing agency for the proposed project. The two segments are treated as one project under CEQA, and impacts are evaluated as such. However, the discussion of each impact area is broken down into the respective Caltrans and County segments for ease of understanding.

Caltrans Segment. For the Caltrans Segment of the proposed project, Lewis Road would be widened from the existing two lanes to four 3.6-meter (12-foot) travel lanes. The bridge over the Union Pacific Railroad tracks would be widened to the east. From Pleasant Valley Road to Dawson Place, the proposed roadway would also have two 2.4-meter (8-foot) shoulders and two 3.6-meter (12-foot) parkways that comprise the Caltrans standard 6-meter "clear recovery zone" for safety purposes. The 2.4-meter (8-foot) shoulders would be striped to accommodate on-road bicycle lanes on both sides of the roadway. Total right-of-way width for this section would be approximately 28 meters (92 feet). From Dawson Place to Ventura Boulevard, the 3.6-meter (12-foot) parkways would be eliminated and replaced by safety guards and retaining walls. Right-of-way widths for this section would be 19 meters (62 feet). See Figure 3 for the project alignment.

County Segment. For the County Segment of the proposed project, Lewis Road would be widened from the existing two 3.6-meter (12-foot) lanes with 0.3-0.6-meter (1-2-foot) shoulders to four 3.6-meter (12-foot) travel lanes, a 4.3-meter (14-foot) median, two 2.4-meter (8-foot) shoulders, and two 2.4-meter (8-foot) parkways. Total right-of-way width for this section would be 28.7 meters (94 feet). The 2.4-meter (8-foot) shoulders would be striped to accommodate on-road bicycle lanes on both sides of the roadway. The roadway would narrow to two lanes between the Hueneme Road Bridge on the south and the proposed CSU Channel Islands Santa Barbara Avenue extension on the north. This section would consist of two 3.6-meter (12-foot) lanes with two 2.4-meter (8-foot) shoulders and two 3-meter (10-foot) parkways for a total right-of-way width of 18 meters (60 feet).

In this section of road, the Calleguas Creek bridge would be removed and replaced with a wider bridge. Parkways and medians would be eliminated over the bridge. The curve north of Cawelti Road would be straightened from the existing 130-meter (900-foot) radius to a 457-meter (1,500-foot) radius in order to increase the design speed of the roadway from 50 to 60 mph. The intersection of Lewis Road and Pleasant Valley Road would have an additional 3.6-meter (12 foot) lane to accommodate left turns from both the north and south for a total right-of-way width of 31.7 meters (104 feet). See Figure 4 for the project alignment.

7. Surrounding Land Uses and Setting: North: City of Camarillo and U.S. 101; South and West: agricultural lands; East: agricultural and open space lands.

SECTION B

INITIAL STUDY CHECKLIST

ISSUE	(RESPONSIBLE DEPARTMENT)	PROJECT IMPACT DEGREE OF EFFECT*				CUMULATIVE IMPACT DEGREE OF EFFECT*			
		N	LS	S	U	N	LS	S	U
GENERAL:	1. GENERAL PLAN ENVIRONMENTAL GOALS AND POLICIES			X				X	
LAND USE:	2. LAND USE								
	A. COMMUNITY CHARACTER:		X				X		
	B. HOUSING:		X				X		
	C. GROWTH INDUCEMENT:			X				X	
RESOURCES:	3. AIR QUALITY								
	A. REGIONAL		X				X		
	B. LOCAL:		X				X		
	4. WATER RESOURCES								
	A. GROUNDWATER QUANTITY:		X				X		
	B. GROUNDWATER QUALITY:	X				X			
	C. SURFACE WATER QUANTITY:			X				X	
	D. SURFACE WATER QUALITY:			X				X	
	5. MINERAL RESOURCES								
	A. AGGREGATE:		X				X		
	B. PETROLEUM:		X				X		
	6. BIOLOGICAL RESOURCES								
	A. ENDANGERED, THREATENED, OR RARE SPECIES:			X				X	
	B. WETLAND HABITAT:			X				X	
	C. COASTAL HABITAT:	X				X			
	D. MIGRATION CORRIDORS:		X				X		
	E. LOCALLY IMPORTANT SPECIES/ COMMUNITIES:		X				X		
	7. AGRICULTURAL RESOURCES								
	A. SOILS:				X				X
	B. WATER:		X				X		
	C. AIR QUALITY/MICRO-CLIMATE:		X				X		

ISSUE	(RESPONSIBLE DEPARTMENT)	PROJECT IMPACT DEGREE OF EFFECT*				CUMULATIVE IMPACT DEGREE OF EFFECT*			
		N	LS	S	U	N	LS	S	U
	D. PESTS/DISEASES:		X				X		
	E. LAND USE INCOMPATIBILITY:		X				X		
	8. VISUAL RESOURCES								
	A. SCENIC HIGHWAY:			X				X	
	B. SCENIC AREA/FEATURE:			X				X	
	9. PALEONTOLOGICAL RESOURCES:		X				X		
	10. CULTURAL RESOURCES								
	A. ARCHAEOLOGICAL:			X				X	
	B. HISTORICAL:		X				X		
	C. ETHNIC, SOCIAL OR RELIGIOUS:		X				X		
	11. ENERGY RESOURCES:		X				X		
	12. COASTAL BEACHES & SAND DUNES:	X				X			
HAZARDS:	**13. SEISMIC HAZARDS**								
	A. FAULT RUPTURE:			X				X	
	B. GROUND SHAKING:			X				X	
	C. TSUNAMI:	X				X			
	D. SEICHE:	X				X			
	E. LIQUEFACTION:			X				X	
	14. GEOLOGIC HAZARDS								
	A. SUBSIDENCE:			X				X	
	B. EXPANSIVE SOILS:		X				X		
	C. LANDSLIDES/MUDSLIDES:	X				X			
	15. HYDRAULIC HAZARDS								
	A. EROSION/SILTATION:			X				X	
	B. FLOODING:			X				X	
	16. AVIATION HAZARDS	X				X			
	17. FIRE HAZARDS	X				X			
	18. HAZARDOUS MATERIALS/WASTE								
	A. ABOVE-GROUND HAZARDOUS MTL'S:			X				X	
	B. BELOW-GROUND HAZARDOUS MTL'S:	X				X			
	C. HAZARDOUS WASTE:	X				X			

ISSUE	(RESPONSIBLE DEPARTMENT)	PROJECT IMPACT DEGREE OF EFFECT*				CUMULATIVE IMPACT DEGREE OF EFFECT*			
		N	LS	S	U	N	LS	S	U
	19. NOISE AND VIBRATION			X				X	
	20. GLARE		X				X		
PUBLIC FACILITIES/ SERVICES:	**21. TRANSPORTATION/CIRCULATION**								
	A. PUBLIC ROADS AND HIGHWAYS								
	(1) LEVEL OF SERVICE:			X				X	
	(2) SAFETY/DESIGN:		X				X		
	(3) TACTICAL ACCESS:		X				X		
	B. PRIVATE ROADS AND DRIVEWAYS								
	(1) SAFETY/DESIGN:	X				X			
	(2) TACTICAL ACCESS:	X				X			
	C. PEDESTRIAN/BICYCLE								
	(1) PUBLIC FACILITIES:		X				X		
	(2) PRIVATE FACILITIES:	X				X			
	D. PARKING:			X				X	
	E. BUS TRANSIT:		X				X		
	F. RAILROADS:			X				X	
	G. AIRPORTS:	X				X			
	H. HARBORS:	X				X			
	I. PIPELINES:		X				X		
	22. WATER SUPPLY								
	A. QUALITY:	X				X			
	B. QUANTITY:	X				X			
	C. FIRE FLOW:	X				X			
	23. WASTE TREATMENT/DISPOSAL								
	A. INDIVIDUAL SEWAGE DISPOSAL SYSTEM:	X				X			
	B. SEWAGE COLLECTION/TREATMENT FACILITIES:	X				X			
	C. SOLID WASTE FACILITIES:	X				X			
	24. UTILITIES								
	A. ELECTRIC:		X				X		
	B. GAS:		X				X		

ISSUE	(RESPONSIBLE DEPARTMENT)	PROJECT IMPACT DEGREE OF EFFECT*				CUMULATIVE IMPACT DEGREE OF EFFECT*			
		N	LS	S	U	N	LS	S	U
	C. COMMUNICATION:	X				X			
	25. FLOOD CONTROL/DRAINAGE								
	A. FCD FACILITY:			X				X	
	B. OTHER FACILITIES:	X				X			
	26. LAW ENFORCEMENT/EMERGENCY SERVICES								
	A. PERSONNEL/EQUIPMENT:		X				X		
	B. FACILITIES:	X				X			
	27. FIRE PROTECTION								
	A. DISTANCE/RESPONSE TIME:		X				X		
	B. PERSONNEL/EQUIPMENT/FACILITIES:	X				X			
	28. EDUCATION								
	A. SCHOOLS:	X				X			
	B. LIBRARIES:	X				X			
	29. RECREATION								
	A. LOCAL PARKS/FACILITIES:	X				X			
	B. REGIONAL PARKS/FACILITIES:	X				X			
	C. REGIONAL TRAILS/CORRIDORS:		X				X		

*EXPLANATION: DEGREE OF EFFECT
N = NO EFFECT
LS = LESS THAN SIGNIFICANT EFFECT
S = SIGNIFICANT EFFECT; MND OR EIR REQUIRED.
U = UNKNOWN; EIR REQUIRED.

D.	MANDATORY FINDINGS OF SIGNIFICANCE	YES/MAYBE	NO
	BASED ON THE INFORMATION CONTAINED WITHIN SECTIONS B AND C:		
1.	DOES THE PROJECT HAVE THE POTENTIAL TO SIGNIFICANTLY 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?	✗	
2.	DOES THE PROJECT HAVE THE POTENTIAL TO ACHIEVE SHORT-TERM, TO THE DISADVANTAGE OF LONG-TERM, ENVIRONMENTAL GOALS? (A SHORT-TERM IMPACT ON THE ENVIRONMENT IS ONE WHICH OCCURS IN A RELATIVELY BRIEF, DEFINITIVE PERIOD OF TIME WHILE LONG-TERM IMPACTS WILL ENDURE WELL INTO THE FUTURE).	✗	
3.	DOES THE PROJECT HAVE IMPACTS WHICH ARE INDIVIDUALLY LIMITED, BUT CUMULATIVELY CONSIDERABLE? (SEVERAL PROJECTS MAY HAVE RELATIVELY SMALL INDIVIDUAL IMPACTS ON TWO OR MORE RESOURCES, BUT THE TOTAL OF THOSE IMPACTS ON THE ENVIRONMENT IS SIGNIFICANT).	✗	
4.	DOES THE PROJECT HAVE ENVIRONMENTAL EFFECTS WHICH WILL CAUSE SUBSTANTIAL ADVERSE EFFECTS ON HUMAN BEINGS, EITHER DIRECTLY OR INDIRECTLY?		✗

E.	DETERMINATION OF ENVIRONMENTAL DOCUMENT
	ON THE BASIS OF THIS INITIAL EVALUATION:
[ ]	I FIND THE PROPOSED PROJECT COULD NOT HAVE A SIGNIFICANT EFFECT ON THE ENVIRONMENT, AND A NEGATIVE DECLARATION SHOULD BE PREPARED.
[ ]	I FIND THAT ALTHOUGH THE PROPOSED PROJECT COULD HAVE A SIGNIFICANT EFFECT ON THE ENVIRONMENT, THERE WILL NOT BE A SIGNIFICANT EFFECT IN THIS CASE BECAUSE THE MITIGATION MEASURE(S) DESCRIBED IN SECTION C OF THE INITIAL STUDY WILL BE APPLIED TO THE PROJECT. A MITIGATED NEGATIVE DECLARATION SHOULD BE PREPARED.
[✗]	I FIND THE PROPOSED PROJECT, INDIVIDUALLY AND/OR CUMULATIVELY, MAY HAVE A SIGNIFICANT EFFECT ON THE ENVIRONMENT AND AN ENVIRONMENTAL IMPACT REPORT IS REQUIRED.*

Cathy Wright
Senior Environmental Planner

Date

*EIR ISSUES OF FOCUS: Aesthetics, Air Quality, Agriculture Resources, Biological Resources, Cultural Resources, Drainage/Hydrology, Geologic Hazards, Hazardous Materials, Land Use/Policy Consistency, Noise, Transportation/Circulation, and Growth Inducement.

SECTION C

INITIAL STUDY DISCUSSION OF RESPONSES

As discussed in Section A, Item 8, *Description of the Project*, the proposed project consists of two segments: the Caltrans segment (from Ventura Boulevard to Pleasant Valley Road), and the County segment (from Pleasant Valley Road to the Hueneme Road bridge). The two segments are treated as one project under CEQA, and impacts are evaluated as such. However, in order to expedite agency review, the discussion of each impact area is broken down into the respective Caltrans and County segments.

GENERAL

1. GENERAL PLAN ENVIRONMENTAL GOALS AND POLICIES

Caltrans Segment. Lewis Road is identified as an "Arterial" in the Circulation Element of the City of Camarillo General Plan. This designation allows a road width of up to six lanes. The proposed project is consistent with this designation and serves to implement the City of Camarillo Circulation Element, a component of the City's General Plan. In addition, the project involves minimal right-of-way acquisition and does not involve urbanization of an otherwise rural area. Therefore, the project is considered consistent with City policies in these areas. Based on this preliminary evaluation, the project appears to be consistent with locally adopted plans, policies, and goals. However, a detailed review of project consistency with City and countywide policies will be performed as part of the EIR.

County Segment. Lewis Road is identified as a two-lane road in the Circulation Element of the County of Ventura General Plan. Therefore, the project will require a General Plan Amendment prior to its implementation. The project is consistent with the RTP, CMP, and RTIP, regional transportation planning programs. However, the project involves some agricultural land conversion and may involve impacts to Calleguas Creek and Round Mountain, a cultural resource. Thus, it may not be consistent with countywide resource protection policies. As such, the project may involve a tradeoff between meeting regional transportation objectives and resource protection policies. A detailed review of project consistency with County policies will need to be performed as part of the EIR.

The project may conflict with the following environmental goals, policies and programs of the Ventura County General Plan:

- **Farmland Resources Goal 1.6.1-1**

  "Preserve and protect irrigated agricultural lands as a nonrenewable resource to assure the continued availability of such lands for the production of food, fiber and ornamentals." [see Item 7 (a)]

- **Farmland Resources Policy 1.6.2-1**

  "Discretionary development located on land designated as Agricultural (see Land Use Chapter) and identified as Prime Farmland or Farmland of Statewide

Importance on the State's Important Farmland Inventory, shall be planned and designed to remove as little land as possible from potential agricultural production and to minimize impacts on topsoil." [see Item 7 (a)]

- **Farmland Resources Policy 1.6.2-6**

  "Discretionary development adjacent to Agricultural-designated lands shall not conflict with agricultural use of those lands." [see Item 7(e)]

- **Land Use Designation Goal 3.2.1-4**

  "AGRICULTURAL: ...

  (2) Preserve and protect agricultural lands as a nonrenewable resource to assure their continued availability for the production of food, fiber and ornamentals. ...

  (4) Establish policies and regulations which restrict agricultural land to farming and related uses rather than other development purposes.

  (5) Restrict the introduction of conflicting uses into farming areas."

  [see Items 7(a), 7(d), and 7(e)]

- **Land Use Designation Policy 3.2.2-4**

  "AGRICULTURAL:

  (1) The Agricultural land use designation shall primarily include lands which are designated as Prime Farmlands, Farmlands of Statewide Importance or Unique Farmlands in the State's Important Farmland Inventory (IFI). ...

  (3) Agricultural land shall be utilized for the production of food, fiber and ornamentals; animal husbandry and care; uses accessory to agriculture and limited temporary or public uses which are consistent with agricultural or agriculturally related uses."

  [see Items 7(a), 7(d) and 7(e)]

Conclusion: Additional analysis of project consistency with the above General Plan environmental goals and policies should be conducted in conjunction with the referenced environmental issues, and measures should be implemented to minimize or avoid identified impacts.

LAND USE

2. LAND USE

a. Community Character

Caltrans Segment. The Caltrans segment of the project involves minimal right-of-way acquisition and would not involve the displacement of any residences or businesses. Further, the project is located along an existing road corridor that is generally developed with commercial and industrial uses. Therefore, the proposed project is not expected to adversely affect community character or stability.

County Segment. The road corridor is proposed to be expanded by two lanes and developed with a soft shoulder, which will help preserve the rural character of the County segment of the project. The surrounding rural character of this area is not expected to change appreciably as a result of this segment of the project.

b. Housing

Caltrans and County Segments. Construction jobs created by the project have a potential impact on the demand for additional housing. However, since construction is estimated to be of a short-term nature, construction worker demand on housing is regarded as not significant. Thus, the project is not expected to displace any housing or businesses and would not generate any new long-term demand for housing resources.

c. Growth Inducement

Caltrans and County Segments. The proposed project is planned for in the Circulation Element of the City of Camarillo General Plan and in itself is not expected to support any large new commercial or residential development. However, Lewis Road is the primary access route to the recently approved California State University at Channel Islands, 4.3 km (2.7 miles) to the south. Under the proposed campus Master Plan, development of the campus would be phased to serve 15,000 full time equivalent students sometime after Year 2025. The proposed project would serve this campus development and other development that is planned in the area. Much of the area along the corridor is in agricultural use, and the project could facilitate additional unplanned growth. Per CEQA requirements, analysis of growth-inducing impacts will be conducted as part of the EIR.

Conclusion: Based upon the above analysis, additional study is necessary for land use issues related to growth inducement.

RESOURCES

3. AIR QUALITY

The Federal Clean Air Act Amendments of 1990 require that in order for a project to be in conformance, it has to be identified in the adopted plans and programs for the region. This includes the Ventura County Air Quality Management Plan (AQMP) prepared and updated by

the Ventura County Air Pollution Control District (VCAPCD), the Regional Transportation Plan (RTP) and Regional Transportation Improvement Program (RTIP) prepared and updated by the Southern California Association of Governments (SCAG), and the Ventura County Transportation Commission (VCTC), Congestion Management Plan (CMP)/Capital Improvement Program (CIP). According to the Ventura County Public Works Agency-Transportation Department, the proposed project was included in the Federal Transportation Improvement Program (FTIP) and is thus considered to be consistent with the most recently enacted Federal Clean Air Act requirements. In addition, the project involves an access improvement that would support development of the CSUCI campus, and such improvements have been identified in the County's RTP, RTIP, and CMP. These plans have received have received final approval by the County.

It should be noted that the EIR will examine impacts associated only with the proposed road widening. Air quality impacts resulting from buildout of the new California State University, Channel Islands campus was examined in the EIR prepared for the university in 1998. This EIR identified an increase of over 50% in traffic volumes on Lewis Road due to the university and concurrent Phase 1 background development. At final General Plan and university buildout, the average daily traffic (ADT) volumes would increase from a baseline of 6,000- 13,000 ADT to 20,000-43,500 ADT. The traffic analysis prepared for the CSUCI Master Plan 1998 Final EIR found that traffic flow and intersection levels of service would be significantly and adversely impacted unless mitigation were implemented. The EIR recommended widening Lewis Road from two to four lanes as mitigation to reduce impacts to less than significant.

Caltrans Segment. Lewis Road is identified as an "Arterial" in the Circulation Element of the City of Camarillo General Plan. This designation allows a road width of up to six lanes. The Caltrans segment of the proposed project is consistent with this designation and thus is in compliance with the Federal Clean Air Act.

County Segment. Lewis Road is not identified as a four-lane road in the Ventura County General Plan. The General Plan would need to be modified accordingly prior to implementation of the County segment of the road corridor. The EIR will discuss the project's consistency with the Ventura County AQMP

a. <u>Regional Air Quality Impacts</u>

Caltrans and County Segments. Discretionary development projects are considered to have a significant regional air quality impact if the daily emissions for reactive organic compounds (ROC) or nitrogen oxides (NOx) exceeds 25 pounds per day (significant project impact. With the exception of construction activities, the proposed project is not expected to generate additional traffic or cause other sources of air emissions. It is anticipated that the project, in the long term, would incrementally reduce air emissions by providing a more efficient road system. Such a system would have the effect of reducing vehicle trip lengths and delays and a commensurate reduction in air emissions associated with these trip characteristics.

b. <u>Local Air Quality Impacts</u>

Caltrans and County Segments.

Carbon Monoxide - The APCD's *Guidelines for the Preparation of Air Quality Impact Analysis* recommends that a carbon monoxide screening analysis be performed for any project with indirect emissions of 25 or more pounds per day (5 pounds per day in the Ojai Valley Airshed) of reactive organic compounds (ROC) or nitrogen oxides (NOx). Projects with indirect ROC and NOx emissions less than 25 pounds per day will not generate enough motor vehicle traffic to cause high levels of carbon monoxide. Because the project is not expected to generate any additional traffic or cause other long-term sources of air emissions, ROC and NOx emissions are not expected to exceed 25 pounds per day, and a carbon monoxide screening analysis is not necessary. The project is not expected to have a significant local air quality impact with respect to carbon monoxide.

Dust - Construction of the project would cause short-term increases in dust and airborne pollutants. Implementation of dust control measures and use of well-maintained equipment would minimize these emissions. Measures required by the Ventura County Air Pollution Control District for new construction projects would be expected to minimize construction impacts to the extent feasible.

Toxic Pollutants/Odors - Other than the potential for short-term nuisance effects that could occur during construction (such as odors associated with asphalting) the preferred alternative is not expected to result in the creation of objectionable odors. As noted above, widening of the bridge on the west (not the preferred alternative) could result in nuisance effects on the nearby apartment units caused by vehicular exhaust in close proximity to such uses.

Conclusion: Based upon the above analysis, the project will not have a significant cumulative adverse impact on air quality. However, impacts associated with construction activities and consistency with long-range air quality planning programs, such as the Ventura County Air Quality Management Plan, will be examined in the EIR.

4. WATER RESOURCES

a. Groundwater Quantity

Caltrans and County Segments. This project would be expected to use less water due to the conversion of irrigated agricultural lands to roadway. Mature and heritage tree replacement would be required to alleviate potential impacts associated with tree removal that will be required under the proposed project. The tree water requirements would likely be less than that for the existing agricultural lands. The project is not within an aquifer recharge area. Therefore, overcovering of soil by impervious surfaces will not have a significant effect on groundwater recharge.

b. Groundwater Quality

Caltrans and County Segments. This project would have no significant impact on groundwater quality because the project overlies the confined Fox Canyon and Grimes Canyon Aquifers. A confined aquifer is bounded above and below by formations of impermeable, or relatively impermeable, soil or rock. There is no evidence that irrigation return has percolated into the usable aquifer in this area. As a condition of project development, if any abandoned wells are discovered during project development, they shall

be destroyed. Well destruction must be performed under a permit from the Water Resources Division.

c. Surface Water Quantity

Caltrans and County Segments. Local drainage is to the east and then south into an existing VCFCD flood control channel that ultimately drains into Calleguas Creek. This project would have a significant effect because it would increase the area covered by impervious surfaces, thus causing an increase in the quantity of runoff to Calleguas Creek during storm events. Appropriate measures would have to be taken to avoid this impact, such as Regional Water Quality Control Board acceptable Best Management Practices (BMPs) or conceptual drainage modification to prevent roadway stormwater runoff from entering the creek.

d. Surface Water Quality

Caltrans and County Segments. Project construction has the potential to adversely affect surface water quality of Calleguas Creek unless measures to reduce sedimentation and urban storm water runoff are incorporated into the project. Water quality of the creek is protected and regulated at the federal and state level by the Federal Clean Water Act and the National Pollutant Discharge Elimination System (NPDES) permit requirements. The Regional Water Quality Control Board (RWQCB), Los Angeles Region, implements the federal NPDES Permit for General Construction Activities. The proposed project would be required to comply with NPDES permit conditions. Other measures would also have to be taken to avoid impacts to water quality, such as those discussed in Item 15 (a), *Hydraulic Hazards - Erosion/Siltation*, and in Item 4(c), *Water Resources- Groundwater Quantity*.

Conclusion: Based upon the above analysis, additional study will be performed in the EIR to address surface water quantity and quality issues.

5. MINERAL RESOURCES

a. Aggregate

Caltrans and County Segments. The proposed project will require the consumption of aggregate resources during the construction phase. However, this project will have a less-than-significant impact on the demand for aggregate resources because there is a sufficient amount of aggregate resources to meet local demand for the next 50 years (Resources Appendix of the Ventura County General Plan).

b. Petroleum

Caltrans and County Segments. The proposed project will consume petroleum by-products as fuel for the equipment used during project construction phase. However, this project will have a less-than-significant impact on the demand for petroleum resources because petroleum is considered a world-wide, national and state-wide resource which is beyond the scope of local governments to effectively manage or control.

Conclusion: Based upon the above analysis, no additional study is required for impacts on mineral resources.

6. BIOLOGICAL RESOURCES

Biologically, the project site may be divided into four distinct segments:

Caltrans Segment

1. Between Ventura Road and Pleasant Valley Road in the City of Camarillo;

County Segment

2. Along the length of Lewis Road between Pleasant Valley Road and the Hueneme Road Bridge;
3. Around and under the bridge over Calleguas Creek; and
4. The western base of Round Mountain at the southern end of the project site, adjacent to Hueneme Road Bridge.

a. Endangered, Threatened, or Rare Species

Caltrans Segment. Development of the Caltrans segment of the project would remove 29 mature eucalyptus trees (Eucalyptus sp.) located along the western portion of Lewis Road, near the intersection with Pleasant Valley Road. These trees measure between 0.61 and 1.5 meters (two and five feet) in diameter at breast height (dbh) and range from approximately 12 to 21 meters (40 to 70 feet) tall. However, non-native eucalyptus trees are not considered important vegetation from a floristic aspect. Loss of these trees would not be considered a significant biological impact. No rare, threatened, or endangered plant or animal species are known to exist in the project corridor for the Caltrans segment of the project.

County Segment. The County segment of the project would involve the removal of native vegetation and removal and temporary deterioration of existing fish and wildlife habitat. A discussion of the vegetation along the entire length of the proposed road-widening project, the wildlife in the riparian corridor, and potential impacts to these biological resources follow.

Plant Species - The eastern segment from Pleasant Valley Road to the first major bend (proceeding south) has a maintained drainage ditch on the east side and a windrow of exfoliated trees, which appear to be a nonnative cottonwood species (Populus spp.).

The vegetation in the vicinity of and due south of the major bend consists of a collection of exotics and natives along the east side, including large palm trees (Palmus spp.), pepper trees (Schinus molle), eucalyptus, ornamental landscape species "Pride of Madeira," and native elderberry (Sambucus mexicana). A row of planted Monterey pines (Pinus radiata) is located along the west side.

Between the major bend and the bridge over Calleguas Creek, the vegetation along the west side of the road consists of a row of small, ornamental eucalyptus trees. The east side of this section contains planted Monterey pines, high-pressure gas lines, and power lines. The proposed project would remove some eucalyptus trees, at least 14 large palm trees, and other vegetation as described above.

The vegetation in the vicinity of the bridge over Calleguas Creek contains characteristic wetland species. The stream banks and channel under the bridge are highly disturbed with recent tractor treads evident. The dominant vegetation along the southern banks of the creek includes cattails (Typha spp.), bulrush (Scirpus spp.), water speedweed (Veronica anagallis-aquatica) and arroyo willow (Salix lasiolepis). Less common vegetation included giant reed (Arundo donax) and willow herb (Epilobium spp.). Several invasive weeds were also present including tree tobacco (Nicotiana glauca), cockle bur (Xanthium spp.), thistle (Centaurea spp.) and castor bean (Ricinus communis). Although the channel is armored, vegetation at the top of the northern banks includes cattails, coyote brush (Baccharus pilularis var. consanguinea), mule fat (Baccharus salicifolia), and eucalyptus.

Agricultural fields are located east of Lewis Road near the southern terminus of the project, between the bridge over Calleguas Creek and an agricultural pond near Hueneme Road. On the west side along this same stretch of Lewis Road is Calleguas Creek. The creek is constrained on both sides with levees; the east creek bank is armored with riprap and devoid of vegetation. The confined floodplain between the levees supports some characteristic pockets of wetland vegetation as described in the vicinity of the bridge over Calleguas Creek.

At the southern terminus of the project site, at the base of Round Mountain, a volcanic rock outcrop abuts the road and provides habitat for both Riparian and Venturan Sage Scrub communities. At a depression at the base of the outcrop, the dominant riparian vegetation includes sandbar willow (Salix hindsiana), mexican elderberry (Sambucus mexicana), coyote brush, mule fat and nettles (Urtica spp.). Between the roadside and the riparian section, the vegetation was predominantly California sage brush (Artemisia californica) and one pepper tree (Schinus molle). On the outcropping itself, the predominant vegetation includes coyote brush, saltbush (Atriplex spp.), buckwheat (Eriogonum spp.), giant coriopsis (Coriopsis gigantea) and mustard (Brassica negra). Also present were black sage (Salvia mellifera), sweet clover (Melilotis spp.), coffeeberry (Rhamnus californica), fennel (Foeniculum vulgare), several dudleyas (Dudleya pulverulenta and lanceolata) and various annual grasses. Prickly pear (beavertail) cactus (Opuntia basilaris) was also observed on the rockier, thinner soil portions of the hill. The project right-of-way is planned to encroach on this volcanic rock outcrop; however this area is not planned to be disturbed.

The proposed project could reduce the abundance of numerous plants species in the area. Further investigation would be required to determine if the project would decrease the diversity in these riparian and Coastal Sage Scrub environments.

A "sensitive biological resource" refers to any rare, threatened or endangered plant or animal species, or those species considered regionally declining by local authorities. Habitats are also considered sensitive if they exhibit a limited distribution, have high

wildlife value, contain sensitive species, or are particularly susceptible to disturbance. This section lists those rare or otherwise sensitive species and habitats that were found on the site, or that have the potential to occur in the project vicinity. The potential for occurrence of sensitive resources is based on site characteristics and the known regional distribution and habitat affinities of the species. The California State University, Channel Islands Campus Master Plan EIR (Rincon Consultants, 1998), which references listings of sensitive, threatened and endangered plants, indicates that rare or otherwise sensitive plant species were found near the site or have the potential to occur in the project vicinity, particularly in the vicinity of the volcanic outcropping adjacent to the Hueneme Road Bridge.

Sensitive plant species of concern known or possibly found at the site or local vicinity are listed in Table 1. State or federally listed species are accorded the highest protection status; however, no state or federally listed rare, threatened, or endangered plants are expected to occur or substantially utilize the habitats available in the vicinity of the road widening.

Table 1 Sensitive Plant Species in the Project Vicinity

Common Name	Scientific Name	Agency Status	Occurrence
Blochman's dudleya	*Dudleya blochmaniae* ssp *blochmaniae*	FSC	Onsite, known immediately east of site
Verity's dudleya	*Dudleya verityi*	FT	Possible, known about 1 mile east of site
Conejo buckwheat	*Eriogonum crocatum*	CR, FSC	Possible, known about 1 mile east of site
Dune larkspur	*Delphinium parryi* ssp *blochmaniae*	FSC	Possible, known about 2 miles east of site
Plummer's mariposa lily	*Calochortus plummerae*	FSC	Possible, known about 2 miles east of site
Lyon's pentachaeta	*Pentachaeta lyonii*	SE, FE	Low potential

Source: Rincon Consultants, Inc.; CDFG, July 1997, August 1997; Impact Sciences, Inc., September 1997

CE = California Endangered
CR = California Rare
FE = Federal Endangered
FSC = Federal Species of Concern
FT = Federal Threatened

Animal Species - California State University, Channel Islands Campus Master Plan EIR (Rincon Consultants, 1998), which references listings of sensitive, threatened and endangered animals, indicates that rare or otherwise sensitive plant species were found near the site or have the potential to occur in the project vicinity, particularly in the vicinity of the Round Mountain volcanic outcrop adjacent to the Hueneme Road bridge. Sensitive vertebrate species of concern known or possibly found at the site or local vicinity are listed in Table 2. State or federally listed species are accorded the highest protection status; however, no state or federally listed rare, threatened, or endangered animals are expected to occur or substantially utilize the habitats available in the vicinity of the road widening.

Table 2 Sensitive Animals in the Project Vicinity

Common Name	Scientific Name	Agency Status
Amphibians		
Red-legged frog	*Rana aurora draytonii*	FT
Reptiles		
Southwestern pond turtle	*Clemmys marmorata pallida*	CSC
Coast horned lizard	*Phrynosoma coronatum ssp.*	CSC
Coastal patch-nosed snake	*Salvadora hexalepis virgultea*	CSC
Birds		
Prairie falcon	*Falco mexicanus*	CSC (breeding sites)
San Diego cactus wren	*Campylorhynchus brunneicappillus sandiegoense*	CSC
California gnatcatcher	*Polioptila californica*	FT, CSC,
Loggerhead shrike	*Lanius l. ludovicianus*	CSC
Bell's sparrow	*Amphispiza b. bellii*	CSC
Ashy rufous-crowned sparrow	*Aimophila ruficeps canescens*	CSC
Mammals		
Pallid bat	*Antrozous pallidus*	CSC
Pale big-eared bat	*Plecotus townsendi pallescens*	CSC
San Diego desert woodrat	*Neotoma lepida intermedia*	CSC

CSC = California Species of Concern
FT = Federal Threatened

Since sensitive plant and animal species exist in the project vicinity and this preliminary survey was conducted during early winter, a spring plant and animal survey would be required to determine if the proposed road-widening project would reduce the numbers of or encroach upon the critical habitat of any of the above-mentioned plant or animal species.

b. <u>Wetland Habitat</u>

Caltrans Segment. For the Caltrans segment of the project, no natural wetland habitats would be directly affected.

County Segment. As discussed above, the County segment of the project would result in removal and temporary disturbance of the wetland vegetation in Calleguas Creek due to a bridge widening. This project component will require streambed modification and will require a U.S. Army Corps of Engineers Section 404 permit or Regional Water Quality Control Board Section 401 certification per the Clean Water Act. Similarly, a California Department of Fish and Game Section 1601 streambed alteration agreement would be required. No other water bodies are in the immediate vicinity of the proposed project. Further studies would be necessary to determine the amount of area disturbed, and mitigation required to offset lost acreage.

c. Coastal Habitat

Caltrans and County Segments. Coastal resources do not occur in the vicinity of the project site. Development of the project is not expected to adversely impact coastal resources.

d. Migration Corridors

Caltrans Segment. The Caltrans segment of the road widening would not result in a barrier to the normal replenishment of existing species or interfere with migration corridors.

County Segment. The initial construction period of the County segment of the proposed project would create a temporary obstacle for animal species that utilize Calleguas Creek as a movement or migration corridor. However, this impact would not be significant in the long term. The project would not be expected to impact normal replenishment of existing species.

e. Locally Important Species/Communities

Caltrans Segment (only). The Caltrans segment of the project would remove 29 mature eucalyptus trees. At other locations throughout Southern California, including in Ventura County, the species of eucalyptus tree that would be affected by this project provides over-wintering/roosting habitat for Monarch butterflies (Danaus plexippus), which are considered to be locally sensitive species. These trees may also provide roosting and nesting habitat for raptors.

During the site visit, no butterflies were observed roosting in any of the trees, and due to the proximity of human activity and disturbance (Lewis and Pleasant Valley Roads and numerous industrial and office uses), in addition to the linear configuration of the trees, the habitat for Monarch butterfly over-wintering roosts appears to be less than optimal. The noise, vibration, wind disturbance, pollution byproducts of combustion engines and limited natural element protection offered by trees configured linearly are all factors that likely prevent the butterflies from choosing this site to over-winter. It is therefore unlikely that removal of the trees would affect the Monarch butterfly. However, potential impacts to raptor roosting and nesting activities should be examined in the EIR.

Conclusion: Additional evaluation will be performed in the EIR to address project impacts associated with wetland habitat, endangered and threatened species, and locally important/sensitive species.

7. AGRICULTURAL RESOURCES

The **Caltrans Segment** of the proposed project is located in an urbanized area and does not involve acquisition or conversion of agricultural lands. Thus, this segment of the proposed project would not result in impacts to agricultural resources. The discussion below applies only to the **County Segment** of the proposed project.

a. Soils

The proposed road-widening project would reduce the acreage of agricultural crops. While the precise acreage of prime agricultural or "Statewide Important" soils that would be converted from agricultural use is not known, it is estimated to be about 10-15 acres. This exceeds the County of Ventura threshold of significance for agricultural conversion and is considered to be a potentially significant and unavoidable impact of the project under the State CEQA Guidelines. The project would not be subject to the recently enacted SOAR Initiative.

If it is concluded that the amount or type of farmland that would be adversely affected by a transportation improvement project would constitute a significant environmental impact, measures to protect farmland will be considered. These could include alternative alignments that would avoid prime farmland altogether, or that would convert fewer acres of farmland or take other farmland that has a lower relative value. Mitigation measures might also include placing a conservation easement on alternate farmland parcels.

b. Water

Groundwater Quantity – As discussed in Item 4 (a), the project is expected to consume less water for replacement trees than if the project area were to remain in agricultural production.

Surface Water Quality - Heavy rains during construction grading could increase sediment discharge into surface water sources. However this impact would be of relatively short duration and would not significantly affect agricultural operations. Measures that would reduce siltation are discussed in Item 15 (a), *Hydraulic Hazards - Erosion/Siltation.*

c. Air Quality/Micro-Climate

During the grading of this project dust will be generated which could adversely impact nearby farm operations. This impact is expected to be short term in nature and is not considered significant. Standard measures to reduce construction-related air pollution would be required as mitigation.

d. Pests/Disease

No landscaping other than same-species tree replacement is proposed as part of the project. Therefore, it would not introduce new species of plants to the area. No new animal species are anticipated to be introduced as a result of the proposed project.

e. Land Use Compatibility

The project has the potential to adversely affect local agricultural operations and businesses. These issues would be evaluated in the EIR and measures proposed to minimize or avoid impacts.

Conclusion: Based upon the above analysis, the impacts on agricultural soils and land use compatibility are considered potentially significant for the County segment of the project.

8. VISUAL RESOURCES

a. Scenic Highway

Caltrans Segment. Lewis Road is designated as a scenic corridor in the City of Camarillo. Certain design and construction standards apply to designated scenic corridors. The proposed project would be evaluated in the EIR for consistency with these standards.

County Segment. Lewis Road is listed as an eligible county scenic highway in the County's General Plan. The County requires that certain design and construction standards apply to designated scenic routes, and the proposed project should be evaluated in the EIR for consistency with these standards.

b. Scenic Area/Feature

Caltrans Segment. The proposed project is not expected to adversely affect any scenic resources or to obstruct any view of such resources. Several mature trees may need to be removed in order to accommodate the proposed widening. However, this impact would be partially mitigated by an offsite replacement program that would be required under City of Camarillo protocol. The visual significance of these trees to the local community would be evaluated further in the EIR.

County Segment. The proposed project is not expected to adversely affect any scenic resources or to obstruct any view of such resources. However, the project would incrementally convert the road's semi-rural character to a more urban design, and the significance of this change would be considered in the EIR analysis.

Implementation of an approximately 1.8-meter (six-foot) noise wall on the west side of the railroad bridge has the potential to obstruct private views of the southern flank of the Santa Monica Mountains that are visible in the distance. Further, while the proposed project would locate the noise wall would be located about 13.5 meters (44 feet) from the existing structures, there is the potential that the structure could cause shadowing effects on local residences. The extent of these impacts are not known but may be perceived as significant by the local residents affected, and should be further evaluated in the EIR.

Conclusion: Based upon the above analysis, additional study is required for visual resources.

9. PALEONTOLOGICAL RESOURCES

Caltrans and County Segments. The project site lies within alluvial valleys and hillsides of volcanic origin that are not conducive to the development of fossils. No impact to paleontological resources is therefore anticipated.

10. CULTURAL RESOURCES

a. Archaeological

Caltrans Segment. As part of this study, a Phase I Archaeological Resources Study was performed for the project corridor. This included consultation with the South Central Coast Information Center at UCLA to determine the potential for impacts to archaeological resources. Based on the findings of the Phase I survey, the proposed project is not expected to adversely affect any significant archaeological sites.

County Segment. The Phase I study and consultation with the South Central Coast Information Center at UCLA, and a site reconnaissance determined that potentially adverse impacts to cultural resources could occur in the vicinity of Round Mountain, a documented sensitive cultural and archaeological resource site. No other sensitive archaeological resources were identified in the project corridor.

b. Historical

Caltrans Segment. The existing eucalyptus windrow that would be removed as part of the project was reviewed and determined not to be a significant historical resource. However, it is recommended that this finding be further reviewed as part of the EIR.

County Segment. Based on the findings of the Phase I survey, the proposed project is not expected to adversely affect any significant historical sites or structures.

c. Ethnic, Social or Religious

Caltrans Segment. St. Mary Magdalen Church is located southwest of the intersection of Lewis Road and Ventura Boulevard. The proposed project is not expected to adversely affect this facility as the proposed road widening is planned to occur on the east side of the street in this area.

County Segment. This segment is not expected to affect ethnic, social, or religious communities.

Conclusion: Based upon the above analysis, additional study of sensitive cultural resources in the vicinity of Round Mountain and the historical importance of the eucalyptus windrow (Caltrans Segment) should be included in the EIR.

11. ENERGY RESOURCES

Caltrans and County Segments. The proposed project will result in the use of fuel and energy both during the construction and post construction phases. However, per the County of Ventura Initial Study Guidelines, the use of energy is not considered significant because solar, wind and hydraulic energy is renewable and petroleum is considered a world wide, national and statewide resource which is beyond the scope of local governments to manage or control.

12. COASTAL BEACHES AND SAND DUNES

Caltrans and County Segments. The project is not located within or near any coastal beaches or sand dunes and will not result in any direct or indirect impacts on coastal resources.

HAZARDS

13. SEISMIC HAZARDS

a. Fault Rupture

Caltrans and County Segments. The project is located in a seismically active area. The Camarillo Fault crosses the Lewis Road corridor in the vicinity of the existing bridge crossing. Evidence of recent activity along the Camarillo Fault can be observed between Santa Rosa and Lewis Road, where a 10-foot high step in the alluvium parallels the southern margin of Highway 101. The floodplain alluvium on the northern side of the freeway is at the same elevation as the freeway, whereas the floodplain alluvium on the southern side of the freeway is about 10 feet lower than the freeway (Association of Engineering Geologists, 1991). According to the CDMG (1997), the Camarillo Fault is designated as an Alquist-Priolo Special Studies Zone. Therefore, the potential for fault rupture is considered significant.

b. Ground Shaking

Caltrans and County Segments. The regional faults in the area include the Oak Ridge Fault, thought to be a continuation of the Northridge Blind Thrust Fault; the Sycamore Canyon and Boney Mountain Faults; the Ventura-Pitas Point fault zone; the Red Mountain/San Cayetano/Santa Susana/San Fernando fault system; and the San Andreas Fault.

According to the Geologic Map of the Camarillo and Newbury Park Quadrangles (Dibblee, 1990), the site is underlain by Quaternary alluvium consisting of gravel, sand and clay. Local faults in the vicinity of the project corridor include the Springville fault zone, the Simi/Santa Rosa fault system, the Bailey Fault, and the Camarillo Fault. The Springville fault zone lies approximately 1.75 miles northwest of the project corridor, the Simi-Santa Rosa fault system lies approximately 1.5 miles northeast of the corridor, the Camarillo Fault crosses the corridor in the vicinity of the existing bridge crossing, and the Bailey Fault is located about 0.5 miles south of the project site.

The Simi-Santa Rosa fault system includes the Springville and Camarillo Faults (Association of Engineering Geologists, 1991), and is considered active. The Bailey Fault is considered potentially active (City of Camarillo, 1989). Faults in the immediate project area and their seismic capabilities are summarized in Table 3.

Table 3 Estimated Ground Accelerations and Intensities

Fault Name	Maximum Credible Earthquake[1]	Distance in Miles from site (km)	Acceleration (g)[2]	Maximum MMI[3]
Active Faults				
Northridge Blind Thrust	6.9	20 (32)	0.16	VIII-IX
San Cayetano	6.8	18 (29)	0.15	VIII-IX
Santa Susana	6.6	25 (40)	0.095	VII-VIII
San Andreas	7.8	42 (68)	0.12	IX-X
Simi-Santa Rosa	6.7	1.5 (2.4)	0.55	X-XI
Ventura	6.8	12 (19)	0.23	IX-X
Potentially Active Faults				
Boney Mountain Fault	6.0[4]	7(11)	0.24	VIII-IX
Oak Ridge	6.9	12 (19)	0.23	IX-X
Sycamore Canyon Fault	6.2[4]	6 (10)	0.27	VIII-IX

1-CDMG, Probabilistic Seismic Hazard Assessment for the State of California (1996)
2-Idriss (1985)
3-Krinitzsky and Chang, December (1977)
4-Slemmons (1977)
MMI = Modified Mercalli Intensity
Note: Attenuation relationships developed by Idriss (1985), which are applicable for sites located on bedrock, were used to calculate peak ground accelerations. Peak horizontal accelerations on rock and stiff soil sites are almost identical over a wide range of accelerations. Accelerations on deep soil sites are approximately 15 to 20 percent less than those on rock at acceleration levels between 0.2 g and 0.5 g (Idriss, 1985). MMIs were calculated for each fault using the relationship between MCE magnitudes and distance from the epicenter (in this instance the distance from the site and the nearest section of each fault) (Krinitzky and Chang, 1977). MMIs can be influenced by site specific features, such as the thickness of loosely consolidated alluvium and the depth to groundwater. These factors have not been included in the calculation of expected MMIs; thus, the actual intensities that are felt at a site could differ from the levels extrapolated here.

As shown in Table 3, the Simi-Santa Rosa fault system is anticipated to be capable of generating the highest ground accelerations for known active faults in the area. An earthquake along the Simi-Santa Rosa fault system is estimated to generate a MMI of X-XI in the site vicinity. If the depth to groundwater is shallow (less than 12 meters (40 feet) below ground surface) beneath the site, ground accelerations could be 15 to 20 percent lower than those calculated in Table 3. The acceleration and intensity data presented herein is provided for general planning purposes, not for specific design considerations. Site specific design studies are necessary to adequately model ground accelerations and MMIs for a particular structure and area.

c. & d. <u>Tsunami and Seiches</u>

Caltrans and County Segments. Pursuant to the Countywide General Plan, Hazards Appendix, Figure 2.6, the proposed project is not located in a Tsunami and/or Seiches Zone.

Therefore, there would be no adverse impacts relating to tsunamis and/or seiches.

e. <u>Liquefaction</u>

Caltrans and County Segments. Because of its location in a seismically active area, seismically-induced liquefaction is a potential concern. To more accurately determine the potential for liquefaction, site-specific geologic studies are required. These studies should be performed prior to final engineering design and construction. The studies should include site-specific depth to groundwater and soil composition. Areas having liquefiable sediments should be identified, and structures should be properly designed to withstand the conditions.

Conclusion: Additional study and mitigation area required to address the potential for seismic hazards.

14. GEOLOGIC HAZARDS

a. Subsidence

Caltrans and County Segments. According to the Countywide General Plan, Hazards Appendix, Figure 2.8, portions of the project area are located areas with a subsidence potential of less than 0.13 cm (0.05 in) per year. The majority of the project is located outside areas with subsidence potential. However, a more detailed analysis should be performed as part of a geotechnical study and examined in the EIR.

b. Expansive Soils

Caltrans and County Segments. Expansive soils are those characterized as having a high shrink-swell potential (Edwards, et. al., 1970). The shrink-swell potential of a soil refers to the change in volume resulting from a change in moisture content. Soils with high shrink-swell potential generally have a high clay content and shrink when dry and swell when wet. Expansive soils can cause considerable damage to building foundations, roads, and other structures. Soils with low shrink-swell potential are generally suitable for building sites if other geologic factors are also favorable. According to the Soil Survey for the Ventura Area (Edwards, et. al., 1970), soil beneath the site belongs to the Metz and Anacapa Soil series, which has a low shrink-swell potential.

c. Landslides/Mudslides

Caltrans and County Segments. The proposed project is not located in a landslide and/or mudslide Zone per the Countywide General Plan, Hazards Appendix, Figure 2.9.

Conclusion: Additional study and mitigation are required to address the potential for soil-related hazards.

15. HYDRAULIC HAZARDS

a. Erosion/Siltation

Caltrans and County Segments. The proposed project would involve construction activities in the immediate vicinity of the existing Lewis Road corridor. Soil erosion could occur during construction. Exposure of soils in cleared areas increases erosion

potential. This situation could be exacerbated during the rainy season (November 1 through April 1) and appropriate mitigation measures for grading would be required. Potential for erosion due to wind would be minimized by adherence to Ventura County Air Pollution Control District requirements to reduce dust at the construction site. Erosion due to water would be minimized by limiting construction during the rainy season (December to March) and by containing construction run-off on the work site.

b. Flooding

Caltrans Segment. Based on a VCFCD floodplain map dated March 10, 1998, the project is not located in the 100-Year floodplain of Calleguas Creek.

County Segment. Based on a VCFCD floodplain map dated March 10, 1998, the majority of the project corridor is located in the 100-Year floodplain of Calleguas Creek. Therefore, the project could be adversely affected by flooding.

Conclusion: Based upon the above analysis, additional study is required for hydraulic hazards.

16. AVIATION HAZARDS

Caltrans and County Segments. The project site is not located near or in the path of any airport. Therefore, no impact upon aviation is anticipated.

17. FIRE HAZARDS

Caltrans and County Segments. The project is not located in a high fire hazard area. Therefore, no fire hazards are anticipated.

18. HAZARDOUS MATERIALS/WASTE

a. Above Ground Hazardous Materials

Caltrans and County Segments. The project is not expected to generate hazardous waste. To assess the potential for the proposed project to involve the generation of hazardous materials as a result of property acquisitions, an Initial Site Assessment (ISA) was prepared by Rincon Consultants on January 15, 1999 to evaluate the possible presence of hazardous materials within the immediate vicinity of the right of way.

The proposed project would not involve substantial right of way acquisition and, with the exception of required bridge modifications, the project would not involve the acquisition of any structures or the modification of any structures. Therefore, the proposed project is not anticipated to generate hazardous materials associated with structural demolition or excavation.

However, the ISA identifies potential for adjoining and nearby buildings to have asbestos and lead-based paint containing materials and for several neighboring uses along the corridor to involve the use and possible release of hazardous materials. These uses and their specific locations are identified in the ISA. Given the proximity of potential hazardous material release sites to the project corridor and the historic agricultural uses in

the area, the ISA recommends additional records review and subsurface sampling to verify that these past uses have not significantly impacted the subject corridor. Based on visual observations, the bridge structure did not have obvious signs of lead based paint or asbestos containing materials.

The project would not involve the storage, handling or transportation of hazardous materials. It is likely that some vehicles using the roadway would transport hazardous materials and waste; however, these conditions are also likely occurring under current conditions. The relief of congestion should generally alleviate hazardous traffic conditions and may reduce the traffic accident potential that could result in hazardous materials spills along the corridor.

b. Below Ground Hazardous Materials

Caltrans and County Segments. The project will not utilize any underground hazardous materials storage tanks. Therefore the project will not have any impacts relative to underground tanks.

c. Hazardous Waste

Caltrans and County Segments. The project is would not be a producer of hazardous wastes. Therefore the project will not create any adverse environmental impacts relative to hazardous wastes.

Conclusion: Based upon the above review, additional analysis of hazardous materials/waste in connection with neighboring hazardous material uses and historic agricultural use is required.

19. NOISE AND VIBRATION

Caltrans Segment. The primary noise sources in the project area include traffic noise along the existing Lewis Road corridor, other roadways in the project area, and the Union Pacific Railroad in the Caltrans Segment. Land uses in the general project area are commercial and industrial. The only noise sensitive uses that were identified along the corridor include apartments (Park Glen Apartments) and a church and school complex (St. Mary Magdalen) located west of the Caltrans segment. Noise impacts to the school and church are minimized due to the distance of their setbacks and their location atop the existing knoll along this portion of the corridor. Because of the knoll, the line of sight, and thus the noise pathway, to church and school structures is interrupted by the current topographical and structural layout. Therefore, the only noise sensitive use that could be adversely affected by the proposed project is the apartment complex located west and just north of the existing bridge structure. To assess the effect of the project on this noise sensitive use, noise modeling was performed using SOUND 32.

Based on existing traffic volumes of 13,000 ADT for this segment of the road the existing peak hour Leq was determined to be 71.5 dBA at this location. This level currently exceeds the Federal Highway Works Administration (FHWA) peak hour design noise level of 67 dBA Leq. Implementation the proposed project involves widening of the bridge on the east side, away from this existing noise sensitive use. Post project, Year 2020 peak hour noise levels were determined to be 72.6 dBA (Leq). This

forecasted level would also exceed the FHWA design noise level at this sensitive location and would require mitigation. Implementation of a 51-meter long (168 foot), 1.8-meter (6-foot) high wall along the western portion of the bridge would reduce the design noise level at this location to 65.9 dBA.

Once construction methods are developed, further analysis should be performed to identify the significance of the noise expected during construction of this project. The potential for any federal, state or local noise criteria being equaled or exceeded should also be evaluated as part of the noise analysis. In particular, the noise analysis should focus on determining what impacts the project construction would have on the apartments as well as existing businesses, and what mitigation measures may be necessary to alleviate the potential increase in sound levels.

County Segment. The primary noise sources in the project area include traffic noise along the existing Lewis Road corridor and other roadways in the project area. Land uses in the immediate vicinity of the corridor are agricultural. Noise sensitive receptors along the corridor include two farm residences, just south of Camarillo Drive, the Via Calleguas project, the Las Posadas Mental Health Care Facility, and Casa Pacifica Crisis Care Center south of Cawelti Road, another farm residence just north of Cawelti Road, and California State University Channel Islands (CSUCI). Traffic noise impacts to these sensitive uses has been identified as an unavoidable adverse impact of buildout of the CSUCI campus. Table 4 presents existing and projected future noise levels as presented in the Draft EIR for the CSUCI Master Plan.

Table 4 Traffic Noise on Affected Area Roadways

Phase	Lewis Road (Casa Pacifica – 130 m/425 ft)	Lewis Road (Proposed Las Posadas – 73 m/240 ft)	Lewis Road (Existing Las Posadas – 219 m/720 ft)	Cawelti Road (sf residences – 15 m/50 ft)
Existing	50.9	56.4	49.2	69.2
Project and Cumulative Growth	61.6	67.6	60.5	75.4

Implementation of the proposed project would need to incorporate mitigation measures to ensure that the proposed widening project minimizes impacts on sensitive receptors. This may involve implementation of sound walls to screen such uses or the use of rubberized asphalt along select portions of the route, as suggested in the CSUCI EIR.

<u>Conclusion</u>: Based on the above analysis, further study and mitigation are required to address short-term (construction) and long-term (traffic) noise that result from the proposed project.

20. <u>GLARE</u>

Caltrans Segment. To minimize traffic disruption, portions of the construction may occur at night, resulting in a temporary increase in light and glare. Because impacts are

temporary in nature, they are not considered significant. Once the project is constructed, it would not add lighting or glare to the area.

County Segment. This segment of the project does not involve night lighting and would not affect long-term light and glare in the area. However, to minimize traffic disruption, portions of the construction may occur at night, resulting in a temporary increase in light and glare. Given the general absence of sensitive land uses along the immediate project corridor, short-term night lighting during construction would not significantly affect surrounding uses.

Conclusion: Based on the above analysis, no further analysis of glare is necessary.

PUBLIC FACILITIES/SERVICES

20. TRANSPORTATION/CIRCULATION

a. Public Roads and Highways

(1) Levels of Service

Caltrans and County Segments. The proposed project would result in temporary disruption and negligible increase of traffic during construction. Implementation of an appropriate traffic management program would be necessary.

The project is designed to accommodate existing and projected traffic volumes and to alleviate existing and future traffic congestion from existing and planned urban development. Long-term roadway and intersection levels of service would improve with implementation of the proposed project. The EIR will quantify existing and future traffic volumes and to evaluate roadway and intersection operations.

(2) Safety/Design

Caltrans and County Segments. The proposed project would be required to be designed to Ventura County road safety standards. No significant impacts are anticipated.

(3) Tactical Access

Caltrans and County Segments. The proposed project would improve emergency access to surrounding areas by improving traffic flow on Lewis Road.

b. Private Roads and Driveways

Caltrans and County Segments. The proposed road widening does not involve construction or significant alteration of private roads and driveways.

c. **Pedestrian/Bicycle/Equestrian**

Caltrans and County Segments.

(1) Public Facilities

Lewis Road is currently not designed to accommodate pedestrian, bicycle, or equestrian traffic. The road widening includes construction of 2.44-meter (8-foot) shoulders on either side of the roadway, which will be striped with bicycle lanes. Current shoulder widths on Lewis Road are 0.3-0.6 meters (1-2 feet). Construction activities may temporarily interrupt pedestrian and bicycle traffic; however these are temporary effects of the proposed project and are not considered significant.

(2) Private Facilities

The proposed project does not involve and would not affect private pedestrian, bicycle, or equestrian facilities.

d. **Parking**

Caltrans Segment. A Metrolink train station is located on the west side of Lewis Road in the northern portion of the corridor. The proposed road-widening project would require acquisition of right-of-way on the existing Metrolink site, thereby reducing the number of parking spaces available at this station. The number of parking spaces that would be lost is not known at this time. The impact of the proposed project on Metrolink parking would be fully evaluated as part of the EIR. If future year demands show a parking deficiency at this location, opportunities for lot expansion or alternative parking strategies may be necessary.

The proposed project is expected to have temporary parking demands during construction but is not expected to adversely affect parking over the long term. Short-term construction parking should be addressed in the construction management plan.

County Segment. The proposed project is expected to have temporary parking demands during construction but is not expected to adversely affect parking over the long term. Short-term construction parking should be addressed in the construction management plan.

e. **Bus Transit**

Caltrans and County Segments. The proposed project will neither interfere with nor create a substantial demand for bus transit facilities or services.

f. **Railroads**

Caltrans Segment. The project involves widening of the existing bridge that is a railroad overcrossing. Widening of the bridge would be done in conformance with Caltrans requirements for such structures and no long-term impacts are anticipated. Short-term construction has the potential to adversely affect railroad activities and will need to be

planned accordingly. Potential impacts to rail activities will depend upon the type of construction techniques that are used. A detailed assessment of the construction impacts on rail activities will be performed as part of the EIR. However, it anticipated that implementation of a construction management plan will minimize any short-term impacts on rail activities.

County Segment. There are no rail activities in this segment of the project.

g. Airports

Caltrans and County Segments. The project is located more than two miles from the nearest airport and therefore is not expected to be impacted by air traffic.

h. Harbors

Caltrans and County Segments. The project is not located near any harbors.

i. Pipelines

Caltrans Segment. An underground pressurized gas pipeline is located adjacent to Dawson Drive and crosses the proposed road alignment in at least one location in the Caltrans Segment. The owner/operator of the pipeline should be contacted and coordinated with during all phases of the construction process. However, no significant environmental impacts are anticipated.

County Segment. An underground pressurized gas pipeline follows the road corridor for the entire length of the County segment and will likely be affected by construction of the proposed road. The owner/operator of the pipeline should be contacted and coordinated with during all phases of the construction process. However, no significant environmental impacts are anticipated.

Conclusion: Based upon the above analysis additional study is necessary to quantify existing and future traffic volumes for Lewis Road and to evaluate roadway and intersection operations. The EIR should also outline a traffic management program to address construction impacts on traffic flows and railroad traffic for each phase of the project.

22. WATER SUPPLY

a. Quality

Caltrans and County Segments. The proposed project is not expected to have an impact on the quality of water delivered to the project area.

b. Quantity

Caltrans and County Segments. The proposed project is expected to use less water that applied to existing agricultural lands and is not expected to have an impact on the quantity of water delivered to the project area.

c. **Fire Flow**

Caltrans and County Segments. The project is not anticipated to require additional fire flow services. Impacts are considered less than significant.

Conclusion: Impacts are expected to be less than significant.

23. WASTE TREATMENT/DISPOSAL

a. **Individual Sewage Disposal**

Caltrans and County Segments. The proposed project would not require individual sewage disposal systems.

b. **Sewage Collection/Treatment**

Caltrans and County Segments. The project would not generate sewage.

c. **Solid Waste Facilities**

Caltrans and County Segments. The project would not generate solid waste.

Conclusion: Impacts would be less than significant.

24. UTILITIES

a. **Electric**

Caltrans and County Segments. No electrical service is needed for the proposed project. However, the project will require relocation of a number of power poles along the roadway alignment. The utility company should be contacted and coordinated with during all phases of the construction process. However, no significant environmental impacts are anticipated.

b. **Gas**

Caltrans and County Segments. No gas supplies are needed for the proposed project. As discussed in Item 20 (i), *Public Facilities/Services, Pipelines*, a pressurized gas pipeline is located adjacent to the road alignment and will require coordination with the pipeline operator during all phases of construction. However, no significant environmental impacts are anticipated.

c. **Communication**

Caltrans and County Segments. No communication facilities are needed for or would be disrupted by the proposed project.

Conclusion: No additional analysis is required for utilities.

25. FLOOD CONTROL/DRAINAGE

a. FCD Facility

Caltrans and County Segments. The proposed project would involve modification to the existing Ventura County Flood Control Channel (VCFCD) along the east side of the road, south of the railroad bridge. These modifications would include slope stabilization methods such as a retaining wall and redirection of the channel through a concrete box at the Lewis Road/Pleasant Valley intersection. Improvements within the VCFCD drainage channel would require VCFCD review and approval.

b. Other Facilities

Caltrans and County Segments. Potential impact to flood control facilities will be examined in the EIR.

Conclusion: Based upon the above analysis, additional study is required at this time for flood control facilities.

26. LAW ENFORCEMENT/EMERGENCY SERVICES

a. Personnel/Equipment

Caltrans and County Segments. There would likely be limited short-term impacts on police for traffic control or other emergency services during construction. This would be typical of any road improvement project since there may be temporary increase in traffic congestion. However, these impacts would be temporary and are not considered significant. Road-widening improvements would reduce traffic congestion in the long term. This would improve emergency vehicle access.

b. Facilities

Caltrans and County Segments. The project would not require additional law enforcement/emergency facilities.

Conclusion: Based upon the above analysis, no additional study is necessary for cumulative law enforcement/emergency services impacts.

27. FIRE PROTECTION

Distance/Response Time and Personnel/Equipment/Facilities

Caltrans and County Segments. There would likely be limited short-term impacts on emergency services during construction. This would be typical of any road improvement project since there may be temporary increase in traffic congestion. However, these impacts would be temporary and are not considered significant. Road-widening improvements would reduce traffic congestion in the long term. This would improve emergency vehicle access and response times. No impacts to personnel, equipment, or facilities are anticipated.

Conclusion: Based upon the above analysis, fire protection impacts would be less than significant.

28. EDUCATION

a. Schools

The project would have no impact on area schools.

b. Libraries

The project would have no impact on area libraries.

Conclusion: Based upon the above analysis, no additional study is necessary to address the impacts on schools.

29. RECREATION

a. Local Parks/Facilities

The proposed project would not impact local parks and facilities.

b. Regional Parks/Facilities

Camarillo Regional Park, a 327-acre County facility at the base of the Santa Monica Mountains is the closest regional park to the proposed project. The park is located east of the proposed roadway but is not adjacent to Lewis Road and would not be impacted by the proposed project.

c. Regional Trails/Corridors

The Ventura County Regional Trails and Pathways Final Master Plan Report (1995) designates Lewis Road as a Class II regional pathway. A Class II pathway is an on-road bike lane usually located along the edge of the paved area of between the parking lane and the first motor vehicle lane. The proposed project appears to be generally consistent with and serves to implement this component of the Trails and Pathways Master Plan; however it is noted that bicycle lanes would be eliminated over the Calleguas Creek bridge. Consistency with the Trails and Pathways Master Plan and other locally adopted land use policies should be further examined in the EIR.

Conclusion: Based upon the above analysis, additional study is necessary for local and regional recreation facilities.

MANDATORY FINDINGS OF SIGNIFICANCE

1. **Caltrans Segment.** Given the project's location in a predominantly urbanized area, impacts to significant natural resources are limited. The principal project impacts relate to

construction activities that could result in soil erosion and downstream sedimentation into Calleguas Creek, an important natural resource. Other potential impacts to natural resources include the loss of approximately 29 mature and possibly heritage eucalyptus trees that would be removed as part of project development. While a preliminary review of these trees has determined that they are not of historical significance, this finding would be verified in the EIR. Provided that appropriate mitigation measures are identified an implemented during the subsequent phases of the project, the projected is not anticipated to have unavoidable adverse impacts in these areas.

County Segment. The proposed project will involve widening of an existing bridge over Calleguas Creek and may involve the removal of wetland vegetation. In addition, there are several sensitive species that are known to exist in the area and may be adversely affected by the project. A detailed biological review of the project should be completed as part of the EIR.

The project could also affect Round Mountain, which is a documented sensitive cultural resources site. The extent of project impacts on this resource should be fully examined and mitigation requirements developed, as necessary, as part of the EIR.

2. **Caltrans Segment.** The proposed roadway improvements would have long-term benefits in terms of reducing existing and future traffic congestion and only minor, short-term construction-related impacts. Potential impacts to parking facilities at the Metrolink station could adversely affect future parking capacity. While the full magnitude of this impact is unknown, it is unlikely that it would be an unavoidable adverse impact since other parking options appear to exist in the immediate project area. This issue would be examined further in the EIR. The potential that the proposed project would induce growth impacts is also not yet known and further analysis will be required in the EIR. However, given the developed nature of the area immediately along the corridor, the project would not be expected to induce growth in the immediate vicinity.

   County Segment. The proposed roadway improvements would provide access to the recently approved CSUCI campus. In this regard, the project would have a long-term benefit relative to traffic flow and safety. The project would involve short-term construction-related impacts and may involve impacts to biological, agricultural, and cultural resources. However, the extent of these impacts is not known at this time. In addition, the long-term effect of the project on land use and growth inducement in the area needs to be evaluated in greater detail. As such, the project may involve a trade off between long-term transportation and safety goals and long-term environmental protection goals.

3. **Caltrans Segment.** The proposed project is in an area that is developed with urban uses. As such, it does not involve significant new develop in a previously undeveloped natural area. Therefore, project impacts to natural resources are limited. Project implementation is expected to improve local circulation flow in the area, which would also incrementally reduce long-term air emissions. With the implementation of a noise wall to shield an existing apartment complex from unacceptable noise levels, noise exposure at this location would also improve over the current condition. In addition, short-term construction impacts on downstream resources along Calleguas Creek and ultimately Mugu Lagoon could be cumulatively significant unless mitigated.

However, the potential growth inducing impact of the project together with the anticipated extension of the southern portion of the road is not known. However, together these projects could cause individually limited, but cumulatively considerable, impacts.

County Segment. The proposed project is primarily surrounded by agricultural and open space uses, including Calleguas Creek. Impacts to biological resources, while individually limited, may be cumulatively considerable and may require mitigation. Also, issues related to agricultural land conversion are considered to be individually limited but cumulatively considerable in the context of the County-adopted thresholds of significance. In addition, short-term construction impacts on downstream resources along Calleguas Creek and ultimately Mugu Lagoon could be cumulatively significant unless mitigated. The potential growth inducing impact of the project and its potential to result in cumulative land use or other impacts should be fully documented in the EIR.

4. **Caltrans Segment.** It is unlikely that the proposed project would have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly if proper mitigation measures are implemented. However, the proposed project is located in a seismically active area that could be adversely impacted during an earthquake. In addition, given the past industrial uses at properties in the immediate vicinity of the project corridor, there is some potential that offsite activities could have resulted in a hazardous material release that could have affected property within the project corridor. This issue will be examined in the EIR. In addition, impacts to existing residences that could result from partial obstruction of views or shadowing effects associated with the required sound wall need to be explored further. Even though additional assessment is recommended in the above areas, it is not expected that the project would result in significant unavoidable impacts to human beings, either directly or indirectly, provided that the recommended mitigation measures are implemented.

County Segment. It is unlikely that the proposed project would have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly if proper mitigation measures are implemented. However, the proposed project is located in a seismically active area that could be adversely impacted during an earthquake. In addition, given the past agricultural uses at properties in the immediate vicinity of the project corridor, there is some potential that offsite activities could have resulted in a hazardous material release that could have affected property within the project corridor. This issue will be examined further in the EIR. In addition, potential impacts to existing residences that could result from increased noise will be explored further. Even though additional assessment is recommended in the above areas, it is not expected that the project would result in significant unavoidable impacts to human beings, either directly or indirectly, provided that recommended mitigation measures are implemented.

Appendix B

Notice of Scoping Meeting

Ventura County Star
Thursday, May 25

County of Ventura and Caltrans
ENVIRONMENTAL SCOPING NOTICE
Lewis Road Widening Project

The County of Ventura and the Department of Transportation in cooperation with the Federal Highway Administration is preparing an Environmental Impact Report/Environmental Assessment (EIR/EA) for the Lewis Road Widening project. This notice is to invite public participation in a scoping meeting that will be held to identify potential social, economic, and environment issues associated with his project.

Proposed Project. The purpose of the project is to widen an approximately 5.75-km (3.57-mile) segment of Lewis Road between the Hueneme Road Bridge on the south and Ventura Boulevard on the north in order to accommodate increased traffic, primarily from the new California State University (CSU), Channel Islands. The road will be widened from two to four lanes between Ventura Boulevard and the proposed CSU Santa Barbara Avenue extension. From the proposed Santa Barbara Avenue extension to the Hueneme Road Bridge, the roadway will remain two lanes but will have increased lane widths and right of way. The Calleguas Creek bridge will be replaced with a wider structure, the approach to the bridge will be straightened, and the curve in the road north of Cawelti Road will be straightened from the existing 130-meter (900-foot) radius to a 457-meter (1,500-foot) radius. This increase in radius will increase the design speed of the roadway from 50 to 60 mph.

Alternatives. The following alternatives will be evaluated in the EIR/EA in addition to the proposed project.

- No Project Alternative
- Widening of Calleguas Creek Bridge Alternative
- Alignment West of Calleguas Creek Alternative

Where and When. The meeting will be held at 10:00 AM on June 15, 2000 at the Ventura County Government Center, Hall of Administration, Lower Plaza Assembly Room (below the Supervisors meeting room). If you have any questions or would like to send written comments please send them on or before June 15, 2000 to:

Michael Gialketsis, Partner
Rincon Consultants, Inc.
790 East Santa Clara Street
Ventura, CA 93001
(805) 641-1000
mike@rinconconsultants.com

In compliance with Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact Chris Hooke, Project Engineer at (805) 654-2048, 48 hours in advance of the meeting. Publish: May 25, 2000 Ad No. VC124604

Appendix C

Responses to Notice of Preparation

Federal Agency Responses

United States Department of the Interior

FISH AND WILDLIFE SERVICE

Ventura Fish and Wildlife Office
2493 Portola Road, Suite B
Ventura, California 93003

May 9, 2000

Kate Parrot
Associate, Assistant Project Manager
Rincon Consultants, Inc.
790 East Santa Clara Street
Ventura, California 93001

Subject: Species List for and Comments on the Lewis Road Widening Project, Ventura County, California

Dear Ms. Parrot:

We have reviewed your letter describing the proposed widening of Lewis Road in the vicinity of Camarillo, Ventura County. Your firm is preparing a biological resources technical report as part of the environmental impact report for the project and you have requested our input on the types of studies and information we would request for this kind of environmental work, as well as a species list for the area.

The enclosed list of threatened or endangered species fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Act. It contains all of the listed endangered and threatened species known to occur in Ventura County. Many of the species are unlikely to occur in the project area, so the potential for their presence must be determined through habitat evaluation and knowledge of distribution and local occurrences. For those animal species considered potentially occurring in the area, you should consult with us to determine if there are recommended survey protocols.

The Federal Highway Administration (FHWA), as the lead Federal agency for the project, has the responsibility to review its proposed activities and determine whether any listed species may be affected. If the project is a construction project which may require an environmental impact statement[1/], the FHWA has the responsibility to prepare a biological assessment to make a determination of the effects of the action on the listed species or critical habitat. If a biological assessment is not required, the FHWA still has the responsibility to review its proposed activities and determine whether the listed species will be affected. If the FHWA determines that a listed species or critical habitat is likely to be adversely affected, it should request, in writing through our office, formal consultation pursuant to section 7 of the Act. Informal consultation may be

used to exchange information and resolve conflicts with respect to threatened or endangered species or their critical habitat prior to a written request for formal consultation. During this review process, the FHWA may engage in planning efforts but may not make any irreversible commitment of resources. Such a commitment could constitute a violation of section 7(d) of the Act.

As the lead Federal agency, the FHWA is required to confer with the Service, pursuant to section 7(a)(4), if its proposed actions are likely to jeopardize the continued existence of any proposed species or result in the destruction or adverse modification of proposed critical habitat (50 CFR 402.10(a)). In addition, the FHWA may elect to enter into formal conference with the Service if a proposed species or proposed critical habitat may be affected even if the action is not likely to jeopardize or result in the destruction or adverse modification of proposed critical habitat. If the proposed species is listed or the proposed critical habitat is designated after completion of the conference, the FHWA may ask the Service, in writing, to confirm the conference as a formal consultation. If the Service reviews the proposed action and finds that no significant changes in the action as planned or in the information used during the conference have occurred, the Service will confirm the conference as a formal consultation on the project and no further section 7 consultation will be necessary. Use of the formal conference process in this manner can prevent delays in the event the proposed species is listed or the proposed critical habitat is designated during project development or implementation.

Conferences can also include discussions between the Service and the FHWA to identify and resolve potential conflicts between an action and proposed species or proposed critical habitat early in the decision-making process. The Service recommends ways to minimize or avoid adverse effects of the action. These recommendations are advisory because the jeopardy prohibition of section 7(a)(2) of the Act does not apply until the species is listed or the proposed critical habitat is designated. The conference process fulfills the need to inform Federal agencies of possible steps that an agency might take at an early stage to adjust its actions to avoid jeopardizing a proposed species.

The National Marine Fisheries Service (NMFS) should be contacted because Calleguas Creek was included in the proposed critical habitat designation for the endangered steelhead trout (*Oncorhynchus mykiss*). NMFS has a regulatory role similar to the Service.

We have concerns about two of the areas identified on the map provided with your letter. The first is where Lewis Road comes closest to Round Mountain. If the widening would affect undisturbed portions of Round Mountain, we recommend that you conduct surveys for listed plant species that are known from the Conejo Mountain area, including Verity's dudleya (*Dudleya verityi*), Conejo dudleya (*Dudleya abramsii* ssp. *parva*), and Lyon's pentachaeta (*Pentachaeta lyonii*). Several other plant species may occur in the area that are of concern to the California Department of Fish and Game (Department), such as Blochman's dudleya (*Dudleya blochmaniae*), so we recommend that you review information in the Department's Natural

Diversity Data Base and contact the Department at (805) 491-3571 for information on other species of concern that may occur in the project area.

Your map also shows that a long stretch of Lewis Road will be parallel to Calleguas Creek just north of Round Mountain. Calleguas Creek is the main source of fresh water that flows into Mugu Lagoon; changes in the quality of water entering the lagoon could affect several listed species. If the widening affects the creek in this area and alters the hydrology to the extent that flows into Mugu Lagoon are disrupted, this could cause impacts to the species that rely upon the estuarine environment.

We request that you provide us with any reports that are produced for this project. We are especially interested in reviewing any documents prepared pursuant to the California Environmental Quality Act or National Environmental Policy Act. If you have any questions abut these comments or the species list, please contact Rick Farris of my staff at (805) 644-1766.

Sincerely,

Anne S. Bell

For Diane K. Noda
Field Supervisor

Enclosure

1/ "Construction project" means any major Federal action which significantly affects the quality of the human environment designed primarily to result in the building of structures such as dams, buildings, roads, pipelines, and channels. This includes Federal actions such as permits, grants, licenses, or other forms of Federal authorizations or approval which may result in construction.

LISTED SPECIES AND THEIR CRITICAL HABITAT
WHICH MAY OCCUR IN VENTURA COUNTY, CALIFORNIA
(Updated December 7, 1999)

Mammals		
Southern sea otter	*Enhydra lutris nereis*	T
Birds		
California condor	*Gymnogyps californianus*	E
Brown pelican	*Pelecanus occidentalis*	E
Light-footed clapper rail	*Rallus longirostris levipes*	E
California least tern	*Sterna antillarum browni*	E
Western snowy plover	*Charadrius alexandrinus nivosus*	T, CH
Mountain plover	*Charadrius montanus*	PT
Least Bell's vireo	*Vireo bellii pusillus*	E, CH
Southwestern willow flycatcher	*Empidonax traillii extimus*	E
California gnatcatcher	*Polioptila californica*	T
Bald eagle	*Haliaeetus leucocephalus*	T
Reptiles		
Blunt-nosed leopard lizard	*Gambelia silus*	E
Island night lizard	*Xantusia riversiana*	T
Amphibians		
Arroyo toad	*Bufo microscaphus californicus*	E
California red-legged frog	*Rana aurora draytonii*	T
Fishes		
Unarmored threespine stickleback	*Gasterosteus aculeatus williamsoni*	E
Tidewater goby	*Eucyclogobius newberryi*	E
Steelhead trout	*Oncorhynchus mykiss*	*T, PCH
Invertebrates		
Quino checkerspot butterfly	*Euphydryas editha quino*	E
Riverside fairy shrimp	*Streptocephalus woottoni*	E
Conservancy fairy shrimp	*Branchinecta conservatio*	E
Plants		
California orcutt grass	*Orcuttia californica*	E
Salt marsh bird's-beak	*Cordylanthus maritimus* ssp. *maritimus*	E
Slender-horned spineflower	*Dodecahema leptoceras*	E
Lyon's pentachaeta	*Pentachaeta lyonii*	E
Braunton's milk-vetch	*Astragalus brauntonii*	E

VENTURA COUNTY (continued)

Santa Monica Mountains dudleya	*Dudleya cymosa* ssp. *ovatifolia*	T
Marcescent dudleya	*Dudleya cymosa* ssp. *marcescens*	T
Conejo dudleya	*Dudleya abramsii* ssp. *parva*	T
Verity's dudleya	*Dudleya verityi*	T
Nevin's barberry	*Berberis nevinii*	E

Key

E - Endangered T - Threatened PT - Proposed Threatened

CH - Critical Habitat

PCH - Critical habitat which has been proposed

* The National Marine Fisheries Service is the responsible agency for the steelhead.

State Agency Responses

STATE OF CALIFORNIA

Governor's Office of Planning and Research

State Clearinghouse

Gray Davis
GOVERNOR

Loretta Lynch
DIRECTOR

Notice of Preparation

April 28, 2000

To: Reviewing Agencies

Re: Lewis Road Widening Project
SCH# 2000041146

Attached for your review and comment is the Notice of Preparation (NOP) for the Lewis Road Widening Project 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:

Butch Britt
Ventura County
800 Victoria Avenue
Ventura, CA 93003

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,

Scott Morgan

Scott Morgan
Project Analyst, State Clearinghouse

Attachments
cc: Lead Agency

1400 TENTH STREET P.O. BOX 3044 SACRAMENTO, CALIFORNIA 95812-3044
916-445-0613 FAX 916-323-3018 WWW.OPR.CA.GOV/CLEARINGHOUSE.HTML

RECEIVED
MAY 03 2000
SWA - Transportation

Document Details Report
State Clearinghouse Data Base

SCH# 2000041146
Project Title Lewis Road Widening Project
Lead Agency Ventura County

Type nop Notice of Preparation

Description The project involves widening of an approximately 5.75-km (3.57-mile) segment of Lewis Road between the Hueneme Road Bridge on the South and Ventura Boulevard on the north in order to accommodate increased traffic, primarily from the new CSU, Channel Islands University. The EIR prepared for the University in 1998 recommended widening of Lewis Road from two to four lanes as mitigation for the increased traffic volumes from U.S. 101 south to the CSUCI campus entrance.

Lead Agency Contact

Name Butch Britt
Agency Ventura County
Phone 805-654-2048 **Fax**
email
Address 800 Victoria Avenue
City Ventura **State** CA **Zip** 93003

Project Location

County Ventura
City
Region
Cross Streets Ventura Road, Hueneme Road, Lewis Road
Parcel No.
Township **Range** **Section** **Base**

Proximity to:

Highways U.S. 101
Airports
Railways
Waterways
Schools
Land Use General Plan land use designations along either side of Lewis Road include Urban (City of Camarillo), Agricultural (40-acre minimum), and State and Federal Facility. The State and Federal Facility designation includes the CSU Channel Islands Campus and a seperate 57.6-acre parcel south of Cawelti Road that includes the Association for Retarded Citizens (ARC) facilities, Casa Pacifica Crisis Care Center, Las Posadas Mental Health Care Facility, and a 24-unit independent living facility (Via Calleguas project) that is currrently under construction.

Project Issues

Reviewing Agencies Resources Agency; California Coastal Commission; Department of Conservation; Office of Historic Preservation; Department of Parks and Recreation; Department of Fish and Game, Region 5; Native American Heritage Commission; State Lands Commission; Santa Monica Mountains Conservancy; Caltrans, District 7; California Highway Patrol; Regional Water Quality Control Board, Region 4

Date Received 04/28/2000 **Start of Review** 04/28/2000 **End of Review** 05/30/2000

Note: Blanks in data fields result from insufficient information provided by lead agency.

NOP Distribution List

SCH# 2000044114

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  - ( ) **Ann Geraghty**
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  - ( ) **Mike Tollstrup**
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  Sacramento, CA 95812-0806
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Regional Water Quality Control Board

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- [ ] **Central Coast Region (3)**
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  San Luis Obispo, CA 93401-5427
  805/549-3147 Fax 805/543-0397

- [X] **Los Angeles Region (4)**
  Jonathan Bishop
  320 West 4th Street, Suite 200
  Los Angeles, CA 90013
  213/576-6600 Fax 213/576-6640

- [ ] **Central Valley Region (5)**
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  916/255-3000 Fax 916/255-3015

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    Fresno, CA 93726
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    415 Knollcrest Drive
    Redding, CA 96002
    530/224-4845 Fax 530/224-4857

- [ ] **Lahontan Region (6)**
  2501 Lake Tahoe Boulevard
  South Lake Tahoe, CA 96150
  530/542-5400 Fax 530/544-2271

  - ( ) **Victorville Branch Office**
    15428 Civic Drive, Suite 100
    Victorville, CA 92392-2359
    760/241-6583 Fax 760/241-7308

- [ ] **Colorado River Basin Region (7)**
  73720 Fred Waring Drive, #100
  Palm Desert, CA 92260-2564
  760/346-7491 Fax 760/341-6820

- [ ] **Santa Ana Region (8)**
  3737 Main Street, Suite 500
  Riverside, CA 92501-3339
  909/782-4130 Fax 909/781-6288

- [ ] **San Diego Region (9)**
  9771 Clairemont Mesa Blvd., Suite A
  San Diego, CA 92124-1331
  858/467-2952 Fax 858/571-6972

STATE OF CALIFORNIA Gray Davis, *Governor*

NATIVE AMERICAN HERITAGE COMMISSION
915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-4082
(916) 657-5390 - Fax

May 4, 2000

Butch Britt
Ventura County
800 Victoria Avenue
Ventura, CA 93003

RE: SCH # 2000041146 – Lewis Road Widening Project

Dear Mr. Britt:

The Native American Heritage Commission has reviewed the above mentioned NOP. To adequately assess the project-related impact on archaeological resources, the Commission reccomends the following action be required:

1. Contact the appropriate Information Center for a records search. The record search will determine:
   - Whether a part or all of the project area has been previously surveyed for cultural resources.
   - Whether any known cultural resources have already been recorded on or adjacent to the project area.
   - Whether the probability is low, moderate, or high that cultural resources are located within the project area.
   - Whether a survey is required to determine whether previously unrecorded cultural resources are present.

2. The final stage of the archaeological inventory survey is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
   - Required the report containing site significance and mitigation be submitted immediately to the planning department.
   - Required site forms and final written report be submitted within 3 months after work has been completed to the Information Center.

3. Contact the Native American Heritage Commission for:
   - A Sacred Lands File Check.
   - A list of appropriate Native American Contacts for consultation concerning the project site and assist in the mitigation measures.

Lack of surface evidence of archeological resources does not preclude the existence of archeological resources. Lead agencies should include provisions for accidentally discovered archeological resources during construction per California Environmental Quality Act (CEQA) §15064.5 (f). Health and Safety Code §7050.5 and Public Resources Code §5097.98 mandates the process to be followed in the event of an accidental discovery of any human remains in a location other than a dedicated cemetery and should be included in all environmental documents. If you have any questions, please contact me at (916) 653-4038.

Sincerely,

Debbie Pilas-Treadway
Associate Governmental Program Analyst

CC: State Clearinghouse

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California Regional Water Quality Control Board
Los Angeles Region

Winston H. Hickox
Secretary for Environmental Protection

320 W. 4th Street, Suite 200, Los Angeles, California 90013
Phone (213) 576-6600 FAX (213) 576-6640
Internet Address: http://www.swrcb.ca.gov/~rwqcb4

Gray Davis
Governor

May 22, 2000

Chris Hooke
Project Manager
Public Works Agency
County of Ventura
800 S. Victoria Avneue
Ventura, CA 93003

Dear Sir or Madam,

Re: Response to Lewis Road Widening, Project No. 50293

We appreciate the opportunity to comment on the above mentioned project. For your information a list of permitting requirements and Regional Board Contacts is provided in Attachment A hereto.

The project site lies in the Santa Clara watershed that was listed as being impaired pursuant to Section 303 (d) of the Clean Water Act. Impairments listed in reaches downstream from the proposed project include nutrients and their effects, salts, coliform bacteria, and historic pesticides. The Los Angeles Regional Water Quality Control Board will be developing Total Maximum Daily Loads (TMDLs) for the watershed, but the proposed project is expected to proceed before applicable TMDLs are adopted. In the interim, the Regional Board must carefully evaluate the potential impacts of new projects that may discharge to impaired waterbodies. Please provide the following additional information for both the construction and operational phases of the project.

- For each constituent listed above, please provide an estimate of the concentration (ppb) and load (lbs/day) from non-point and point source discharges.
- Estimates of the amount of additional runoff generated by the project during wet and dry seasons.
- Estimate of the amount of increased or decreased percolation due to the project.
- Estimates of the net change in cubic feet per second of groundwater and surface water contributions under historic drought conditions (as compiled by local water purveyors, the Department of Water Resources, and others), and 10-year 50-year, and 100-year flood conditions.

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If you have any questions please call Elizabeth Erickson at (213) 576 6683.

Sincerely,

Melinda Merryfield-Becker

Melinda Merryfield-Becker
Chief, TMDL Unit
Los Angeles Regional Water Quality Control Board

EE:mmb
Attachments (1)
cc: file

ATTACHMENT A

✓ If the proposed project is subject to a **federal license or permit**, and will result in a **discharge (dredge or fill) into a surface water**, including a dry streambed, the project may require a *Section 401 Water Quality Certification*, or waiver thereof. For further information, please contact:

Alex Fu at (213) 576-6692, or Anthony Klecha at (213) 576-6785, Nonpoint Source Unit

✓ If the project involves **inland disposal of nonhazardous contaminated soils and materials**, the proposed project may be subject to *Waste Discharge Requirements*. For further information, please contact:

Rodney Nelson, Landfills & Cleanup Unit, at (213) 576-6719

✓ If the overall project area is **larger than five acres**, the proposed project may be subject to the State *Board's General Construction Activity Storm Water Permit*. For further information, please contact:

Wayne Chiou, Los Angeles Inland Unit, at (213) 576-6664:
Los Angles County watersheds draining to Long Beach and San Pedro

Carlos Urrunaga, Los Angeles Coastal Unit, at (213) 576-6655:
Los Angeles County watersheds draining to Santa Monica Bay and Palos Verdes Peninsula
Ventura County watersheds draining to Malibu Creek watershed

Mark Pumford, Ventura Coastal Unit, at (213) 576-6657:
Watersheds draining to Ventura County coastline

✓ If the project involves a facility that is proposing to discharge storm water associated with **industrial activity** (e.g., manufacturing, recycling and transportation facilities, etc.), the facility may be subject to the State Board's *General Industrial Activities Storm Water Permit*. For further information, please contact:

Robert Tom, Nonpoint Source Unit, at (213) 576-6789:
Watersheds draining to Los Angeles County coastline

Mark Pumford, Ventura Coastal Unit, at (213) 576-6657:
Watersheds draining to Ventura County coastline

✓ If the proposed project involves any construction and/or groundwater **dewatering to be discharged to surface waters** or storm drains, including dry streambeds, the project may be subject to *NPDES/Waste Discharge Requirements*. For further information, please contact:

Wayne Chiou, Los Angeles Inland Unit, at (213) 576-6664:
Los Angles County watersheds draining to Long Beach and San Pedro

Mazhar Ali, Los Angeles Coastal Unit, at (213) 576-6652:
Los Angeles County watersheds draining to Santa Monica Bay and Palos Verdes Peninsula
Ventura County watersheds draining to Malibu Creek watershed

Mark Pumford, Ventura Coastal Unit, at (213) 576-6657:
Watersheds draining to Ventura County coastline

✓ If the proposed project involves any construction and/or groundwater **dewatering to be discharged to land or groundwater**, the project may be subject to *Waste Discharge Requirements*. For further information, please contact:

Jau Ren Chen, Los Angeles Coastal Unit, at (213) 576-6656:
Watersheds draining to Los Angeles County coastline

Mark Pumford, Ventura Coastal Unit, at (213) 576-6657:
Watersheds draining to Ventura County coastline

✓ The proposed project shall also comply with the local regulations associated with the applicable **Regional Board stormwater permit**:

Los Angeles County and co permittees:
NPDES No. CAS614001
Waste Discharge Requirements Order No. 96-054

Ventura County and co-permittees:
NPDES No. CAS063339
Waste Discharge Requirements Order No. 94-082

Local Agency Responses

COUNTY OF VENTURA
PUBLIC WORKS AGENCY

WATER RESOURCES AND ENGINEERING DEPARTMENT
DEVELOPMENT & INSPECTION SERVICES DIVISION
800 South Victoria Avenue, Ventura, California 93009
805 654-2030

Memorandum

Date: May 5, 2000

To: Chris Hooke, Transportation Dept.

From: Al Echarren

Subject: Lewis Road Widening.

1. As requested, this letter is prepared to address the Draft Notice of Preparation. Section B of the Notice, the Initial Study Checklist, has been changed and the Notice should reflect the new format of the Initial Studies Checklist.

2. I have no comments to the Notice of Preparation with regards to the Seismic and Geologic Hazards Sections.

END OF TEXT

JOT
File: Aemem37.doc

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SOUTHERN CALIFORNIA

ASSOCIATION of GOVERNMENTS

Main Office

818 West Seventh Street

12th Floor

Los Angeles, California

90017-3435

t (213) 236-1800

f (213) 236-1825

www.scag.ca.gov

Officers: • President: Councilmember Ron Bates, City of Los Alamitos • First Vice President: Supervisor Kathy Davis, San Bernardino County • Second Vice President: Councilmember Hal Bernson, Los Angeles • Immediate Past President: Supervisor Zev Yaroslavsky, Los Angeles County

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Los Angeles County: Yvonne Brathwaite Burke, Los Angeles County • Zev Yaroslavsky, Los Angeles County • Eileen Ansari, Diamond Bar • Bob Bartlett, Monrovia • Bruce Barrows, Cerritos • George Bass, Bell • Hal Bernson, Los Angeles • Chris Christiansen, Covina • Robert Bruesch, Rosemead • Laura Chick, Los Angeles • Gene Daniels, Paramount • Jo Anne Darcy, Santa Clarita • John Ferraro, Los Angeles • Michael Feuer, Los Angeles • Ruth Galanter, Los Angeles • Jackie Goldberg, Los Angeles • Ray Grabinski, Long Beach • Dee Hardison, Torrance • Mike Hernandez, Los Angeles • Nate Holden, Los Angeles • Lawrence Kirkley, Inglewood • Keith McCarthy, Downey • Cindy Miscikowski, Los Angeles • Stacey Murphy, Burbank • Pam O'Connor, Santa Monica • Jenny Oropeza, Long Beach • Nick Pacheco, Los Angeles • Alex Padilla, Los Angeles • Bob Pinzler, Redondo Beach • Beatrice Proo, Pico Rivera • Mark Ridley-Thomas, Los Angeles • Richard Riordan, Los Angeles • Karen Rosenthal, Claremont • Marcine Shaw, Compton • Rudy Svorinich, Los Angeles • Paul Talbot, Alhambra • Sidney Tyler, Jr., Pasadena • Joel Wachs, Los Angeles • Rita Walters, Los Angeles • Dennis Washburn, Calabasas

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Riverside County: James Venable, Riverside County • Ron Loveridge, Riverside • Greg Pettis, Cathedral City • Andrea Puga, Corona • Ron Roberts, Temecula • Charles White, Moreno Valley

San Bernardino County: Kathy Davis, San Bernardino County • Bill Alexander, Rancho Cucamonga • Jim Bagley, Twentynine Palms • David Eshleman, Fontana • Lee Ann Garcia, Grand Terrace • Gwenn Norton-Perry, Chino Hills • Judith Valles, San Bernardino

Ventura County: Judy Mikels, Ventura County • Donna De Paola, San Buenaventura • Glen Becerra, Simi Valley • Toni Young, Port Hueneme

Riverside County Transportation Commission: Robin Lowe, Hemet

Ventura County Transportation Commission: Bill Davis, Simi Valley

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May 5, 2000

Mr. Chris A. Hooke
Project Manager
County of Ventura
Public Works Agency
Transportation Department
800 Victoria Avenue
Ventura, CA 93003

RE: **Comments on the Notice of Preparation and Initial Study for a Draft Environmental Impact Report for the Lewis Road Widening Project - SCAG No. I 20000197**

Dear Mr. Hooke:

Thank you for submitting the **Notice of Preparation and Initial Study for a Draft Environmental Impact Report for the Lewis Road Widening Project** to SCAG for review and comment. As areawide clearinghouse for regionally significant projects, SCAG assists cities, counties and other agencies in reviewing projects and plans for consistency with regional plans.

In addition, The California Environmental Quality Act requires that EIRs discuss any inconsistencies between the proposed project and the applicable general plans and **regional plans (Section 15125 [d])**. If there are inconsistencies, an explanation and rationalization for such inconsistencies should be provided.

Policies of SCAG's Regional Comprehensive Plan and Guide and Regional Transportation Plan, which may be applicable to your project, are outlined in the attachment. **We expect the DEIR to specifically cite the appropriate SCAG policies and address the manner in which the Project is consistent with applicable core policies or supportive of applicable ancillary policies. Please use our policy numbers to refer to them in your DEIR. Also, we would encourage you to use a side-by-side comparison of SCAG policies with a discussion of the consistency or support of the policy with the Proposed Project.**

Please provide a minimum of 45 days for SCAG to review the DEIR when this document is available. If you have any questions regarding the attached comments, please contact Jeffrey Smith, Senior Planner at (213) 236-1867. Thank you.

Sincerely,

J. DAVID STEIN
Manager, Performance Assessment and Implementation

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COMMENTS ON THE PROPOSAL TO DEVELOP A DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE LEWIS ROAD WIDENING PROJECT SCAG NO. I 20000197

PROJECT DESCRIPTION

The proposed Project includes the widening of approximately 3.57-mile segment of Lewis Road between the Hueneme Road Bridge on the south and Ventura Boulevard on the north in order to accommodate increased traffic, primarily from the new CSU, Channel Islands University. The road will be widened from two to four lanes between Ventura Boulevard and the proposed CSU Santa Barbara Avenue extension. From the proposed Santa Barbara Avenue extension to the Hueneme Road Bridge, the roadway will remain tow lanes but will have increased lane widths and right of way. The Calleguas Bridge will be replaced with a wider structure, the approach to the bridge will be straightened, and a curve in the road north of Cawelti Road will be straightened from the existing 900 foot radius to a 1,500 foot radius in order to increase the design speed of the roadway from 50 mph to 60 mph.

CONSISTENCY WITH REGIONAL COMPREHENSIVE PLAN AND GUIDE POLICIES

The **Growth Management Chapter (GMC)** of the Regional Comprehensive Plan and Guide (RCPG) contains the following policies that are particularly applicable and should be addressed in the Draft EIR for the Project.

3.01 The population, housing, and jobs forecasts, which are adopted by SCAG's Regional Council and that reflect local plans and policies, shall be used by SCAG in all phases of implementation and review.

Regional Growth Forecasts

The Draft EIR should reflect the most current SCAG forecasts which are the 1998 RTP (April 1998) Population, Household and Employment forecasts for the Ventura Council of Governments (VCOG) subregion, unincorporated Ventura County and the City of Camarillo. These forecasts follow:

VCOG Subregional Forecasts	2000	2005	2010	2015	2020
Population	712,800	745,000	804,300	861,700	932,300
Households	237,500	252,400	274,700	297,500	326,400
Employment	306,600	343,200	394,800	438,200	485,600

Unincorporated Ventura County Forecasts	2000	2005	2010	2015	2020
Population	94,800	98,100	104,200	110,000	117,300
Households	30,700	32,200	34,500	36,800	39,700
Employment	29,400	31,300	33,900	36,200	38,600

City of Camarillo Forecasts	2000	2005	2010	2015	2020
Population	56,700	59,100	63,500	67,700	72,900
Households	20,200	21,500	23,600	25,700	28,400
Employment	29,800	31,700	34,500	36,900	39,400

3.03 The timing, financing, and location of public facilities, utility systems, and transportation systems shall be used by SCAG to implement the region's growth policies.

The **Regional Transportation Plan (RTP)** also has goals, objectives, policies and actions pertinent to this proposed project. This RTP links the goal of sustaining mobility with the goals of fostering economic development, enhancing the environment, reducing energy consumption, promoting transportation-friendly development patterns, and encouraging fair and equitable access to residents affected by socio-economic, geographic and commercial limitations. Among the relevant goals, objectives, policies and actions of the RTP are the following:

Core Regional Transportation Plan Goals

1. *Meet the need for mobility and access to transportation of an increased employment and population base in the subregions and region, reduce*

congestion to 1990 or better levels of performance and enhance the movement of goods.

2. *Ensure that transportation investments are cost-effective, protect the environment, promote energy efficiency and enhance the quality of life.*

3. *Serve everyone's transportation needs in a safe, reliable and economical way, including those who depend on public transit, such as the elderly, handicapped and disadvantaged.*

4. *Develop regional transportation solutions that complement subregional transportation systems and the needs of cities, communities and subregions.*

5. *Promote transportation strategies that are innovative and market-based, encourage new technologies and support the Southern California economy.*

Core Regional Transportation Plan Policies

4.01 *Transportation investments shall be based on SCAG's adopted Regional Performance Indicators.*

Mobility - Transportation Systems should meet the public need for improved access, and for safe, comfortable, convenient and economical movements of people and goods.

- *Average Work Trip Travel Time in Minutes – 22 minutes*
- *PM Peak Highway Speed – 33 mph*
- *Percent of PM Peak Travel in Delay (All Trips) – 33%*

Accessibility - Transportation Systems should ensure the ease with which opportunities are reached. Transportation and land use measures should be employed to ensure minimal time and cost.

- *Work Opportunities within 25 Minutes – 88%*

Environment - Transportation Systems should sustain development and preservation of the existing system and the environment. (All Trips)

- *Meeting Federal and State Standards – Meet Air Plan Emission Budgets*

Reliability - Reasonable and dependable levels of service by mode. (All Trips)

- *Transit – 63%*
- *Highway – 76%*

Safety - Transportation Systems should provide minimal, risk, accident, death and

injury. (All Trips)

- *Fatalities Per Million Passenger Miles – 0.008*
- *Injury Accidents – 0.929*

Livable Communities - Transportation Systems should facilitate Livable Communities in which all residents have access to all opportunities with minimal travel time. (All Trips)

- *Vehicle Trip Reduction – 1.5%*
- *Vehicle Miles Traveled Reduction – 10.0%*

Equity - The benefits of transportation investments should be equitably distributed among all ethnic, age and income groups. (All trips)

- *Low-Income (Household Income $12,000)) Share of Net Benefits – Equitable Distribution of Benefits*

Cost-Effectiveness - Maximize return on transportation investment. (All Trips)

- *Net Present Value – Maximum Return on Transportation Investment*
- *Value of a Dollar Invested -- Maximum Return on Transportation Investment*

4.02 Transportation investments shall mitigate environmental impacts to an acceptable level.

4.04 Transportation Control Measures shall be a priority.

4.16 Maintaining and operating the existing transportation system will be a priority over expanding capacity.

4.17 Alternatives to highway expansion must be evaluated before giving regional approval to expand single occupancy lanes.

GMC POLICIES RELATED TO THE RCPG GOAL TO IMPROVE THE REGIONAL QUALITY OF LIFE

The Growth Management goals to attain mobility and clean air goals and to develop urban forms that enhance quality of life, that accommodate a diversity of life styles, that preserve open space and natural resources, and that are aesthetically pleasing and preserve the character of communities, enhance the regional strategic goal of maintaining the regional quality of life. The evaluation of the proposed project in relation to the following policies would be intended to provide direction for plan implementation, and does not allude to regional mandates.

3.18 Encourage planned development in locations least likely to cause environmental impact.

3.20 Support the protection of vital resources such as wetlands, groundwater recharge areas, woodlands, production lands, and land containing unique and endangered plants and animals.

3.21 Encourage the implementation of measures aimed at the preservation and protection of recorded and unrecorded cultural resources and archaeological sites.

3.22 Discourage development, or encourage the use of special design requirements, in areas with steep slopes, high fire, flood, and seismic hazards.

3.23 Encourage mitigation measures that reduce noise in certain locations, measures aimed at preservation of biological and ecological resources, measures that would reduce exposure to seismic hazards, minimize earthquake damage, and to develop emergency response and recovery plans.

GMC POLICIES RELATED TO THE RCPG GOAL TO PROVIDE SOCIAL, POLITICAL, AND CULTURAL EQUITY

The Growth Management Goal to develop urban forms that avoid economic and social polarization promotes the regional strategic goal of minimizing social and geographic disparities and of reaching equity among all segments of society. The evaluation of the proposed project in relation to the policy stated below is intended guide direction for the accomplishment of this goal, and does not infer regional mandates and interference with local land use powers.

3.27 Support local jurisdictions and other service providers in their efforts to develop sustainable communities and provide, equally to all members of society, accessible and effective services such as: public education, housing, health care, social services, recreational facilities, law enforcement, and fire protection.

AIR QUALITY CHAPTER CORE ACTIONS

The **Air Quality Chapter** core actions related to the proposed project includes:

5.07 Determine specific programs and associated actions needed (e.g., indirect source rules, enhanced use of telecommunications, provision of community based shuttle

services, provision of demand management based programs, or vehicle-miles-traveled/emission fees) so that options to command and control regulations can be assessed.

5.11 Through the environmental document review process, ensure that plans at all levels of government (regional, air basin, county, subregional and local) consider air quality, land use, transportation and economic relationships to ensure consistency and minimize conflicts.

WATER QUALITY CHAPTER RECOMMENDATIONS AND POLICY OPTIONS

The **Water Quality Chapter** core recommendations and policy options relate to the two water quality goals: to restore and maintain the chemical, physical and biological integrity of the nation's water; and, to achieve and maintain water quality objectives that are necessary to protect all beneficial uses of all waters.

11.02 Encourage "watershed management" programs and strategies, recognizing the primary role of local governments in such efforts.

11.07 Encourage water reclamation throughout the region where it is cost-effective, feasible, and appropriate to reduce reliance on imported water and wastewater discharges. Current administrative impediments to increased use of wastewater should be addressed.

CONCLUSIONS

All feasible measures needed to mitigate any potentially negative regional impacts associated with the proposed project should be implemented and monitored, as required by CEQA.

ENDNOTE

SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS

Roles and Authorities

SCAG is a ***Joint Powers Agency*** established under California Government Code Section 6502 et seq. Under federal and state law, SCAG is designated as a Council of Governments (COG), a Regional Transportation Planning Agency (RTPA), and a Metropolitan Planning Organization (MPO). SCAG's mandated roles and responsibilities include the following:

SCAG is designated by the federal government as the Region's ***Metropolitan Planning Organization*** and mandated to maintain a continuing, cooperative, and comprehensive transportation planning process resulting in a Regional Transportation Plan and a Regional Transportation Improvement Program pursuant to 23 U.S.C. '134(g)-(h), 49 U.S.C. '1607(f)-(g) et seq., 23 C.F.R. '450, and 49 C.F.R. '613. SCAG is also the designated ***Regional Transportation Planning Agency***, and as such is responsible for both preparation of the Regional Transportation Plan (RTP) and Regional Transportation Improvement Program (RTIP) under California Government Code Section 65080.

SCAG is responsible for developing the demographic projections and the integrated land use, housing, employment, and transportation programs, measures, and strategies portions of the ***South Coast Air Quality Management Plan***, pursuant to California Health and Safety Code Section 40460(b)-(c). SCAG is also designated under 42 U.S.C. '7504(a) as a ***Co-Lead Agency*** for air quality planning for the Central Coast and Southeast Desert Air Basin District.

SCAG is responsible under the Federal Clean Air Act for determining ***Conformity*** of Projects, Plans and Programs to the Air Plan, pursuant to 42 U.S.C. '7506.

Pursuant to California Government Code Section 65089.2, SCAG is responsible for ***reviewing all Congestion Management Plans (CMPs) for consistency with regional transportation plans*** required by Section 65080 of the Government Code. SCAG must also evaluate the consistency and compatibility of such programs within the region.

SCAG is the authorized regional agency for ***Inter-Governmental Review*** of Programs proposed for federal financial assistance and direct development activities, pursuant to Presidential Executive Order 12,372 (replacing A-95 Review).

SCAG reviews, pursuant to Public Resources Code Sections 21083 and 21087, ***Environmental Impact Reports*** of projects of regional significance for consistency with regional plans [California Environmental Quality Act Guidelines Sections 15206 and 15125(b)].

City of Santa Paula

970 VENTURA STREET
SANTA PAULA, CALIFORNIA 93061
Mailing Address: P.O. Box 569
Phone: 805 525-4478
FAX: 805 525-6278

May 8, 2000

Mr. Christopher Hooke
Ventura Co. Public Works Agency
Transportation Department
800 S. Victoria Rd.
Ventura, CA 93009

Re: Lewis Road Widening
Notice of Preparation and Initial Study

Dear Mr. Hooke:

City staff has briefly reviewed the information you sent to us pertaining to this proposed roadway widening, and we have determined that the project will not adversely affect the City of Santa Paula. The project, which anticipates widening Lewis Road from two lanes to four lanes between the Hueneme Road Bridge and Ventura Boulevard, is located entirely south of highway 101, and traffic disruptions are not expected to occur on Highway 126 or on local streets in Santa Paula.

Thank you for consulting with the City of Santa Paula regarding this important roadway improvement project.

Sincerely,

Thomas M. Bartlett, AICP
Director, Planning Department

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"Citrus Capital of the World"

COUNTY OF VENTURA

RESOURCE MANAGEMENT AGENCY
PLANNING DIVISION

M E M O R A N D U M

DATE: May 9, 2000

TO: Chris Hooke, Transportation Department

BS

FROM: Bruce Smith, Manager, General Plan Section

SUBJECT: NOTICE OF PREPARATION (NOP) AND INITIAL STUDY FOR LEWIS ROAD WIDENING PROJECT

NOP

Page 2, Second Paragraph, First sentence. Lewis Road should be described as an "Eligible" scenic highway.

Initial Study

Page 12, 13, General Plan Environmental Goals and Policies. The EIR should also evaluate relevant General Plan goals and policies related to Water Resources Biological Resources, and Cultural Resources.

Location # 1740
800 South Victoria Avenue, Ventura, CA 93009

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PUBLIC WORKS AGENCY
county of ventura

Director
Arthur E. Goulet

Deputy Directors of Public Works
Wm. B. Britt
Transportation
John C. Crowley
Water Resources & Engineering
Kay Martin
Solid Waste Management
Jeff Pratt
Flood Control
Paul W. Ruffin
Central Services

cy file
cy cit
cy Boyle
cy Rincon Cons

May 10, 2000

County of Ventura
Butch Britt, Deputy Director of Public Works
800 Victoria Avenue
Ventura, California 93003

SUBJECT: Project No. 50293, Lewis Road Widening, NOP Initial Study

Dear Mr. Britt :

This letter is in response to the request for review of the above-mentioned project. The District has reviewed the submittal and determined that surface water quality, both during construction and the life of the project, has been adequately addressed and no comments are required at this time.
The applicant should be reminded that a portion of the project in a flood hazard area and that review and permitting by the Flood Control District will be required.

If you have questions regarding this subject please call the undersigned at 654-2011 or for water quality questions please call Vicki Musgrove at 654-5051.

Very truly yours,

Fred Boroumand, P.E.
Manager
Permit & Regulatory Section
Flood Control Department

tt

c: Ronald J,. Kosinski, Caltrans District 7
Joseph Eisenhut, RMA Planning, County of Ventura

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City Of Camarillo

601 Carmen Drive • P.O. Box 248 • Camarillo, CA 93011-0248

Department of
Engineering Services
(805) 388-5340

May 16, 2000

County of Ventura
Public Works Agency
Transportation Department
800 S. Victoria Avenue
Ventura, CA 93009
Attn: Chris A. Hooke

RE: LEWIS ROAD WIDENING, NOTICE OF PREPARATION AND INITIAL STUDY

Dear Mr. Hooke:

Thank you for the opportunity to review and comment on the Notice of Preparation and Initial Study for the above referenced project. Upon review, we find that we do not have any comments.

If you have any questions or need clarification please call me at (805) 388-5342.

Sincerely,

Lindy Moore

Lindy Moore
Engineering Services Analyst

LM/lm

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MAY 18 2000
PWA - Transportation

Office Of
AGRICULTURAL COMMISSIONER

P.O. Box 889, Santa Paula, CA 93061
815 East Santa Barbara Street
Telephone: (805) 933-3165
(805) 647-5931
FAX: (805) 525-8922

MEMORANDUM

TO: **Chris Hooke**
Principal Design Engineer
Ventura County Public Works Agency
Transportation Department

FROM: Julie Bulla
Senior Planner

DATE: May 18, 2000

SUBJECT: **Lewis Road Widening Project (No. 50293)**
Notice of Preparation/Initial Study

Thank you for sending us the Draft Notice of Preparation/Initial Study for the proposed road widening project. We concur with the findings of the Initial Study that an EIR be prepared to address the project's consistency with General Plan agricultural policies, conversion of prime and statewide importance soils, and compatibility with agricultural operations.

We look forward to reviewing the Draft EIR.

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MAY 22 2000
PWA - Transportation

VENTURA COUNTY
AIR POLLUTION CONTROL DISTRICT
Memorandum

TO: Chris Hooke, Public Works Agency DATE: May 24, 2000

FROM: Molly Pearson MP

SUBJECT: Notice of Preparation (NOP) of an Environmental Impact Report/Environmental Assessment (EIR/EA) and Initial Study for the Lewis Road Widening Project, Project No. 50293

Air Pollution Control District staff has reviewed the subject Notice of Preparation (NOP) and Initial Study. The subject project involves the widening of an approximately 5.75-km (3.57-mile) segment of Lewis Road between the Hueneme Road Bridge on the south and Ventura Boulevard on the north in order to accommodate increased traffic, primarily from the new California State University Channel Islands (CSUCI) campus.

District staff recommends that the air quality section of the EIR/EA be prepared in accordance with Ventura County's *Guidelines for the Preparation of Air Quality Impact Analyses*. Specifically, the air quality assessment should consider reactive organic compound (ROC) and nitrogen oxide (NOx) emissions from all project-related motor vehicles and construction equipment. Emissions of ROC and NOx are expected to occur as a result of the project construction activities, and should be mitigated to the extent feasible. However, construction-related air pollutant emissions are considered to be temporary, and are not counted towards the significance thresholds presented in the *Guidelines*. The air quality assessment should also consider potential impacts from fugitive dust, including PM_{10}, that will be generated by construction activities. Mitigation measures for fugitive dust control during project construction should be outlined in the EIR/EA.

District staff offers the following comments regarding the Draft Initial Study and MND:

<u>Pages 7 through 10, Section B., Initial Study Checklist</u>
It should be noted that the "Degree of Effect" categories included in the Initial Study checklist do not correlate with the revised checklist presented in Appendix G of the current CEQA Guidelines (CCR §§15000-15387). They also do not correlate with the Initial Study checklist that is included in the August 3, 1999 revision to the Ventura County Administrative Supplement to the State CEQA Guidelines. In particular, the category of "U" (Unknown) has been removed from the revised Initial Study checklist.

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Page 15, Section C.3., Air Quality

The last sentence of the second paragraph on Page 15 refers to the widening of Lewis Road as a mitigation to reduce impacts to less than significant. The sentence should be revised as follows to indicate that this is a traffic mitigation, not an air quality mitigation: "...as mitigation to reduce *traffic* impacts to less than significant."

If you have any questions, please call me at 645-1439.

VENTURA COUNTY FIRE DISTRICT
FIRE PREVENTION DIVISION
165 DURLEY AVENUE
CAMARILLO, CA 93010
(805) 389-9710

May 30, 2000

Ventura County Public Works
800 South Victoria Avenue
Ventura, CA 93001-09

Attn: Chris Hook

Project number: 50293

Project name or description: Lewis Road Widening

During the project Fire Department access must be maintained. If the road is shut down for any reasons, you will need to contact Ventura County Fire Department dispatch with the location and duration of the closure. Emergency response can be modified as needed.

Jim Aaron
Fire Inspector

Public Responses

HARBOR FREIGHT TOOLS

3491 MISSION OAKS BLVD. - CAMARILLO, CA 93011
TEL # (805) 388-1000 ext. 4324 FAX # (805) 445-4902

REAL ESTATE DEPARTMENT

May 22, 2000

Mr. Chris A. Hooke, Project Manager
Ventura County Transportation Department
County of Ventura
800 South Victoria Avenue
Ventura, Ca 93009

VIA CERTIFIED MAIL

Re: Lewis Road Widening, Project No. 50293
Notice of Preparation (NOP) and Initial Study

Dear Mr. Hooke,

We are the owner of approximately 23 acres at the northeast corner (APN 234-01-28) of Lewis Road and Pleasant Valley Road. We have received your Notice of Preparation (NOP) dated April 24, 2000 and have completed a detailed review of the accompanying Initial Study for Lewis Road Widening Project ("PSR") relating to a proposed widening of Lewis Road, which abuts our westerly property boundary. Pursuant to your request, we offer the following comments for your consideration. Our comments reference the applicable sections of the Initial Study as indicated:

Item 7, Agricultural Resources (Page 22)-

Our property is currently operated as an organic farm growing vegetables and other row crops. As we understand the design proposed in the PSR, the widening of the Lewis Road will potentially reduce the area of our property and impact our irrigation procedures. Eventually the site may become developed, but until that time, the integrity of the agriculture operation must be considered and maintained. The property is somewhat unique in its designation as an organic farm and we are concerned that construction activities on the adjacent Lewis road could jeopardize this designation or interfere with farming operations.

Item 20.b. Private Roads and Driveways (Page 32)-

We do not agree that "The proposed road widening does not involve construction or significant alteration of private roads and driveways." Such a conclusion does not consider the future need for access to our property from Lewis road, such as the loop street that was approved by the City of Camarillo under tentative tract #4698. This future need for access must also be considered within the context of the existing southern entrance to Imation (3M) which is directly north of our property so that left hand turn movements both into and out of both properties are coordinated. The proposed median

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proposed in the PSR will certainly alter, and maybe diminish, the existing access to Imation (3M) as well as potentially precluding access to the property from southbound Lewis road for future commercial uses.

Moreover, the probable improvements to Pleasant Valley Road at the intersection to accommodate signalization and turning movements may also reduce or alter the access we have to Pleasant Valley Road. The PSR does not discuss the work on intersecting roadways, but in our opinion needs to do so. It is our belief that the widening of Lewis road will axiomatically require the upgrading of the Pleasant Valley intersection and associated roadway and the impact of those improvements on our property need to be included in your review.

Item 24. a, Utilities (Page 35)-

As noted in this paragraph, the PSR proposes that the existing 66KV and 16KV power poles on Lewis Rd be relocated in connection with the widening of Lewis Rd. It may be wise to recognize the future plans of the City of Camarillo to underground these utilities lines. It is possible that the design of the roadway and any necessary related changes to the Lewis Road Drain could incorporate a design for conduit for the future undergrounding of these lines. This could also potentially reduce the amount of our property that would be required as an additional easement dedication for purposes of accommodating the relocated power poles, as well as minimizing the future cost of the undergrounding to a degree that it could be accelerated. The safety and aesthetic benefits of the undergrounding of these lines could be substantial, as compared with the relatively marginal cost of conduit which is pre-installed in connection with the widening of the roadway.

Item 25. a, Flood Control and Drainage (Page 36)-

In regards to the VCFCD drainage channel abutting Lewis road, the PSR proposes a modification to the existing drainage channel at the north and south ends of our property. We believe the proposed modifications will create an undersized facility with a gap in the middle portion of the reach abutting our property. We do not believe that such a gap will keep storm flows from flooding our property. The proposed system also needs to consider how tributary flows from side channels, such as the 110 cfs from the Imation property (located directly north of our property), will be added to the channel. Drainage connections in flat ground are difficult and may cause backwater conditions flooding adjacent land. We do not believe that it is sufficient for the agencies to consider partial construction and modification of the existing flood control channel and only a culvert under Pleasant Valley Road. We strongly support the recommendation contained within the NOP that "Improvements within the VCFCD drainage channel would require VCFCD review and approval". The drainage system and the environmental document need to conform to the City of Camarillo's Master Plan of Drainage using Ventura County Flood Control District flow rates. Anything less is a potential flood hazard.

NPDES is an issue all along this roadway, not just at Calleguas Creek, and needs to be considered. It may impact right-of-way and existing land use adversely. Farmland, such as ours, can supply silt and agricultural waste to storm drains all along Lewis Road Drain. Detention for present and future zoned land uses needs to be considered as well.

Lastly, the cost of right-of-way in exchange, in whole or in part, for improvements that could provide mutual benefits to the agencies and property owner should be considered as part of the cost analysis. Some work, such as channels and utilities, if properly located, may reduce the amount of right-of-way to be purchased for an overall cost savings. Alignment of drainage channels underground and within the roadway may eliminate right-of-way acquisition costs at various locations. A roadway widening project which occurs mostly in agricultural areas likely has few, if any underground utilities. As a result, drains can be readily placed under the roadway. Placing utilities underground within parkways which are a part of the present or future right-of-way, will also reduce right-of-way cost, and therefore project cost.

We appreciate your consideration of our concerns regarding access, drainage, agricultural resource impacts, and utilities as we have outlined herein.

Sincerely,

Richard E. Heath

Director of Real Estate

cc: Eric L. Smidt
(Trustee, Eric L. Smidt Revocable Trust)

May 23, 2000

Chris A. Hooke, Project Manager
Public Works Agency, V.C.
800 S. Victoria Ave.
Ventura, CA 93009-1600

Mr. Hooke:

This letter is in response to the Lewis Rd widening, Project No. 50293. Having read through the Notice of Preparation (NOP) and Initial Study (IS), I have listed by page number/document my concerns, worries, comments and suggestions.

IS, page 2 County segment. Increasing of curve radius north of Cawelti. I have lived at this address for almost 50 years, seen traffic navigate the present and its predecessor curves. I could fill a book with accident stories through the years. A radius increase will probably help, but to increase the (design) speed limit to 60 mph? That is foolish. Lewis Rd is/will still be a rural, agricultural area with slow moving equipment, trailers and laborers car, truck entering and leaving the highway. Of my immediate concern will be crossing four lanes of traffic to and from my mailbox, as well as the next door neighbors.

Also, the number of motorists who cross double yellow lines to pass others through the Cawelti Rd/Lewis Rd intersection, and in front of Casa Pacifica entrance is alarming.

In addition, truck traffic from the Port Hueneme area is significant, so I do hope further study as to an increased speed limit is pursued. Much of the University traffic will be those unaccustomed or unfamiliar with agricultural traffic patterns and due to impatience will create hazardous situations

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for themselves, other drivers and local residents.

IS, page 16 #4 Water Resources a) Groundwater Quantity. Though the conversion of agricultural lands to roadway will lessen water requirements, there will still be the loss off property tax revenue and income tax revenue in perpetuity from those paved over agricultural lands.

IS, page 18 #6 Biological Resources, County Segment In regards to plant, tree, windrow removal. Will those be replaced outside the new roadways (i.e.: popular trees, palm trees, various hedge rows.

In a similar vein. The project will require the destruction of several wells, relocation of irrigation lines and fences, as well as agricultural tree removal. Will the property owners be fully compensated for their losses and inconvenience.

IS, page 21 b. Wetland Habitat. If it wasn't for the treated effluent from the Camarillo and Thousand Oaks Sewage Treatment plants, there would be not wetland. The creek bed would be dry except for storm runoff. The wetland is strictly manmade.

IS, page 23 #7a Agricultural Resources, a. Soils. Again, the SOAR initiative with its fine print fails to protect prime farmland, especially if Alternative #3 should be used. Again, a tax base is removed from the public funds.

IS, page 24 #10 b. Historical. Though not in the Cal Trans segment, the dislocation and destruction of buildings in Old town Camarillo to facilitate Highway 101 on-ramp widening etc., should be studied further.

IS, page 29 #15 Hydraulic Hazards. b. Flooding As noted, the County Segment could be affected. Most certainly it will be, and not every 100 years. The road

if memory serves me, has been closed due to flood waters in 1948, 1978, 1980, 1983, 1992, 1995. Closure was anywhere from a few hours to several months. The biggest concern is the roadway between Camarillo Drive and the Calleguas Creek Bridge. If alternative #3 were to be used, a much longer (1.5 miles) road section could be subjected to erosion, standing water, silt and debris deposits.

IS, page 32 Public Facilities/sevices #20 Transportation Circulation b. Private Roads and driveways. Will the private drives be blended to mesh with the Lewis Road. Also will the 14' Median strip be of use as a Left turn lane for the private drives and farm roads?

IS, page 2 #6 County segment. Will the left turn lanes at Pleasant Valley Rd and Lewis Rd intersection be aligned to allowe sight of approaching through traffic. As they are now, especially N bound Lewis to Pleasant Valley, the line of sight is block by the opposing Left turning vehicles.

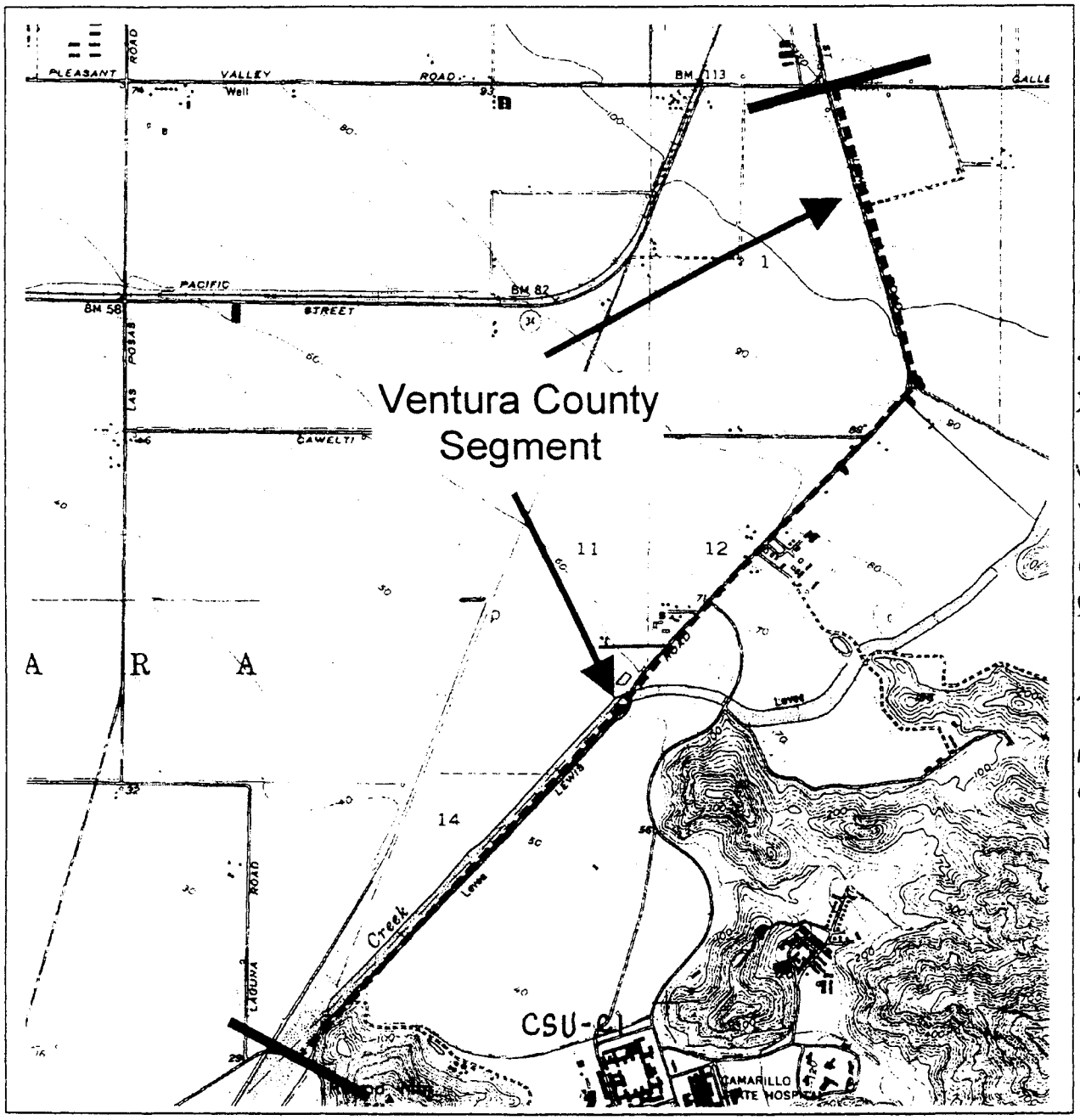
There are also several businesses which will be required to move or relocate. Will the Project pay for their move, relocation and monetary losses from said hardships. Also will soundwalls be built for the several residences which will be most impacted by the Lewis Road widening.

I thank you for allowing me to express my concerns. If I can be of any assistance, or any questions concerning the above remarks please write or call (805) 482-2673.

Thank you,

John W. Hughan

John W. Hughan
1354 S. Lewis Rd.
Camarillo, CA 93012



The yellow signifies our two parcels with both having roads or driveway fronting Lewis

The Red marks Road entrances

NORTH

0 1 2
scale in miles

0 1 2 3
scale in kilometers

Lewis Road Widening
Site Map-Ventura County Segment

Figure 4

Mike

From: StephenS
Sent: Friday, May 26, 2000 5:27 PM
To: Mike
Subject: FW: Lewis Rd. widening comments (NOP/IS)

Mike, this person was received by Michelle, who erroneously directly her to me. Could you handle from here?

Svete

-----Original Message-----
From: Pattyfine@aol.com [mailto:Pattyfine@aol.com]
Sent: Friday, May 26, 2000 4:31 PM
To: svete@rinconconsultants.com
Subject: Lewis Rd. widening comments (NOP/IS)

6465 La Cumbre Rd.
Somis, Ca. 93066
May 26, 2000

Mr. Steven Svete
Rincon CDonsultants, Inc.
790 E. Santa Clara St.
Ventura, Ca. 93001

e-mail: svete@rinconconsultants.com

Re: NOP/Initial Study Lewis Rd. Widening Project

Dear Mr. Svete:

Upon telephoning the number for Kate Parrott at Rincon Consultants today, I was advised that comments on the above NOP/Initial Study should be addressed to your office. Thank you for this opportunity to comment. Time constraints will make this letter necessarily brief.

1. I believe a much-improved public transit system approach should be considered, and actually tried first, as a serious alternative to widening any of the approach roads to CSUCI. The environmental documents should include and analyze this alternative in a fully-considered way. The campus has billed itself, indeed "sold" itself to the public as a "green campus." This is a commendable goal, with important implications for the future quality of life throughout the county (traffic congestion, air pollution, noise degradation, more "liveable communities," etc.). Every viable means to fulfill this promise should be attempted in deeds and not just words. CSUCI, with its destiny to become another population activity center in this county is a perfect opportunity for the county to begin to more

intelligently
coordinate land use planning from the outset with transit planning. In the
big picture, this single act alone could serve as a model for ultimately

improving transportation mobility and air quality throughout the county, both
between and within all the other county population centers.

2. Re Regional and local Air Quality Impacts on both County and Caltrans
segments: I wholeheartedly disagree with the (faulty) logic in the Initial
Study that says that in the long term the project will reduce air emissions
by providing a more efficient road system. Both common sense and recent

studies have increasingly established that road widenings don't just
"accomodate" traffic, they actually induce traffic. (Citations can be
provided upon request.) The short-term "efficiencies" in traffic flow
quickly deteriorate to yet more traffic congestion on simply a larger scale.
I believe the environmental studies should, as a matter of social
conscience and scientific accuracy, acknowledge this verity and disclose it
fully so that decisionmakers are required to face squarely the true
consequences of their actions should they choose to approve this road widening.

3. I believe cumulative impacts in unintended growth-inducement, loss of
agricultural resources, loss of community character, air quality degradation,
noise level degradation, transportation/circulation level of service should
all be considered as fully as possible, taking into effect the many road

widenings being built or planned for connecting and adjacent roads in the
county, including the many projects intended along Lewis/Somis Road (such as
the Somis intersection at SR 34 and 118), the new Camarillo 101/34 interchange, other road

widenings being sought near the new campus. Will current and intended Port
of Hueneme-related road-widening and road-building projects also ultimately
affect this roadway? Will the intended 4-laning of SR 118 from Moorpark to SR
101 likewise affect it?

4. Regarding bicycle facilities: Have bicycle storage/parking/other
facilities been planned for the campus itself to accomodate the needs of

bicycle commuters to the campus? (The proposed creation of bike lanes seems
commendable and in line with my comments in #1 above.)

Sincerely yours,

Patricia Feiner Arkin

cc: Butch Britt VIA FAX
Ron Kosinski VIA FAX

Appendix D

Farmland Conversion Impact Rating
Impact Calculations, Form AD 1006 Criteria &
Communications with Property Owners

U.S. Department of Agriculture

FARMLAND CONVERSION IMPACT RATING

PART I *(To be completed by Federal Agency)*	Date Of Land Evaluation Request 5/26/2000
Name Of Project Lewis Road Widening	Federal Agency Involved FHA/Caltrans
Proposed Land Use Road	County And State Ventura, California
PART II *(To be completed by NRCS)*	Date Request Received By NRCS
Does the site contain prime, unique, statewide or local important farmland? *(If no, the FPPA does not apply --do not complete additional parts of this form)*	Yes ☐ No ☐ Acres Irrigated: Average Farm Size
Major Crop(s) Citrus, vegetables, nursery	Farmable Land In Govt. Jurisdiction Acres: 124,600 % 10
	Amount Of Farmland As Defined In FPPA Acres: n/a % n/a
Name Of Land Evaluation System Used California-Storie Index	Name Of Local Site Assessment System none
	Date Land Evaluation Returned By NRCS 6/1/00

PART III *(To be completed by Federal Agency)*	Alternative Site Rating: Site A	Site B	Site C	Site D
A. Total Acres To Be Converted Directly	25.32	27.28	36.82	
B. Total Acres To Be Converted Indirectly	3.68	3.53	4.63	
C. Total Acres In Site	29.0	30.81	41.45	0.0
PART IV *(To be completed by NRCS)* Land Evaluation Information				
A. Total Acres Prime And Unique Farmland	20.85	26.38	32.35	
B. Total Acres Statewide And Local Important Farmland	4.47	4.47	4.47	
C. Percentage Of Farmland In County Or Local Govt. Unit To Be Converted	.0016	.0021	.0025	
D. Percentage Of Farmland In Govt. Jurisdiction With Same Or Higher Relative Value	n/a	n/a	n/a	
PART V *(To be completed by NRCS)* Land Evaluation Criterion Relative Value Of Farmland To Be Converted *(Scale of 0 to 100 Points)*	0 62	0 62	0 62	0

PART VI *(To be completed by Federal Agency)* Site Assessment Criteria *(These criteria are explained in 7 CFR 658.5(b)*	Maximum Points	Alt. 1	Alt. 2	Alt. 3	
1. Area In Nonurban Use	15	15	15	15	
2. Perimeter In Nonurban Use	10	10	10	10	
3. Percent Of Site Being Farmed	20	20	20	20	
4. Protection Provided By State And Local Government	20	20	20	20	
5. Distance From Urban Builtup Area	—	0	0	0	
6. Distance To Urban Support Services	—	0	0	0	
7. Size Of Present Farm Unit Compared To Average	10	10	10	1	
8. Creation Of Nonfarmable Farmland	25	0	0	1	
9. Availability Of Farm Support Services	5	5	5	5	
10. On-Farm Investments	20	10	10	10	
11. Effects Of Conversion On Farm Support Services	25	0	0	0	
12. Compatibility With Existing Agricultural Use	10	1	1	1	
TOTAL SITE ASSESSMENT POINTS	160	0 91	0 91	0 83	0
PART VII *(To be completed by Federal Agency)*					
Relative Value Of Farmland *(From Part V)*	100	0 62	0 62	0 62	0
Total Site Assessment *(From Part VI above or a local site assessment)*	160	0 91	0 91	0 83	0
TOTAL POINTS *(Total of above 2 lines)*	260	0 153	0 153	0 145	0

Site Selected:	Date Of Selection	Was A Local Site Assessment Used? Yes ☐ No ☐

Reason For Selection:

Completed by Alfred Ramos 7-18-00

(See Instructions on reverse side)

This form was electronically produced by National Production Services Staff

Form AD-1006 (10-83)

Lewis Road Widening Project
Agricultural Acreage Impacted
Ventura County Section Alternative 1

			Permananent Impacts		Temporary Impacts
Area	APN	Total	New R/W	Slope Esmt	Const.
		Acres	Acres	Acres	Esmt
1	234-008-24	26.760	0.060	0.000	0.000
2	234-005-21	0.275	0.275	0.000	0.000
3	234-005-19	283.830	4.268	1.129	0.728
4	230-005-22	233.310	1.768	1.219	0.686
5	230-008-25	85.120	2.179	1.109	0.411
6	230-008-28	21.010	0.839	0.122	0.151
7	230-063-23	22.730	0.966	0.116	0.155
8	230-063-20	2.578	0.503	0.068	0.092
9	230-063-19	0.362	0.195	0.030	0.039
10	230-063-24	2.490	0.193	0.041	0.051
11	230-063-22	22.728	0.410	0.087	0.115
12	230-063-26	5.660	0.801	0.161	0.213
13	230-062-29	43.610	2.968	0.609	0.344
14	230-062-35	46.550	4.034	1.157	0.661
15	234-005-23	57.640	0.000	0.000	0.037
16	234-003-22	81.120	0.000	0.000	0.000
17	234-005-20	633.560	0.078	0.000	0.000
TOTALS			**19.537**	**5.848**	**3.683**

Source: Boyle Engineering, July 14, 2000

Lewis Road Widening Project
Agricultural Acreage Impacted
Ventura County Section Alternative 2

			Permananent Impacts		Temporary Impacts
Area	APN	Total	New R/W	Slope Esmt	Const.
		Acres	Acres	Acres	Esmt
1	234-008-24	26.760	0.060	0.000	0.000
2	234-005-21	0.275	0.275	0.000	0.000
3	234-005-19	283.830	4.268	1.129	0.728
4	230-005-22	233.310	4.027	0.820	0.638
5	230-008-25	85.120	2.505	0.616	0.266
6	230-008-28	21.010	0.445	0.122	0.151
7	230-063-23	22.730	0.966	0.116	0.155
8	230-063-20	2.578	0.503	0.068	0.092
9	230-063-19	0.362	0.195	0.030	0.039
10	230-063-24	2.490	0.193	0.041	0.051
11	230-063-22	22.728	0.410	0.087	0.115
12	230-063-26	5.660	0.801	0.161	0.213
13	230-062-29	43.610	2.968	0.609	0.344
14	230-062-35	46.550	4.034	1.157	0.661
15	230-008-31	0.220	0.086	0.020	0.020
16	230-008-30	0.249	0.080	0.117	0.055
17	234-005-23	57.640	0.000	0.370	0.000
18	234-003-22	81.120	0.000	0.000	0.000
TOTALS			**21.816**	**5.463**	**3.528**

Source: Boyle Engineering, July 14, 2000

Lewis Road Widening Project
Agricultural Acreage Impacted
Ventura County Section Alternative 3

			Permananent Impacts		Temporary Impacts
Area	APN	Total	New R/W	Slope Esmt	Const.
		Acres	Acres	Acres	Esmt
1	234-008-24	26.760	4.798	1.253	1.253
2	234-008-27	57.270	5.007	1.065	0.427
3	230-008-25	85.120	6.416	1.715	0.686
4	230-008-28	21.010	0.585	0.340	0.152
5	230-008-31	0.964	0.103	0.092	0.046
6	230-008-30	1.286	0.046	0.106	0.044
7	230-063-23	22.730	0.966	0.116	0.155
8	230-063-20	2.578	0.503	0.068	0.092
9	230-063-19	0.362	0.195	0.030	0.039
10	230-063-24	2.490	0.193	0.041	0.051
11	230-063-22	22.728	0.410	0.087	0.115
12	230-063-26	5.660	0.801	0.161	0.213
13	230-062-29	43.610	2.968	0.609	0.344
14	230-062-35	46.550	4.034	1.157	0.661
15	234-005-23	57.640	0.000	0.000	0.037
16	234-003-22	81.120	0.069	0.000	0.000
17	234-09-82	-	2.093	0.789	0.316
TOTALS			**29.187**	**7.629**	**4.631**

Source: Boyle Engineering, July 14, 2000

[Code of Federal Regulations]
[Title 7, Volume 6, Parts 400 to 699]
[Revised as of January 1, 2000]
From the U.S. Government Printing Office via GPO Access
[CITE: 7CFR658.5]

[Page 730-731]

TITLE 7--AGRICULTURE

CHAPTER VI--NATURAL RESOURCES CONSERVATION SERVICE, DEPARTMENT OF AGRICULTURE

PART 658--FARMLAND PROTECTION POLICY ACT--Table of Contents

Sec. 658.5 Criteria.

This section states the criteria required by section 1541(a) of the Act, 7 U.S.C. 4202(a). The criteria were developed by the Secretary of Agriculture in cooperation with other Federal agencies. They are in two parts, (1) the land evaluation criterion, relative value, for which NRCS will provide the rating or score, and (2) the site assessment criteria, for which each Federal agency must develop its own ratings or scores. The criteria are as follows:

(a) Land Evaluation Criterion--Relative Value. The land evaluation criterion is based on information from several sources including national cooperative soil surveys or other acceptable soil surveys, NRCS field office technical guides, soil potential ratings or soil productivity ratings, land capability classifications, and important farmland determinations. Based on this information, groups of soils within a local government's jurisdiction will be evaluated and assigned a score between 0 to 100, representing the relative value, for agricultural production, of the farmland to be converted by the project compared to other farmland in the same local government jurisdiction, This score will be the Relative Value Rating on Form AD 1006.

(b) Site Assessment Criteria. Federal agencies are to use the following criteria to assess the suitability of each proposed site or design alternative for protection as farmland along with the score from the land evaluation criterion described in Sec. 658.5(a). Each criterion will be given a score on a scale of 0 to the maximum points shown. Conditions suggesting top, intermediate and bottom scores are indicated for each criterion. The agency would make scoring decisions in the context of each proposed site or alternative action by examining the site, the surrounding area, and the programs and policies of the State or local unit of government in which the site is located. Where one given location has more than one design alternative, each design should be considered as an alternative site. The site assessment criteria are:

(1) How much land is in nonurban use within a radius of 1.0 mile from where the project is intended?

More than 90 percent--15 points
90 to 20 percent--14 to 1 point(s)
Less than 20 percent--0 points

(2) How much of the perimeter of the site borders on land in nonurban use?

More than 90 percent--10 points
90 to 20 percent--9 to 1 point(s)
Less than 20 percent--0 points

(3) How much of the site has been farmed (managed for a scheduled harvest or timber activity) more than 5 of the last 10 years?
More than 90 percent--20 points
90 to 20 percent--19 to 1 points(s)
Less than 20 percent--0 points

(4) Is the site subject to State or unit of local government policies or programs to protect farmland or covered by private programs to protect farmland?

Site is protected--20 points
Site is not protected--0 points

(5) How close is the site to an urban built-up area?

The site is 2 miles or more from an urban built-up area--15 points
The site is more than 1 mile but less than 2 miles from an urban built-up area--10 points
The site is less than 1 mile from, but is not adjacent to an urban built-up area--5 points
The site is adjacent to an urban built-up area--0 points

(6) How close is the site to water lines, sewer lines and/or other local facilities and services whose capacities

[[Page 731]]

and design would promote nonagricultural use?

None of the services exist nearer than 3 miles from the site--15 points
Some of the services exist more than 1 but less than 3 miles from the site--10 points
All of the services exist within \1/2\ mile of the site--0 points

(7) Is the farm unit(s) containing the site (before the project) as large as the average-size farming unit in the county? (Average farm sizes in each county are available from the NRCS field offices in each State. Data are from the latest available Census of Agriculture, Acreage of Farm Units in Operation with $1,000 or more in sales.)

As large or larger--10 points
Below average--deduct 1 point for each 5 percent below the average, down to 0 points if 50 percent or more below average--9 to 0 points

(8) If this site is chosen for the project, how much of the remaining land on the farm will become non-farmable because of interference with land patterns?

Acreage equal to more than 25 percent of acres directly converted by the project--10 points
Acreage equal to between 25 and 5 percent of the acres directly converted by the project--9 to 1 point(s)
Acreage equal to less than 5 percent of the acres directly converted by the project--0 points

(9) Does the site have available adequate supply of farm support services and markets, i.e., farm suppliers, equipment dealers, processing and storage facilities and farmer's markets?

All required services are available--5 points
Some required services are available--4 to 1 point(s)
No required services are available--0 points

(10) Does the site have substantial and well-maintained on-farm investments such as barns, other storage buildings, fruit trees and vines, field terraces, drainage, irrigation, waterways, or other soil and water conservation measures?

High amount of on-farm investment--20 points
Moderate amount of on-farm investment--19 to 1 point(s)
No on-farm investment--0 points

(11) Would the project at this site, by converting farmland to nonagricultural use, reduce the demand for farm support services so as

to jeopardize the continued existence of these support services and thus, the viability of the farms remaining in the area?

Substantial reduction in demand for support services if the site is converted--10 points
Some reduction in demand for support services if the site is converted--9 to 1 point(s)
No significant reduction in demand for support services if the site is converted--0 points

(12) Is the kind and intensity of the proposed use of the site sufficiently incompatible with agriculture that it is likely to contribute to the eventual conversion of surrounding farmland to nonagricultural use?

Proposed project is incompatible with existing agricultural use of surrounding farmland--10 points
Proposed project is tolerable to existing agricultural use of surrounding farmland--9 to 1 point(s)
Proposed project is fully compatible with existing agricultural use of surrounding farmland--0 points

(c) Corridor-type Site Assessment Criteria. The following criteria are to be used for projects that have a linear or corridor-type site configuration connecting two distant points, and crossing several different tracts of land. These include utility lines, highways, railroads, stream improvements, and flood control systems. Federal agencies are to assess the suitability of each corridor-type site or design alternative for protection as farmland along with the land evaluation information described in Sec. 658.4(a). All criteria for corridor-type sites will be scored as shown in Sec. 658.5(b) for other sites, except as noted below:

(1) Criteria 5 and 6 will not be considered.

(2) Criterion 8 will be scored on a scale of 0 to 25 points, and criterion 11 will be scored on a scale of 0 to 25 points.

Rincon Consultants, Inc.

790 East Santa Clara Street

Ventura, California 93001

805 641 1000
FAX 641 1072
E-MAIL rinconvta@aol.com
www.rinconconsultants.com

September 5, 2000

ATTN: Farm Manager/Owner
B-H Farms
5606 Willow View Dr.
Camarillo CA 93010

Dear B-H Farms:

An environmental study is currently being conducted to analyze the potential effects of the widening of Lewis Road between Ventura Boulevard and Potrero Road, in Ventura County, California. As a result of the road widening, the cottonwood tree row on your property (Assessor's Parcel Number 234-0-050-220) could potentially be removed.

The Ventura County Agricultural Commissioner's Office has requested that property owners be contacted directly to determine what effect the removal of the agricultural tree row would have on agricultural activities on your property. This information will then be included in the environmental document in order to accurately describe the effects that the removal of the agricultural tree row could have.

On the next page are a few questions. I would appreciate if you would answer them and return the sheet to me in the included stamped envelope. If you would prefer to contact me by phone, I can be reached at (805) 641-1000 Ext. 32.

Thank you very much for your time and I look forward to your comments.

Sincerely,
RINCON CONSULTANTS, INC.

Jamie L. King, M.S.
Associate Biologist/Planner

✓ Rcvd 9/13/2000
JK.

ATTN: Farm Manager/Owner
B-H Farms
5606 Willow View Dr.
Camarillo CA 93010

Question 1: What type of crops are grown next to the cottonwood tree row on your property?

Lemons

Question 2: Would the removal of the cottonwood tree row have a positive, negative, or, no effect, on your crops?

Negative

Question 3: Please briefly describe why the removal of the tree row would result in a positive, negative, or, have no effect, on your crops.

The tree row serves as a windbreak to help protect the tree fruit from scarring due to severe winds.

Rincon Consultants, Inc.
790 East Santa Clara Street
Ventura, California 93001
805 641 1000
FAX 641 1072
E-MAIL rinconvta@aol.com
www.rinconconsultants.com

September 5, 2000

Attn: Tom Vuyovich
Vuyovich-Vuyovich Inc.
3150 Hailes Road
Oxnard CA 93030

Dear Mr. Vuyovich:

An environmental study is currently being conducted to analyze the potential effects of the widening of Lewis Road between Ventura Boulevard and Potrero Road, in Ventura County, California. As a result of the road widening, the eucalyptus tree row on your property (Assessor's Parcel Number 230-0-080-255) could potentially be removed.

The Ventura County Agricultural Commissioner's Office has requested that property owners be contacted directly to determine what effect the removal of the agricultural tree row would have on agricultural activities on your property. This information will then be included in the environmental document in order to accurately describe the effects that the removal of the agricultural tree row could have.

On the next page are a few questions. I would appreciate if you would answer them and return the sheet to me in the included stamped envelope. If you would prefer to contact me by phone, I can be reached at (805) 641-1000 Ext. 32.

Thank you very much for your time and I look forward to your comments.

Sincerely,
RINCON CONSULTANTS, INC.

Jamie L. King, M.S.
Associate Biologist/Planner

Attn: Tom Vuyovich
Vuyovich-Vuyovich Inc.
3150 Hailes Road
Oxnard CA 93030

Question 1: What type of crops are grown next to the eucalyptus tree row on your property?

All types of vegetables that are grown in Ventura County.

Question 2: Would the removal of the eucalyptus tree row have a positive, negative, or, no effect, on your crops?

It will have a negative effect.

Question 3: Please briefly describe why the removal of the eucalyptus tree row would result in a positive, negative, or, have no effect, on your crops.

The trees and gate were planted and installed for two reasons. First was security, to keep unauthorized people and vehicles out. Second was to stop the wind turbulance from the traffic from causing damage to the plants, and to keep down the dust which harms plants.

The trees and gate are very important to us and wherever the new road ends up, we insist they be replaced.

THOMAS P. VUJOVICH, JR.

Rincon Consultants, Inc.

790 East Santa Clara Street

Ventura, California 93001

805 641 1000

FAX 641 1072

E-MAIL rinconvta@aol.com

www.rinconconsultants.com

September 5, 2000

James and Noelle Burkey
2360 Foothill Rd.
Santa Barbara CA 93105

Dear Mr. and Ms. Burkey:

An environmental study is currently being conducted to analyze the potential effects of the widening of Lewis Road between Ventura Boulevard and Potrero Road, in Ventura County, California. As a result of the road widening, the cottonwood tree row on your property (Assessor's Parcel Numbers 230-0-062-290 and -350) that are adjacent to the strawberry fields could potentially be removed.

The Ventura County Agricultural Commissioner's Office has requested that property owners be contacted directly to determine what effect the removal of the agricultural tree row would have on agricultural activities on your property. This information will then be included in the environmental document in order to accurately describe the effects that the removal of the agricultural tree row could have.

On the next page are a few questions. I would appreciate if you would answer them and return the sheet to me in the included stamped envelope. If you would prefer to contact me by phone, I can be reached at (805) 641-1000 Ext. 32.

Thank you very much for your time and I look forward to your comments.

Sincerely,
RINCON CONSULTANTS, INC.

Jamie L. King, M.S.
Associate Biologist/Planner

James and Noelle Burkey
2360 Foothill Rd.
Santa Barbara CA 93105

Question 1: What type of crops are grown next to the cottonwood tree row on your property?

Strawberries

Question 2: Would the removal of the cottonwood tree row have a positive, negative, or, no effect, on your crops?

Negative

Question 3: Please briefly describe why the removal of the tree row would result in a positive, negative, or, have no effect, on your crops.

East Winds that blow in our County and Camarillo could cause severe crop damage and result in financial losses.

per Dean Walsh
9-19-00

Att: Jaime Kung
FAX 641 1072

Appendix E

Air Quality Data

Air Pollution Regulation

Both the federal and state governments have been empowered by the federal and state Clean Air Acts to regulate the emission of airborne pollutants and have established ambient air quality standards for the protection of public health. The United States Environmental Protection Agency (USEPA) is the federal agency designated to administer air quality regulation, while the Air Resources Board (ARB) is the state equivalent in the California Environmental Protection Agency. Local control in air quality management is provided by the ARB through county-level Air Pollution Control Districts (APCDs). The ARB establishes state air quality standards and is responsible for control of mobile emission sources, while the local APCDs are responsible for enforcing standards and regulating stationary sources. The ARB has established 14 air basins statewide, with the County of Ventura located in the South Central Coast Air Basin under the jurisdiction of the Ventura County APCD.

The U.S. EPA has set primary and secondary ambient air quality standards for ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, suspended particulates (PM_{10} and recently $PM_{2.5}$) and lead. In addition, the State of California has established health-based ambient air quality standards for these, and other pollutants, some of which are more stringent than the federal standards. The USEPA adopted stricter air quality standards for ozone and PM_{10} in 1997. The EPA intended to replace the existing 1-hour ozone standard with a new 8-hour averaging time and lowered the concentration level from 0.12 to 0.8 ppm. However, in May 1999, the US Court of Appeals prohibited the EPA from enforcing the new standard, and the existing one-hour standard continues to apply. The court removed the new PM_{10} standard; therefore, the previous standard of 150 micrograms per cubic meter for a 24-hour period continues to apply. The court left in place the new annual $PM_{2.5}$ standard (particulates of less than 2.5 microns in diameter), which was set at 15 micrograms per cubic meter spatially averaged across an area. The new 24-hour $PM_{2.5}$ standard is based on the 3-year average of the 98th percentile of the 24-hour concentrations measured at a monitoring station. However, the Court has invited comments on this standard, and it may be retained, changed, or removed. Table D-1 lists the current Federal and State standards for these regulated pollutants.

Table E-1 Federal and State Ambient Air Quality Standards

Pollutant	Averaging Time	Federal Primary Standards	California Standard
Ozone	1-Hour	0.12 PPM	0.09 PPM
Carbon Monoxide	8-Hour	9 PPM	9.0 PPM
	1-Hour	35.0 PPM	20.0 PPM
Nitrogen Dioxide	Annual	0.05 PPM	---
	1-Hour	---	0.25 PPM
Sulfur Dioxide	Annual	0.03 PPM	---
	24-Hour	0.14 PPM	0.04 PPM
	1-Hour	---	0.25 PPM
Suspended Particulates (PM_{10})	Annual	50 ug/m^3	30 ug/m^3
	24-Hour	150 ug/m^3	50 ug/m^3
Lead	30-Day Average	---	1.5 ug/m^3
	3-Month Average	1.5 ug/m^3	---

ppm = parts per million
ug/m^3 = micrograms per cubic meter
Source: California Air Resources Board, 1999

Air pollution control districts are required to monitor air pollutant levels to ensure that air quality standards are met and, if they are not met, to develop strategies to meet the standards. Air basins in which air pollutant standards are exceeded are referred to as "nonattainment areas." The South Central Coast Air Basin is a nonattainment area for both the federal and state standards for ozone and the state standard for PM_{10}. Each of these pollutants are described below.

Ozone. Ozone is produced by a photochemical reaction (triggered by sunlight) between nitrogen oxides (NOx) and reactive organic gases (ROG). Nitrogen oxides are formed during the combustion of fuels, while reactive organic gases are formed during combustion and evaporation of organic solvents. Because ozone requires sunlight to form, it mostly occurs in concentrations considered serious between the months of April and October. Ozone is a pungent, colorless toxic gas with direct health effects on humans including respiratory and eye irritation and possible changes in lung functions. Groups most sensitive to ozone include children, the elderly, persons with respiratory disorders, and people who exercise strenuously outdoors.

Suspended Particulates. PM_{10} is small particulate matter measuring no more than 10 microns in diameter, while $PM_{2.5}$ is fine particulate matter measuring no more than 2.5 microns in diameter. Suspended particulates are mostly dust particles, nitrates and sulfates. They are a by-product of fuel combustion and wind erosion of soil and unpaved roads, and are directly emitted into the atmosphere through these processes. Suspended particulates are also created in the atmosphere through chemical reactions. The characteristics, sources, and potential health effects associated with the small particulates (those between 2.5 and 10 microns in diameter) and fine particulates ($PM_{2.5}$) can be very different. The small particulates generally come from windblown dust and dust kicked up from mobile sources. The fine particulates are generally associated with combustion processes as well as being formed in the atmosphere as a secondary pollutant through chemical reactions. Fine particulate matter is more likely to penetrate deeply into the lungs and poses a serious health threat to all groups, but particularly to the elderly,

children, and those with respiratory problems. More than half of the small and fine particulate matter that is inhaled into the lungs remains there, which can cause permanent lung damage. These materials can damage health by interfering with the body's mechanisms for clearing the respiratory tract or by acting as carriers of an absorbed toxic substance.

$PM_{2.5}$ as a new pollutant of concern is just beginning to be monitored and the status of areas is unknown at this time, though it is likely that the South Coast Air Basin will be a nonattainment area. Once data has been collected and processed for several years, the USEPA will then designate attainment status with the development of State Implementation Plans to reduce this pollutant to be due starting in the year 2005.

Carbon Monoxide. Carbon monoxide is a local pollutant that is found in high concentrations only very near the source. The major source of carbon monoxide, a colorless, odorless, poisonous gas, is automobile traffic. Elevated concentrations, therefore, are usually only found near areas of high traffic volumes. Carbon monoxide's health effects are related to its affinity for hemoglobin in the blood. At high concentrations, carbon monoxide reduces the amount of oxygen in the blood, causing heart difficulties in people with chronic diseases, reduced lung capacity and impaired mental abilities.

Nitrogen Dioxide. Nitrogen Dioxide (NO_2) is a by-product of fuel combustion, with the primary source being motor vehicles and industrial boilers and furnaces. The principal form of nitrogen oxide produced by combustion is nitric oxide (NO), but NO reacts rapidly to form NO_2, creating the mixture of NO and NO_2 commonly called NOx. Nitrogen dioxide is an acute irritant. A relationship between NO_2 and chronic pulmonary fibrosis may exist, and an increase in bronchitis in young children at concentrations below 0.3 parts per million (ppm) may occur. Nitrogen dioxide absorbs blue light and causes a reddish brown cast to the atmosphere and reduced visibility. It can also contribute to the formation of PM_{10} and acid rain.

HEAVY-DUTY EQUIPMENT EMISSIONS
Per EPA AP-42

Equipment	Type (G or D)	Number	Usage per day in hours	Emissions in pounds per day: Carbon Monoxide	Reactive Organic Cmpnds	Nitrogen Oxides	Sulfur Oxides	PM10
Fork Lift - 50 Hp	D	0	10	0.0	0.0	0.0	#N/A	0.0
Fork Lift - 175 Hp	D	0	10	0.0	0.0	0.0	#N/A	0.0
Off-Highway Truck	D	3	10	54.0	5.7	125.1	13.5	7.8
Tracked Loader	D	3	10	6.0	2.9	24.9	2.3	1.8
Tracked Tractor	D	0	10	0.0	0.0	0.0	0.0	0.0
Scraper	D	3	10	37.5	8.1	115.2	13.8	12.3
Wheeled Dozer	D	3	10	54.0	5.7	125.1	10.5	5.0
Wheeled Loader	D	0	10	0.0	0.0	0.0	0.0	0.0
Wheeled Tractor	D	0	10	0.0	0.0	0.0	0.0	0.0
Roller	D	3	10	9.0	2.0	26.1	2.0	1.5
Motor Grader	D	3	10	4.5	1.2	21.4	2.6	1.8
Miscellaneous	D	3	10	20.3	4.5	51.0	4.3	4.2
			Total:	185.3	30.0	488.8	49.0	34.4
Number of days operating/week:		5	Averaged Daily lbs:	132.4	21.4	349.1	35.0	24.5
operating/quarter:		65	Quarterly tons:	6.0	1.0	15.9	1.6	1.1

** Construction equipment assumptions are based on information provided by Boyle Engineering, June, 2000. The equipment amounts above assume that construction of the County and Caltrans portions of the proposed project occurs concurrently.*

Appendix F

Letter of Finding for Least Bell's Vireo
& Southwestern Willlow Flycatcher Surveys

Jim Greaves, Consulting Biologist
2416 De la Vina Street
Santa Barbara, California 93105
[805-563-2905]

30 May 2000

Jamie King, M.S., Biologist
Rincon Consultants
790 E. Santa Clara Street
Ventura CA 93001

Re: Site assessment to determine potential for occurrence and/or breeding by Least Bell's Vireos or Southwestern Willow Flycatchers, in Calleguas Creek, along Lewis Road between Camarillo and Oxnard, Ventura County, California

Dear Ms. King:

As per our meeting on site about noon on 26 April 2000, this letter confirms my findings.

There were no sensitive bird species observed during the site visit. This is not surprising as there is little vegetated wildlife habitat along the creek: the east side is flanked by Lewis Road, both sides have flood control levees and associated roadways, and the west side is cultivated for row crops, and probably intensively insect and weed abated to protect vegetables during the growing season when the Least Bell's Vireo and Southwestern Willow Flycatcher would be expected to breed (April to August, and June to September, respectively).

Habitats in and along the edges of the channelized creek were insufficient to provide the necessary foraging substrate, nesting sites for either of the two species, Least Bell's Vireo and Southwestern Willow Flycatcher. In addition, it is unlikely that either species will occur except perhaps as extremely rare migrants at the sites between the two bridges, or in areas in the vicinity up and down stream of the bridges. This due primarily to the near absence of shrubby vegetation within 50 meters of the creek bottom.

The only birds of note that I recall during our mid-day meeting were Spotted Sandpiper, Killdeer, and Song Sparrow, the former 2 foraging in the creek bottom sand flats, and the latter singing in a small triangular patch of habitat at the south end of the survey route, on the east side of Lewis Road. Each species was in habitat that could be used for breeding, but no attempt was made to confirm it.

It is my opinion, based on this survey, as well as one upstream of the area in 1998 for Woodward Clyde Consultants, that, while there may be an occasional willow or mulefat in the vicinity of the project reach, there is simply not enough vegetated habitat in this area of the type in which one would see a migrant of either species, let alone an attempt by either to breed. In addition, there is too much disturbance of the "upland" areas where the birds would nest in dense thickets. This includes the small vegetated areas to the south of the down stream bridge.

If you have any questions, or require explanation of my conclusions, please call me. Thank you for the opportunity to be of service to your company. I remain,

Sincerely,

Jim Greaves

Jim Greaves

- cc (via email) to Rick Farris, USFWS Ventura Field Office, California
- attachment

Appendix G

U.S. Fish and Wildlife Service
Letter Outlining Special-Status Species
For Consideration

United States Department of the Interior

FISH AND WILDLIFE SERVICE

Ventura Fish and Wildlife Office
2493 Portola Road, Suite B
Ventura, California 93003

May 9, 2000

Kate Parrot
Associate, Assistant Project Manager
Rincon Consultants, Inc.
790 East Santa Clara Street
Ventura, California 93001

Subject: Species List for and Comments on the Lewis Road Widening Project, Ventura County, California

Dear Ms. Parrot:

We have reviewed your letter describing the proposed widening of Lewis Road in the vicinity of Camarillo, Ventura County. Your firm is preparing a biological resources technical report as part of the environmental impact report for the project and you have requested our input on the types of studies and information we would request for this kind of environmental work, as well as a species list for the area.

The enclosed list of threatened or endangered species fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Act. It contains all of the listed endangered and threatened species known to occur in Ventura County. Many of the species are unlikely to occur in the project area, so the potential for their presence must be determined through habitat evaluation and knowledge of distribution and local occurrences. For those animal species considered potentially occurring in the area, you should consult with us to determine if there are recommended survey protocols.

The Federal Highway Administration (FHWA), as the lead Federal agency for the project, has the responsibility to review its proposed activities and determine whether any listed species may be affected. If the project is a construction project which may require an environmental impact statement[1/], the FHWA has the responsibility to prepare a biological assessment to make a determination of the effects of the action on the listed species or critical habitat. If a biological assessment is not required, the FHWA still has the responsibility to review its proposed activities and determine whether the listed species will be affected. If the FHWA determines that a listed species or critical habitat is likely to be adversely affected, it should request, in writing through our office, formal consultation pursuant to section 7 of the Act. Informal consultation may be

used to exchange information and resolve conflicts with respect to threatened or endangered species or their critical habitat prior to a written request for formal consultation. During this review process, the FHWA may engage in planning efforts but may not make any irreversible commitment of resources. Such a commitment could constitute a violation of section 7(d) of the Act.

As the lead Federal agency, the FHWA is required to confer with the Service, pursuant to section 7(a)(4), if its proposed actions are likely to jeopardize the continued existence of any proposed species or result in the destruction or adverse modification of proposed critical habitat (50 CFR 402.10(a)). In addition, the FHWA may elect to enter into formal conference with the Service if a proposed species or proposed critical habitat may be affected even if the action is not likely to jeopardize or result in the destruction or adverse modification of proposed critical habitat. If the proposed species is listed or the proposed critical habitat is designated after completion of the conference, the FHWA may ask the Service, in writing, to confirm the conference as a formal consultation. If the Service reviews the proposed action and finds that no significant changes in the action as planned or in the information used during the conference have occurred, the Service will confirm the conference as a formal consultation on the project and no further section 7 consultation will be necessary. Use of the formal conference process in this manner can prevent delays in the event the proposed species is listed or the proposed critical habitat is designated during project development or implementation.

Conferences can also include discussions between the Service and the FHWA to identify and resolve potential conflicts between an action and proposed species or proposed critical habitat early in the decision-making process. The Service recommends ways to minimize or avoid adverse effects of the action. These recommendations are advisory because the jeopardy prohibition of section 7(a)(2) of the Act does not apply until the species is listed or the proposed critical habitat is designated. The conference process fulfills the need to inform Federal agencies of possible steps that an agency might take at an early stage to adjust its actions to avoid jeopardizing a proposed species.

The National Marine Fisheries Service (NMFS) should be contacted because Calleguas Creek was included in the proposed critical habitat designation for the endangered steelhead trout (*Oncorhynchus mykiss*). NMFS has a regulatory role similar to the Service.

We have concerns about two of the areas identified on the map provided with your letter. The first is where Lewis Road comes closest to Round Mountain. If the widening would affect undisturbed portions of Round Mountain, we recommend that you conduct surveys for listed plant species that are known from the Conejo Mountain area, including Verity's dudleya (*Dudleya verityi*), Conejo dudleya (*Dudleya abramsii* ssp. *parva*), and Lyon's pentachaeta (*Pentachaeta lyonii*). Several other plant species may occur in the area that are of concern to the California Department of Fish and Game (Department), such as Blochman's dudleya (*Dudleya blochmaniae*), so we recommend that you review information in the Department's Natural

Diversity Data Base and contact the Department at (805) 491-3571 for information on other species of concern that may occur in the project area.

Your map also shows that a long stretch of Lewis Road will be parallel to Calleguas Creek just north of Round Mountain. Calleguas Creek is the main source of fresh water that flows into Mugu Lagoon; changes in the quality of water entering the lagoon could affect several listed species. If the widening affects the creek in this area and alters the hydrology to the extent that flows into Mugu Lagoon are disrupted, this could cause impacts to the species that rely upon the estuarine environment.

We request that you provide us with any reports that are produced for this project. We are especially interested in reviewing any documents prepared pursuant to the California Environmental Quality Act or National Environmental Policy Act. If you have any questions abut these comments or the species list, please contact Rick Farris of my staff at (805) 644-1766.

Sincerely,

Anne S. Bell

For Diane K. Noda
Field Supervisor

Enclosure

1/ "Construction project" means any major Federal action which significantly affects the quality of the human environment designed primarily to result in the building of structures such as dams, buildings, roads, pipelines, and channels. This includes Federal actions such as permits, grants, licenses, or other forms of Federal authorizations or approval which may result in construction.

LISTED SPECIES AND THEIR CRITICAL HABITAT
WHICH MAY OCCUR IN VENTURA COUNTY, CALIFORNIA
(Updated December 7, 1999)

Mammals		
Southern sea otter	*Enhydra lutris nereis*	T
Birds		
California condor	*Gymnogyps californianus*	E
Brown pelican	*Pelecanus occidentalis*	E
Light-footed clapper rail	*Rallus longirostris levipes*	E
California least tern	*Sterna antillarum browni*	E
Western snowy plover	*Charadrius alexandrinus nivosus*	T, CH
Mountain plover	*Charadrius montanus*	PT
Least Bell's vireo	*Vireo bellii pusillus*	E, CH
Southwestern willow flycatcher	*Empidonax traillii extimus*	E
California gnatcatcher	*Polioptila californica*	T
Bald eagle	*Haliaeetus leucocephalus*	T
Reptiles		
Blunt-nosed leopard lizard	*Gambelia silus*	E
Island night lizard	*Xantusia riversiana*	T
Amphibians		
Arroyo toad	*Bufo microscaphus californicus*	E
California red-legged frog	*Rana aurora draytonii*	T
Fishes		
Unarmored threespine stickleback	*Gasterosteus aculeatus williamsoni*	E
Tidewater goby	*Eucyclogobius newberryi*	E
Steelhead trout	*Oncorhynchus mykiss*	*T, PCH
Invertebrates		
Quino checkerspot butterfly	*Euphydryas editha quino*	E
Riverside fairy shrimp	*Streptocephalus woottoni*	E
Conservancy fairy shrimp	*Branchinecta conservatio*	E
Plants		
California orcutt grass	*Orcuttia californica*	E
Salt marsh bird's-beak	*Cordylanthus maritimus* ssp. *maritimus*	E
Slender-horned spineflower	*Dodecahema leptoceras*	E
Lyon's pentachaeta	*Pentachaeta lyonii*	E
Braunton's milk-vetch	*Astragalus brauntonii*	E

VENTURA COUNTY (continued)

Santa Monica Mountains dudleya	*Dudleya cymosa* ssp. *ovatifolia*	T
Marcescent dudleya	*Dudleya cymosa* ssp. *marcescens*	T
Conejo dudleya	*Dudleya abramsii* ssp. *parva*	T
Verity's dudleya	*Dudleya verityi*	T
Nevin's barberry	*Berberis nevinii*	E

Key

E - Endangered T - Threatened PT - Proposed Threatened

CH - Critical Habitat

PCH - Critical habitat which has been proposed

* The National Marine Fisheries Service is the responsible agency for the steelhead.

Appendix H

Noise Calculations

Existing Condition Noise Calculations

Lewis Road Noise Measurements

Station Number	Measurement Number	Date	Time	Duration, seconds	Leq	SEL	Lmax	Lmin	Peak	L(10)	L(33)	L(50)	L(90)
1	1	08Sep 00	4:05 PM	1200	65.0	95.8	78.6	43.3	90.8	68.9	65.2	61.5	51.3
1	2	08Sep 00	4:28 PM	1200	65.6	96.5	78.0	42.9	91.5	69.6	66.1	62.1	48.2
2	1	08Sep 00	5:04 PM	1200	66.5	97.3	81.2	45.6	95.7	70.4	66.7	63.3	50.9
2	2	08Sep 00	5:25 PM	1200	64.9	95.7	78.6	43.9	94.8	69.1	64.4	60.2	48.6
Summary Values, all Measurements and Stations, September 8					65.5		81.2	42.9	95.7	69.5	65.6	61.8	49.5
5	1	12Sep 00	4:43 PM	547.3	51.6	79.0	60.8	47.0	76.4	54.2	50.8	50.0	48.3
4	1	12Sep 00	5:14 PM	1200	61.9	92.7	73.9	46.7	93.7	64.8	62.3	61.1	55.0
4	2	12Sep 00	5:38 PM	1651	61.7	93.9	80.0	46.9	94.4	64.5	61.6	59.9	53.6
5	2	13Sep 00	3:27 PM	1200	55.8	86.7	77.4	42.1	98.4	58.0	51.4	48.5	45.1
5	3	13Sep 00	3:49 PM	1013.5	55.4	85.5	75.4	41.3	91.6	58.4	51.4	49.0	44.5
3	1	13Sep 00	5:12 PM	1200	63.8	94.7	76.6	48.6	89.8	66.9	64.2	62.4	54.9
3	2	13Sep 00	5:33 PM	1200	63.7	94.5	79.0	48.0	92.5	66.5	63.4	61.4	52.9
6a	1	05Apr 01	2:55 PM	1200	51.3	82.1	68.3	42.6	91.3	53.7	51.0	49.8	46.6
6b	1	05Apr 01	3:24 PM	1200	62.9	93.7	80.5	51.0	104.8	65.6	62.4	61.1	57.2

Sample 6a: Taken in center of classroom with both doors and 8 small windows near roof open to represent a typical situation. Primary noise sources: kids in adjacent playground and traffic from Lewis Road.
Sample 6b: Taken in center of playground area approximately 110 feet from roadway edge. Primary noise sources: kids in adjacent playground and traffic from Lewis Road.

Lewis Road Vehicle Counts

Station Number	Measurement Number	Date	Time	Duration, minutes	Actual Counts			Hourly Equivalent			Truck Percentage	
					LDA/LDT	MDT	HDT	LDA/LDT	MDT	HDT	MDT	HDT
South of Cawelti												
1	1	08Sep 00	4:05 PM	20	276	5	7	828	15	21	1.7%	2.4%
1	2	08Sep 00	4:28 PM	20	259	6	9	777	18	27	2.2%	3.3%
2	1	08Sep 00	5:04 PM	20	310	7	9	930	21	27	2.1%	2.8%
2	2	08Sep 00	5:25 PM	20	232	3	7	696	9	21	1.2%	2.9%
5	2	13Sep 00	3:27 PM	20	241	6	12	723	18	36	2.3%	4.6%
5	3	13Sep 00	3:49 PM	16	194	6	8	728	23	30	2.9%	3.8%
Berm		13Sep 00	4:19 PM	20	228	4	5	684	12	15	1.7%	2.1%
							Average:	***767***	***17***	***25***	***2.0%***	***3.1%***
							Estimated ADT (Assume pk hr =10%):			***8083***		
North of Pleasant Valley Road												
4	1	12Sep 00	5:14 PM	9	102	1	1	680	7	7	1.0%	1.0%
4	2	12Sep 00	5:38 PM	7	111	2	3	951	17	26	1.7%	2.6%
3	1	13Sep 00	5:12 PM	20	343	7	10	1029	21	30	1.9%	2.8%
3	2	13Sep 00	5:33 PM	20	284	7	5	852	21	15	2.4%	1.7%
							Average:	***878***	***16***	***19***	***1.8%***	***2.1%***
							Estimated ADT (Assume pk hr =10%):			***9139***		

* * SOUND32 (CALTRANS VERSION OF STAMINA2/OPTIMA) * *

INPUT DATA FILE : LEWISEX1.2
BARRIER COST FILE : CALIF$.DTA
DATE : 09-22-2000

Lewis Road Existing Bridge to Cawelti 6000 ADT

==========

TRAFFIC DATA

LANE NO.	AUTO VPH	AUTO MPH	MEDIUM TRKS VPH	MEDIUM TRKS MPH	HEAVY TRKS VPH	HEAVY TRKS MPH	DESCRIPTION
1	285	50	6	50	9	50	SB Existing ADT 3000
2	285	50	6	50	9	50	NB Existing 3000 ADT

==========

LANE DATA

LANE NO.	SEG. NO.	GRADE COR.	X	Y	Z	SEGMENT DESCRIPTION
1	1	NO	-250.0	610.0	0.0	L1 P1
	2	NO	20.0	212.0	0.0	L1 P2
	3	NO	270.0	-85.0	0.0	L1 P3
			3000.0	-2660.0	0.0	L1 P4
2	1	NO	-262.0	590.0	0.0	L2 P1
	2	NO	0.0	195.0	0.0	L2 P2
	3	NO	260.0	-133.0	0.0	L2 P3
			2980.0	-2685.0	0.0	L2 P4

==========

BARRIER DATA

Barrier No. 1 Description: Existing Villa Calleguas berm
Type - (1)BERM
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS
1	845.0	-775.0	0.0	5.0	*B1 P1	* 5
2	895.0	-770.0	0.0	14.0	*B1 P2	* 14
3	980.0	-850.0	0.0	12.0	*B1 P3	* 12
4	1005.0	-870.0	0.0	6.0	*B1 P4	* 6
	1120.0	-982.0	0.0	6.0	*B1 P5	* 6

Barrier No. 2 Description: VC2
Type - (1)BERM
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS
1	1120.0	-982.0	0.0	10.0	*B2 P1	* 10
2	1163.0	-1025.0	0.0	10.0	*B2 P2	* 10
	1110.0	-1080.0	0.0	1.0	*B2 P3	* 1

==========

RECEIVER DATA

REC. NO.	X	Y	Z	DNL	PEOPLE	ID
1	210.0	140.0	4.5	67	500	House 1
2	360.0	0.0	4.5	67	500	House 2

3	613.0	-1425.0	4.5	67	500	Villa 2
4	1150.0	-1440.0	4.5	67	500	Las P
5	1475.0	-1688.0	4.5	67	500	CP
6	2120.0	-2015.0	4.5	67	500	House 3
7	2819.0	-2438.0	4.5	67	500	House 4
8	1070.0	-1065.0	4.5	67	500	Villa 1

==========

DROP-OFF RATES

ALL LANE/RECEIVER PAIRS = 4.5 DBA

==========

K - CONSTANTS

ALL LANE RECEIVER/PAIRS = 0.0 DBA

==========

EFFECTIVENESS / COST RATIOS
****

BAR ELE	0	1	2	3	4	5	6	7	
1	-	0.*							B1 P1
2	-	0.*							B1 P2
3	-	0.*							B1 P3
4	-	0.*							B1 P4
5	-	0.*							B2 P1
6	-	0.*							B2 P2
	0	1	2	3	4	5	6	7	

1

BARRIER DATA
****

BAR ELE	0	1	2	3	4	5	6	7	BAR ID	LENGTH	TYPE
		BARRIER HEIGHTS									
1	-	10.*							B1 P1	51.0	BERM
2	-	13.*							B1 P2	116.7	BERM
3	-	9.*							B1 P3	32.6	BERM
4	-	6.*							B1 P4	160.5	BERM
5	-	10.*							B2 P1	60.8	BERM
6	-	6.*							B2 P2	76.9	BERM
	0	1	2	3	4	5	6	7			

1

REC	REC ID	DNL	PEOPLE	LEQ(CAL)
1	House 1	67.	500.	62.0
2	House 2	67.	500.	60.7
3	Villa 2	67.	500.	48.2
4	Las P	67.	500.	53.6
5	CP	67.	500.	54.9
6	House 3	67.	500.	61.9
7	House 4	67.	500.	67.5
8	Villa 1	67.	500.	54.7

BARRIER TYPE	COST
BERM	16938.
MASONRY	0.
MASONRY/JERSEY	0.
CONCRETE	0.

TOTAL COST = $ 17000.

BARRIER HEIGHT INDEX FOR EACH BARRIER SECTION
1 1 1 1 1 1
CORRESPONDING BARRIER HEIGHTS FOR EACH SECTION
10.13. 9. 6.10. 6.

* * SOUND32 (CALTRANS VERSION OF STAMINA2/OPTIMA) * *

INPUT DATA FILE : LEWISEX2
BARRIER COST FILE : CALIF$.DTA
DATE : 09-18-2000

Lewis Road Existing Cawelti to PVR 8000 ADT

TRAFFIC DATA

LANE NO.	AUTO VPH	AUTO MPH	MEDIUM TRKS VPH	MEDIUM TRKS MPH	HEAVY TRKS VPH	HEAVY TRKS MPH	DESCRIPTION
1	380	50	8	50	12	50	SB Existing ADT 4000
2	380	50	8	50	12	50	NB Existing 4000 ADT

LANE DATA

LANE NO.	SEG. NO.	GRADE COR.	X	Y	Z	SEGMENT DESCRIPTION
1	1	NO	3000.0	-2660.0	0.0	L1 P1
	2	NO	3413.0	-3050.0	0.0	L1 P2
			3885.0	-3245.0	0.0	L1 P3
2	1	NO	2980.0	-2685.0	0.0	L2 P1
	2	NO	3400.0	-3063.0	0.0	L2 P2
			3880.0	-3270.0	0.0	L2 P3

RECEIVER DATA

REC. NO.	X	Y	Z	DNL	PEOPLE	ID
1	2930.0	-2810.0	0.0	67	500	House 5

DROP-OFF RATES

ALL LANE/RECEIVER PAIRS = 4.5 DBA

K - CONSTANTS

ALL LANE RECEIVER/PAIRS = 0.0 DBA

BASED ON FHWA-RD-108 AND
CALIFORNIA REFERENCE ENERGY MEAN EMISSION LEVELS

RECEIVER	LEQ
House 5	59.8

* * SOUND32 (CALTRANS VERSION OF STAMINA2/OPTIMA) * *

INPUT DATA FILE : LRCAL.EX
BARRIER COST FILE : CALIF$.DTA
DATE : 04-10-2001

Lewis Rd Existing - Caltrans Segment

==========

TRAFFIC DATA

LANE NO.	AUTO VPH	AUTO MPH	MEDIUM TRKS VPH	MEDIUM TRKS MPH	HEAVY TRKS VPH	HEAVY TRKS MPH	DESCRIPTION
1	624	45	12	45	12	45	NB Exist 6500 ADT
2	624	45	12	45	14	45	SB Exist 6500 ADT

==========

LANE DATA

LANE NO.	SEG. NO.	GRADE COR.	X	Y	Z	SEGMENT DESCRIPTION
1	1	NO	504.2	-2287.0	123.0	L1 P1
	2	NO	489.0	-1554.0	131.0	L1 P2
	3	NO	427.0	-1108.0	131.0	L1 P3
	4	NO	329.0	-629.0	132.0	L1 P4
	5	YES	198.5	0.0	159.0	L1 P5
	6	YES	195.0	164.0	166.0	L1 P6
	7	YES	208.0	328.0	170.0	L1 P7
	8	YES	242.0	492.0	172.0	L1 P8
	9	NO	297.0	656.0	170.0	L1 P9
	10	NO	391.0	875.0	160.0	L1 P10
			546.0	1225.0	149.0	L1 P11
2	1	YES	534.0	1225.0	149.0	L2 P1
	2	YES	379.0	875.0	160.0	L2 P2
	3	YES	285.0	656.0	170.0	L2 P3
	4	YES	233.0	494.0	172.0	L2 P4
	5	NO	197.0	328.0	170.0	L2 P5
	6	NO	184.0	164.0	166.0	L2 P6
	7	NO	187.0	0.0	159.0	L2 P7
	8	NO	301.0	-629.0	132.0	L2 P8
	9	NO	415.0	-1108.0	131.0	L2 P9
	10	NO	477.0	-1554.0	131.0	L2 P10
			466.7	-2287.0	123.0	L2 P11

==========

BARRIER DATA

Barrier No. 1 Description: 6" curb
Type - (1)BERM
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS
1	172.0	0.0	159.0	159.5	*B1 P1	* 1
2	169.0	164.0	166.0	166.5	*B1 P2	* 1
3	182.0	328.0	170.0	170.5	*B1 P3	* 1
4	218.0	494.0	172.0	172.5	*B1 P4	* 1
	270.6	656.0	170.0	170.5	*B1 P5	* 1

Barrier No. 2 Description: hill
Type - (1)BERM
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS
1	100.0	550.0	178.0	178.0	*B2 P1	* 0
2	180.0	560.0	178.0	178.0	*B2 P2	* 0
3	310.0	810.0	179.9	179.9	*B2 P3	* 0
	360.0	900.0	174.6	174.6	*B2 P4	* 0

RECEIVER DATA

REC. NO.	X	Y	Z	DNL	PEOPLE	ID
1	167.0	410.0	162.0	67	500	Apt 1st
2	167.0	410.0	172.0	67	500	Apt 2nd
3	625.0	-1554.0	120.0	72	500	Com
4	200.0	760.0	183.0	67	500	playgrnd
5	171.0	775.0	183.0	62	500	classrm

DROP-OFF RATES

ALL LANE/RECEIVER PAIRS = 4.5 DBA

K - CONSTANTS

ALL LANE RECEIVER/PAIRS = 0.0 DBA

EFFECTIVENESS / COST RATIOS
****

BAR ELE	0	1	2	3	4	5	6	7	
1	-	0.*							B1 P1
2	-	0.*							B1 P2
3	-	0.*							B1 P3
4	-	0.*							B1 P4

```
  5     -   0.*                                B2 P1
  6     -   0.*                                B2 P2
  7     -   0.*                                B2 P3
 ----------------------------------------------------
        0    1    2    3    4    5    6    7
1
          BARRIER DATA
          ************

 BAR                BARRIER HEIGHTS                BAR
 ELE    0    1    2    3    4    5    6    7    ID        LENGTH  TYPE
 ---------------------------------------------------------------------------
  1     -   1.*                                B1 P1      164.2  BERM
  2     -   1.*                                B1 P2      164.6  BERM
  3     -   1.*                                B1 P3      169.9  BERM
  4     -   1.*                                B1 P4      170.3  BERM

  5     -   0.*                                B2 P1       80.6  BERM
  6     -   0.*                                B2 P2      281.8  BERM
  7     -   0.*                                B2 P3      103.1  BERM
 ---------------------------------------------------------------------------
        0    1    2    3    4    5    6    7
1
 REC REC ID    DNL  PEOPLE   LEQ(CAL)
 -------------------------------
  1  Apt 1st   67.    500.   60.4
  2  Apt 2nd   67.    500.   64.8
  3  Com       72.    500.   62.0
  4  playgrnd  67.    500.   56.9
  5  classrm   62.    500.   55.8
 -------------------------------

 BARRIER TYPE                COST
 -------------------------------
 BERM                     4683.
 MASONRY                     0.
 MASONRY/JERSEY              0.
 CONCRETE                    0.
 -------------------------------
        TOTAL COST = $      5000.

 BARRIER HEIGHT INDEX FOR EACH BARRIER SECTION
   1  1  1  1  1  1  1
 CORRESPONDING BARRIER HEIGHTS FOR EACH SECTION
  1. 1. 1. 1. 0. 0. 0.
```

Year 2025 w/o Project
Noise Calculations

* * SOUND32 (CALTRANS VERSION OF STAMINA2/OPTIMA) * *

INPUT DATA FILE : LEWISFUT.NP2
BARRIER COST FILE : CALIF$.DTA
DATE : 09-27-2000

Lewis Road Future No Project, Bridge to PVR

==========

TRAFFIC DATA

LANE NO.	AUTO VPH	AUTO MPH	MEDIUM TRKS VPH	MEDIUM TRKS MPH	HEAVY TRKS VPH	HEAVY TRKS MPH	DESCRIPTION
1	1139	45	24	45	37	45	SB future 12000 adt
2	1139	45	24	45	37	45	NB future 12000 ADT
3	1945	25	41	25	64	25	Future SB 20500 ADT
4	1945	25	41	25	64	25	NB future 20500 ADT
5	1803	25	38	25	59	25	SB Future 19000 ADT
6	1803	25	38	25	59	25	NB Future 19000 ADT

==========

LANE DATA

LANE NO.	SEG. NO.	GRADE COR.	X	Y	Z	SEGMENT DESCRIPTION
1	1	NO	-250.0	610.0	0.0	L1 P1
	2	NO	20.0	212.0	0.0	L1 P2
	3	NO	270.0	-85.0	0.0	L1 P3
			430.0	-240.0	0.0	L1 P4
2	1	NO	-262.0	590.0	0.0	L2 P1
	2	NO	0.0	195.0	0.0	L2 P2
	3	NO	260.0	-133.0	0.0	L2 P3
			420.0	-255.0	0.0	L2 P4
3	1	NO	430.0	-240.0	0.0	L3 P1
			3000.0	-2660.0	0.0	L3 P2
4	1	NO	420.0	-255.0	0.0	L4 P1
			2980.0	-2685.0	0.0	L4 P2
5	1	NO	3000.0	-2660.0	0.0	L5 P1
	2	NO	3413.0	-3050.0	0.0	L5 P2
			3885.0	-3245.0	0.0	L5 P3
6	1	NO	2980.0	-2685.0	0.0	L6 P1
	2	NO	3400.0	-3063.0	0.0	L6 P2
			3880.0	-3270.0	0.0	L6 P3

==========

BARRIER DATA

Barrier No. 1 Description: Existing Villa Calleguas berm
Type - (1)BERM
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

GROUND TOP BARRIER

Fut-NP-1

SEG.	X	Y	(Z0)	(Z)	HEIGHTS AT ENDS
1	845.0	-775.0	0.0	5.0 *B1 P1	* 5
2	895.0	-770.0	0.0	14.0 *B1 P2	* 14
3	980.0	-850.0	0.0	12.0 *B1 P3	* 12
4	1005.0	-870.0	0.0	6.0 *B1 P4	* 6
	1120.0	-982.0	0.0	6.0 *B1 P5	* 6

Barrier No. 2 Description: VC berm 2
Type - (1)BERM
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	1120.0	-982.0	0.0	10.0 *B2 P1	* 10
2	1163.0	-1025.0	0.0	10.0 *B2 P2	* 10
	1110.0	-1080.0	0.0	1.0 *B2 P3	* 1

RECEIVER DATA

REC. NO.	X	Y	Z	DNL	PEOPLE	ID
1	210.0	140.0	4.5	67	5	House 1
2	360.0	0.0	4.5	67	5	House 2
3	613.0	-1425.0	4.5	67	50	Villa 2
4	1150.0	-1440.0	4.5	67	100	Las P
5	1475.0	-1688.0	4.5	67	100	CP
6	2120.0	-2015.0	4.5	67	5	House 3
7	2819.0	-2438.0	4.5	67	5	House 4
8	1070.0	-1065.0	4.5	67	50	Villa 1
9	2930.0	-2810.0	4.5	67	5	House 5

DROP-OFF RATES

ALL LANE/RECEIVER PAIRS = 4.5 DBA

K - CONSTANTS

ALL LANE RECEIVER/PAIRS = 0.0 DBA

EFFECTIVENESS / COST RATIOS
****

BAR ELE	0	1	2	3	4	5	6	7	
1	-	0.*							B1 P1
2	-	0.*							B1 P2
3	-	0.*							B1 P3
4	-	0.*							B1 P4
5	-	0.*							B2 P1
6	-	0.*							B2 P2
	0	1	2	3	4	5	6	7	

Fut-NP-2

1

BARRIER DATA
****

BAR ELE	0	1	2	3	4	5	6	7	BAR ID	LENGTH	TYPE
	BARRIER HEIGHTS										
1	-	10.*							B1 P1	51.0	BERM
2	-	13.*							B1 P2	116.7	BERM
3	-	9.*							B1 P3	32.6	BERM
4	-	6.*							B1 P4	160.5	BERM
5	-	10.*							B2 P1	60.8	BERM
6	-	6.*							B2 P2	76.9	BERM
	0	1	2	3	4	5	6	7			

1

REC	REC ID	DNL	PEOPLE	LEQ(CAL)
1	House 1	67.	5.	67.0
2	House 2	67.	5.	65.7
3	Villa 2	67.	50.	52.2
4	Las P	67.	100.	57.4
5	CP	67.	100.	58.6
6	House 3	67.	5.	65.4
7	House 4	67.	5.	71.4
8	Villa 1	67.	50.	58.9
9	House 5	67.	5.	64.0

BARRIER TYPE	COST
BERM	16938.
MASONRY	0.
MASONRY/JERSEY	0.
CONCRETE	0.

TOTAL COST = $ 17000.

BARRIER HEIGHT INDEX FOR EACH BARRIER SECTION
1 1 1 1 1 1
CORRESPONDING BARRIER HEIGHTS FOR EACH SECTION
10.13. 9. 6.10. 6.

Flat-NP

* * SOUND32 (CALTRANS VERSION OF STAMINA2/OPTIMA) * *

INPUT DATA FILE : LRCAL.NP
BARRIER COST FILE : CALIF$.DTA
DATE : 04-10-2001

Lewis Rd Future No Project - Caltrans Segment

TRAFFIC DATA

LANE NO.	AUTO VPH	AUTO MPH	MEDIUM TRKS VPH	MEDIUM TRKS MPH	HEAVY TRKS VPH	HEAVY TRKS MPH	DESCRIPTION
1	1538	25	29	25	34	25	NB Future 16000 ADT
2	1538	25	29	25	34	25	SB Future 16000 ADT

LANE DATA

LANE NO.	SEG. NO.	GRADE COR.	X	Y	Z	SEGMENT DESCRIPTION
1	1	NO	504.2	-2287.0	123.0	L1 P1
	2	NO	489.0	-1554.0	131.0	L1 P2
	3	NO	427.0	-1108.0	131.0	L1 P3
	4	NO	329.0	-629.0	132.0	L1 P4
	5	YES	198.5	0.0	159.0	L1 P5
	6	YES	195.0	164.0	166.0	L1 P6
	7	YES	208.0	328.0	170.0	L1 P7
	8	YES	242.0	492.0	172.0	L1 P8
	9	NO	297.0	656.0	170.0	L1 P9
	10	NO	391.0	875.0	160.0	L1 P10
			546.0	1225.0	149.0	L1 P11
2	1	YES	534.0	1225.0	149.0	L2 P1
	2	YES	379.0	875.0	160.0	L2 P2
	3	YES	285.0	656.0	170.0	L2 P3
	4	YES	233.0	494.0	172.0	L2 P4
	5	NO	197.0	328.0	170.0	L2 P5
	6	NO	184.0	164.0	166.0	L2 P6
	7	NO	187.0	0.0	159.0	L2 P7
	8	NO	301.0	-629.0	132.0	L2 P8
	9	NO	415.0	-1108.0	131.0	L2 P9
	10	NO	477.0	-1554.0	131.0	L2 P10
			466.7	-2287.0	123.0	L2 P11

BARRIER DATA

Barrier No. 1 Description: 6" curb
Type - (1)BERM
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS
1	172.0	0.0	159.0	159.5	*B1 P1	* 1
2	169.0	164.0	166.0	166.5	*B1 P2	* 1
3	182.0	328.0	170.0	170.5	*B1 P3	* 1
4	218.0	494.0	172.0	172.5	*B1 P4	* 1
	270.6	656.0	170.0	170.5	*B1 P5	* 1

Barrier No. 2 Description: hill
Type - (1)BERM
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS
1	100.0	550.0	178.0	178.0	*B2 P1	* 0
2	180.0	560.0	178.0	178.0	*B2 P2	* 0
3	310.0	810.0	179.9	179.9	*B2 P3	* 0
	360.0	900.0	174.6	174.6	*B2 P4	* 0

RECEIVER DATA

REC. NO.	X	Y	Z	DNL	PEOPLE	ID
1	167.0	410.0	162.0	67	500	Apt 1st
2	167.0	410.0	172.0	67	500	Apt 2nd
3	625.0	-1554.0	120.0	72	500	Com
4	200.0	760.0	183.0	67	500	playgrnd
5	171.0	775.0	183.0	62	500	classrm

DROP-OFF RATES

ALL LANE/RECEIVER PAIRS = 4.5 DBA

K - CONSTANTS

ALL LANE RECEIVER/PAIRS = 0.0 DBA

EFFECTIVENESS / COST RATIOS
****

BAR ELE	0	1	2	3	4	5	6	7	
1	-	0.*							B1 P1
2	-	0.*							B1 P2
3	-	0.*							B1 P3
4	-	0.*							B1 P4

```
  5     -   0.*                                B2 P1
  6     -   0.*                                B2 P2
  7     -   0.*                                B2 P3
 ----------------------------------------------------
        0    1    2    3    4    5    6    7
1
          BARRIER DATA
          ************

 BAR              BARRIER HEIGHTS                BAR
 ELE    0    1    2    3    4    5    6    7    ID        LENGTH  TYPE
 ---------------------------------------------------------------------------
  1     -   1.*                                B1 P1      164.2  BERM
  2     -   1.*                                B1 P2      164.6  BERM
  3     -   1.*                                B1 P3      169.9  BERM
  4     -   1.*                                B1 P4      170.3  BERM

  5     -   0.*                                B2 P1       80.6  BERM
  6     -   0.*                                B2 P2      281.8  BERM
  7     -   0.*                                B2 P3      103.1  BERM
 ---------------------------------------------------------------------------
        0    1    2    3    4    5    6    7
1
 REC REC ID    DNL  PEOPLE   LEQ(CAL)
 --------------------------------
  1  Apt 1st   67.    500.   62.2
  2  Apt 2nd   67.    500.   66.6
  3  Com       72.    500.   61.7
  4  playgrnd  67.    500.   58.0
  5  classrm   62.    500.   56.8
 --------------------------------

 BARRIER TYPE                COST
 --------------------------------
 BERM                    4683.
 MASONRY                    0.
 MASONRY/JERSEY             0.
 CONCRETE                   0.
 --------------------------------
        TOTAL COST = $      5000.

 BARRIER HEIGHT INDEX FOR EACH BARRIER SECTION
   1  1  1  1  1  1  1
 CORRESPONDING BARRIER HEIGHTS FOR EACH SECTION
  1. 1. 1. 1. 0. 0. 0.
```

Ventura County Alternative 1 and Caltrans Alternative 1
Noise Calculations

* * SOUND32 (CALTRANS VERSION OF STAMINA2/OPTIMA) * *

INPUT DATA FILE : LEWISFUT.AL1
BARRIER COST FILE : CALIF$.DTA
DATE : 09-22-2000

Lewis Road Future Alt 1, Bridge to PVR

==========

TRAFFIC DATA

LANE NO.	AUTO VPH	AUTO MPH	MEDIUM TRKS VPH	MEDIUM TRKS MPH	HEAVY TRKS VPH	HEAVY TRKS MPH	DESCRIPTION
1	1139	50	24	50	37	50	SB future 12000 adt
2	1139	50	24	50	37	50	NB future 12000 ADT
3	1945	50	41	50	64	50	Future SB 20500 ADT
4	1945	50	41	50	64	50	NB future 20500 ADT
5	1803	50	38	50	59	50	SB Future 19000 ADT
6	1803	50	38	50	59	50	NB Future 19000 ADT

==========

LANE DATA

LANE NO.	SEG. NO.	GRADE COR.	X	Y	Z	SEGMENT DESCRIPTION	
1	1	NO	-240.0	610.0	0.0	L1	P1
	2	NO	20.0	212.0	0.0	L1	P2
	3	NO	285.0	-62.0	0.0	L1	P3
			450.0	-220.0	0.0	L1	P4
2	1	NO	-268.0	580.0	0.0	L2	P1
	2	NO	-10.0	190.0	0.0	L2	P2
	3	NO	268.0	-95.0	0.0	L2	P3
			420.0	-250.0	0.0	L2	P4
3	1	NO	450.0	-220.0	0.0	L3	P1
			2990.0	-2670.0	0.0	L3	P2
4	1	NO	420.0	-250.0	0.0	L4	P1
			2965.0	-2695.0	0.0	L4	P2
5	1	NO	2990.0	-2670.0	0.0	L5	P1
	2	NO	3450.0	-3010.0	0.0	L5	P2
			3925.0	-3142.0	0.0	L5	P3
6	1	NO	2965.0	-2695.0	0.0	L6	P1
	2	NO	3422.0	-3035.0	0.0	L6	P2
			3910.0	-3180.0	0.0	L6	P3

==========

BARRIER DATA

Barrier No. 1 Description: Existing Villa Calleguas berm
Type - (1)BERM
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

GROUND TOP BARRIER

SEG.	X	Y	(Z0)	(Z)	HEIGHTS AT ENDS
1	845.0	-775.0	0.0	5.0 *B1 P1	* 5
2	895.0	-770.0	0.0	14.0 *B1 P2	* 14
3	980.0	-850.0	0.0	12.0 *B1 P3	* 12
4	1005.0	-870.0	0.0	6.0 *B1 P4	* 6
	1120.0	-982.0	0.0	6.0 *B1 P5	* 6

Barrier No. 2 Description: VC berm 2
Type - (1)BERM
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	1120.0	-982.0	0.0	10.0 *ave ht	* 10
2	1163.0	-1025.0	0.0	10.0 *ave ht	* 10
	1110.0	-1080.0	0.0	1.0 *B2 P3	* 1

RECEIVER DATA

REC. NO.	X	Y	Z	DNL	PEOPLE	ID
1	210.0	140.0	4.5	67	500	House 1
2	360.0	0.0	4.5	67	500	House 2
3	613.0	-1425.0	4.5	67	500	Villa 2
4	1150.0	-1440.0	4.5	67	500	Las Pos
5	1475.0	-1688.0	4.5	67	500	Casa Pac
6	2120.0	-2015.0	4.5	67	500	House 3
7	2819.0	-2438.0	4.5	67	500	House 4
8	1070.0	-1065.0	4.5	67	500	Villa 1
9	2930.0	-2810.0	4.5	67	500	House 5

DROP-OFF RATES

ALL LANE/RECEIVER PAIRS = 4.5 DBA

K - CONSTANTS

ALL LANE RECEIVER/PAIRS = 0.0 DBA

EFFECTIVENESS / COST RATIOS
****

BAR ELE	0	1	2	3	4	5	6	7	
1	-	0.*							B1 P1
2	-	0.*							B1 P2
3	-	0.*							B1 P3
4	-	0.*							B1 P4
5	-	0.*							ave ht
6	-	0.*							ave ht
	0	1	2	3	4	5	6	7	

1

BARRIER DATA
****

BAR ELE	0	1	2	3	4	5	6	7	BAR ID	LENGTH	TYPE
	BARRIER HEIGHTS										
1	-	10.*							B1 P1	51.0	BERM
2	-	13.*							B1 P2	116.7	BERM
3	-	9.*							B1 P3	32.6	BERM
4	-	6.*							B1 P4	160.5	BERM
5	-	10.*							ave ht	60.8	BERM
6	-	6.*							ave ht	76.9	BERM
	0	1	2	3	4	5	6	7			

1

REC	REC ID	DNL	PEOPLE	LEQ(CAL)
1	House 1	67.	500.	68.8
2	House 2	67.	500.	68.4
3	Villa 2	67.	500.	56.3
4	Las Pos	67.	500.	61.9
5	Casa Pac	67.	500.	63.2
6	House 3	67.	500.	70.5
7	House 4	67.	500.	74.5
8	Villa 1	67.	500.	62.8
9	House 5	67.	500.	69.2

BARRIER TYPE	COST
BERM	16938.
MASONRY	0.
MASONRY/JERSEY	0.
CONCRETE	0.

TOTAL COST = $ 17000.

BARRIER HEIGHT INDEX FOR EACH BARRIER SECTION
1 1 1 1 1 1
CORRESPONDING BARRIER HEIGHTS FOR EACH SECTION
10.13. 9. 6.10. 6.

* * SOUND32 (CALTRANS VERSION OF STAMINA2/OPTIMA) * *

INPUT DATA FILE : LRCAL.ALT
BARRIER COST FILE : CALIF$.DTA
DATE : 04-10-2001

Lewis Rd Future - Caltrans Segment Alt 1 & 2

==========

TRAFFIC DATA

LANE NO.	AUTO VPH	AUTO MPH	MEDIUM TRKS VPH	MEDIUM TRKS MPH	HEAVY TRKS VPH	HEAVY TRKS MPH	DESCRIPTION
1	1538	45	29	45	34	45	NB Future 16000 ADT
2	1538	45	29	45	34	45	SB Future 12000 ADT

==========

LANE DATA

LANE NO.	SEG. NO.	GRADE COR.	X	Y	Z	SEGMENT DESCRIPTION	
1	1	NO	504.2	-2287.0	123.0	L1	P1
	2	NO	486.8	-1554.0	131.0	L1	P2
	3	NO	438.5	-1108.0	131.0	L1	P3
	4	NO	342.0	-629.0	132.0	L1	P4
	5	YES	227.0	0.0	159.0	L1	P5
	6	YES	217.0	164.0	166.0	L1	P6
	7	YES	230.0	328.0	170.0	L1	P7
	8	YES	266.0	492.0	172.0	L1	P8
	9	NO	318.0	656.0	170.0	L1	P9
	10	NO	421.8	875.0	160.0	L1	P10
			588.0	1225.0	149.0	L1	P11
2	1	YES	532.0	1225.0	149.0	L2	P1
	2	YES	375.7	875.0	160.0	L2	P2
	3	YES	291.0	656.0	170.0	L2	P3
	4	YES	239.0	494.0	172.0	L2	P4
	5	NO	203.0	328.0	170.0	L2	P5
	6	NO	190.0	164.0	166.0	L2	P6
	7	NO	200.0	0.0	159.0	L2	P7
	8	NO	301.0	-629.0	132.0	L2	P8
	9	NO	398.0	-1108.0	131.0	L2	P9
	10	NO	463.2	-1554.0	131.0	L2	P10
			466.7	-2287.0	123.0	L2	P11

==========

BARRIER DATA

Barrier No. 1 Description: 6" curb
Type - (1)BERM
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS
1	172.0	0.0	159.0	159.5	*B1 P1	* 1
2	169.0	164.0	166.0	166.5	*B1 P2	* 1
3	182.0	328.0	170.0	170.5	*B1 P3	* 1
4	218.0	494.0	172.0	172.5	*B1 P4	* 1
	270.6	656.0	170.0	170.5	*B1 P5	* 1

Barrier No. 2 Description: hill
Type - (1)BERM
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS
1	100.0	550.0	178.0	178.0	*B2 P1	* 0
2	180.0	560.0	178.0	178.0	*B2 P2	* 0
3	310.0	810.0	179.9	179.9	*B2 P3	* 0
	360.0	900.0	174.6	174.6	*B2 P4	* 0

RECEIVER DATA

REC. NO.	X	Y	Z	DNL	PEOPLE	ID
1	167.0	410.0	162.0	67	500	Apt 1st
2	167.0	410.0	172.0	67	500	Apt 2nd
3	625.0	-1554.0	120.0	72	500	Com
4	200.0	760.0	183.0	67	500	playgrnd
5	171.0	775.0	183.0	62	500	classrm

DROP-OFF RATES

ALL LANE/RECEIVER PAIRS = 4.5 DBA

K - CONSTANTS

ALL LANE RECEIVER/PAIRS = 0.0 DBA

EFFECTIVENESS / COST RATIOS
****

BAR ELE	0	1	2	3	4	5	6	7	
1	-	0.*							B1 P1
2	-	0.*							B1 P2
3	-	0.*							B1 P3
4	-	0.*							B1 P4

```
   5      -   0.*                                   B2 P1
   6      -   0.*                                   B2 P2
   7      -   0.*                                   B2 P3
 ----------------------------------------------------
        0    1    2    3    4    5    6    7
1
          BARRIER DATA
          ************

 BAR                BARRIER HEIGHTS                BAR
 ELE    0    1    2    3    4    5    6    7    ID         LENGTH  TYPE
 ---------------------------------------------------------------------------
  1     -   1.*                                  B1 P1      164.2  BERM
  2     -   1.*                                  B1 P2      164.6  BERM
  3     -   1.*                                  B1 P3      169.9  BERM
  4     -   1.*                                  B1 P4      170.3  BERM

  5     -   0.*                                  B2 P1       80.6  BERM
  6     -   0.*                                  B2 P2      281.8  BERM
  7     -   0.*                                  B2 P3      103.1  BERM
 ---------------------------------------------------------------------------
        0    1    2    3    4    5    6    7
1
 REC REC ID     DNL  PEOPLE   LEQ(CAL)
 --------------------------------
  1  Apt 1st    67.    500.   61.9
  2  Apt 2nd    67.    500.   67.4
  3  Com        72.    500.   65.7
  4  playgrnd   67.    500.   60.8
  5  classrm    62.    500.   59.7
 --------------------------------

 BARRIER TYPE                COST
 --------------------------------
 BERM                     4683.
 MASONRY                     0.
 MASONRY/JERSEY              0.
 CONCRETE                    0.
 --------------------------------
        TOTAL COST = $      5000.

 BARRIER HEIGHT INDEX FOR EACH BARRIER SECTION
   1  1  1  1  1  1  1
 CORRESPONDING BARRIER HEIGHTS FOR EACH SECTION
  1. 1. 1. 1. 0. 0. 0.
```

Ventura County Alternative 2 and Caltrans Alternative 2
Noise Calculations

* * SOUND32 (CALTRANS VERSION OF STAMINA2/OPTIMA) * *

INPUT DATA FILE : LEWISFUT.AL2
BARRIER COST FILE : CALIF$.DTA
DATE : 09-22-2000

Lewis Road Future Alt 2, Bridge to PVR

TRAFFIC DATA

LANE NO.	AUTO VPH	AUTO MPH	MEDIUM TRKS VPH	MEDIUM TRKS MPH	HEAVY TRKS VPH	HEAVY TRKS MPH	DESCRIPTION
1	1139	50	24	50	37	50	SB future 12000 adt
2	1139	50	24	50	37	50	NB future 12000 ADT
3	1945	50	41	50	64	50	Future SB 20500 ADT
4	1945	50	41	50	64	50	NB future 20500 ADT
5	1803	50	38	50	59	50	SB Future 19000 ADT
6	1803	50	38	50	59	50	NB Future 19000 ADT

LANE DATA

LANE NO.	SEG. NO.	GRADE COR.	X	Y	Z	SEGMENT DESCRIPTION
1	1	NO	-360.0	510.0	0.0	L1 P1
	2	NO	5.0	205.0	0.0	L1 P2
	3	NO	285.0	-62.0	0.0	L1 P3
			450.0	-220.0	0.0	L1 P4
2	1	NO	-380.0	480.0	0.0	L2 P1
	2	NO	-20.0	180.0	0.0	L2 P2
	3	NO	268.0	-95.0	0.0	L2 P3
			420.0	-250.0	0.0	L2 P4
3	1	NO	450.0	-220.0	0.0	L3 P1
			2990.0	-2670.0	0.0	L3 P2
4	1	NO	420.0	-250.0	0.0	L4 P1
			2965.0	-2695.0	0.0	L4 P2
5	1	NO	2990.0	-2670.0	0.0	L5 P1
	2	NO	3450.0	-3010.0	0.0	L5 P2
			3925.0	-3142.0	0.0	L5 P3
6	1	NO	2965.0	-2695.0	0.0	L6 P1
	2	NO	3422.0	-3035.0	0.0	L6 P2
			3910.0	-3180.0	0.0	L6 P3

BARRIER DATA

Barrier No. 1 Description: Existing Villa Calleguas berm
Type - (1)BERM
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS
1	845.0	-775.0	0.0	5.0	*B1 P1	* 5
2	895.0	-770.0	0.0	14.0	*B1 P2	* 14
3	980.0	-850.0	0.0	12.0	*B1 P3	* 12
4	1005.0	-870.0	0.0	6.0	*B1 P4	* 6
	1120.0	-982.0	0.0	6.0	*B1 P5	* 6

Barrier No. 2 Description: VC berm 2
Type - (1)BERM
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS
1	1120.0	-982.0	0.0	10.0	*ave ht	* 10
2	1163.0	-1025.0	0.0	10.0	*ave ht	* 10
	1110.0	-1080.0	0.0	1.0	*B2 P3	* 1

RECEIVER DATA

REC. NO.	X	Y	Z	DNL	PEOPLE	ID
1	210.0	140.0	4.5	67	500	House 1
2	360.0	0.0	4.5	67	500	House 2
3	613.0	-1425.0	4.5	67	500	Villa 2
4	1150.0	-1440.0	4.5	67	500	Las Pos
5	1475.0	-1688.0	4.5	67	500	Casa P
6	2120.0	-2015.0	4.5	67	500	House 3
7	2819.0	-2438.0	4.5	67	500	House 4
8	1070.0	-1065.0	4.5	67	500	Villa 1
9	2930.0	-2810.0	4.5	67	500	House 5

DROP-OFF RATES

ALL LANE/RECEIVER PAIRS = 4.5 DBA

K - CONSTANTS

ALL LANE RECEIVER/PAIRS = 0.0 DBA

EFFECTIVENESS / COST RATIOS
****

```
BAR
ELE    0    1    2    3    4    5    6    7
-----------------------------------------------------
  1     -   0.*                                B1 P1
  2     -   0.*                                B1 P2
  3     -   0.*                                B1 P3
  4     -   0.*                                B1 P4

  5     -   0.*                                ave ht
  6     -   0.*                                ave ht
-----------------------------------------------------
       0    1    2    3    4    5    6    7
1
          BARRIER DATA
          ************

BAR              BARRIER HEIGHTS                BAR
ELE    0    1    2    3    4    5    6    7    ID        LENGTH  TYPE
-------------------------------------------------------------------------------
 1     -  10.*                                B1 P1       51.0  BERM
 2     -  13.*                                B1 P2      116.7  BERM
 3     -   9.*                                B1 P3       32.6  BERM
 4     -   6.*                                B1 P4      160.5  BERM

 5     -  10.*                                ave ht      60.8  BERM
 6     -   6.*                                ave ht      76.9  BERM
-------------------------------------------------------------------------------
       0    1    2    3    4    5    6    7
1
REC REC ID    DNL  PEOPLE   LEQ(CAL)
--------------------------------
 1  House 1   67.    500.   68.3
 2  House 2   67.    500.   68.3
 3  Villa 2   67.    500.   56.3
 4  Las Pos   67.    500.   61.9
 5  Casa P    67.    500.   63.2
 6  House 3   67.    500.   70.5
 7  House 4   67.    500.   74.5
 8  Villa 1   67.    500.   62.8
 9  House 5   67.    500.   69.2
--------------------------------

BARRIER TYPE                COST
--------------------------------
BERM                   16938.
MASONRY                    0.
MASONRY/JERSEY             0.
CONCRETE                   0.
--------------------------------
       TOTAL COST = $    17000.

BARRIER HEIGHT INDEX FOR EACH BARRIER SECTION
  1  1  1  1  1  1
CORRESPONDING BARRIER HEIGHTS FOR EACH SECTION
10.13. 9. 6.10. 6.
```

* * SOUND32 (CALTRANS VERSION OF STAMINA2/OPTIMA) * *

INPUT DATA FILE : LRCAL.ALT
BARRIER COST FILE : CALIF$.DTA
DATE : 04-10-2001

Lewis Rd Future - Caltrans Segment Alt 1 & 2

TRAFFIC DATA

LANE NO.	AUTO VPH	AUTO MPH	MEDIUM TRKS VPH	MEDIUM TRKS MPH	HEAVY TRKS VPH	HEAVY TRKS MPH	DESCRIPTION
1	1538	45	29	45	34	45	NB Future 16000 ADT
2	1538	45	29	45	34	45	SB Future 12000 ADT

LANE DATA

LANE NO.	SEG. NO.	GRADE COR.	X	Y	Z	SEGMENT DESCRIPTION
1	1	NO	504.2	-2287.0	123.0	L1 P1
	2	NO	486.8	-1554.0	131.0	L1 P2
	3	NO	438.5	-1108.0	131.0	L1 P3
	4	NO	342.0	-629.0	132.0	L1 P4
	5	YES	227.0	0.0	159.0	L1 P5
	6	YES	217.0	164.0	166.0	L1 P6
	7	YES	230.0	328.0	170.0	L1 P7
	8	YES	266.0	492.0	172.0	L1 P8
	9	NO	318.0	656.0	170.0	L1 P9
	10	NO	421.8	875.0	160.0	L1 P10
			588.0	1225.0	149.0	L1 P11
2	1	YES	532.0	1225.0	149.0	L2 P1
	2	YES	375.7	875.0	160.0	L2 P2
	3	YES	291.0	656.0	170.0	L2 P3
	4	YES	239.0	494.0	172.0	L2 P4
	5	NO	203.0	328.0	170.0	L2 P5
	6	NO	190.0	164.0	166.0	L2 P6
	7	NO	200.0	0.0	159.0	L2 P7
	8	NO	301.0	-629.0	132.0	L2 P8
	9	NO	398.0	-1108.0	131.0	L2 P9
	10	NO	463.2	-1554.0	131.0	L2 P10
			466.7	-2287.0	123.0	L2 P11

BARRIER DATA

Barrier No. 1 Description: 6" curb
Type - (1)BERM
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS
1	172.0	0.0	159.0	159.5	*B1 P1	* 1
2	169.0	164.0	166.0	166.5	*B1 P2	* 1
3	182.0	328.0	170.0	170.5	*B1 P3	* 1
4	218.0	494.0	172.0	172.5	*B1 P4	* 1
	270.6	656.0	170.0	170.5	*B1 P5	* 1

Barrier No. 2 Description: hill
Type - (1)BERM
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)		BARRIER HEIGHTS AT ENDS
1	100.0	550.0	178.0	178.0	*B2 P1	* 0
2	180.0	560.0	178.0	178.0	*B2 P2	* 0
3	310.0	810.0	179.9	179.9	*B2 P3	* 0
	360.0	900.0	174.6	174.6	*B2 P4	* 0

RECEIVER DATA

REC. NO.	X	Y	Z	DNL	PEOPLE	ID
1	167.0	410.0	162.0	67	500	Apt 1st
2	167.0	410.0	172.0	67	500	Apt 2nd
3	625.0	-1554.0	120.0	72	500	Com
4	200.0	760.0	183.0	67	500	playgrnd
5	171.0	775.0	183.0	62	500	classrm

DROP-OFF RATES

ALL LANE/RECEIVER PAIRS = 4.5 DBA

K - CONSTANTS

ALL LANE RECEIVER/PAIRS = 0.0 DBA

EFFECTIVENESS / COST RATIOS
****

BAR ELE	0	1	2	3	4	5	6	7	
1	-	0.*							B1 P1
2	-	0.*							B1 P2
3	-	0.*							B1 P3
4	-	0.*							B1 P4

```
  5     -   0.*                                B2 P1
  6     -   0.*                                B2 P2
  7     -   0.*                                B2 P3
 ----------------------------------------------------
        0    1    2    3    4    5    6    7
1
          BARRIER DATA
          ************

 BAR              BARRIER HEIGHTS              BAR
 ELE    0    1    2    3    4    5    6    7    ID        LENGTH  TYPE
 ---------------------------------------------------------------------------
  1     -   1.*                                B1 P1      164.2  BERM
  2     -   1.*                                B1 P2      164.6  BERM
  3     -   1.*                                B1 P3      169.9  BERM
  4     -   1.*                                B1 P4      170.3  BERM

  5     -   0.*                                B2 P1       80.6  BERM
  6     -   0.*                                B2 P2      281.8  BERM
  7     -   0.*                                B2 P3      103.1  BERM
 ---------------------------------------------------------------------------
        0    1    2    3    4    5    6    7
1
 REC REC ID    DNL  PEOPLE   LEQ(CAL)
 -------------------------------
  1  Apt 1st   67.    500.   61.9
  2  Apt 2nd   67.    500.   67.4
  3  Com       72.    500.   65.7
  4  playgrnd  67.    500.   60.8
  5  classrm   62.    500.   59.7
 -------------------------------

 BARRIER TYPE                COST
 -------------------------------
 BERM                    4683.
 MASONRY                    0.
 MASONRY/JERSEY             0.
 CONCRETE                   0.
 -------------------------------
        TOTAL COST = $      5000.

 BARRIER HEIGHT INDEX FOR EACH BARRIER SECTION
   1  1  1  1  1  1  1
 CORRESPONDING BARRIER HEIGHTS FOR EACH SECTION
  1. 1. 1. 1. 0. 0. 0.
```

Noise Barrier Calculations

* * SOUND32 (CALTRANS VERSION OF STAMINA2/OPTIMA) * *

INPUT DATA FILE : LRFUTAL1.MIT
BARRIER COST FILE : CALIF$.DTA
DATE : 09-28-2000

Lewis Road Future Alt 1, Bridge to PVR, With berm mitigation

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TRAFFIC DATA

LANE NO.	AUTO VPH	AUTO MPH	MEDIUM TRKS VPH	MEDIUM TRKS MPH	HEAVY TRKS VPH	HEAVY TRKS MPH	DESCRIPTION
1	1139	50	24	50	37	50	SB future 12000 adt
2	1139	50	24	50	37	50	NB future 12000 ADT
3	1945	50	41	50	64	50	Future SB 20500 ADT
4	1945	50	41	50	64	50	NB future 20500 ADT
5	1803	50	38	50	59	50	SB Future 19000 ADT
6	1803	50	38	50	59	50	NB Future 19000 ADT

==========

LANE DATA

LANE NO.	SEG. NO.	GRADE COR.	X	Y	Z	SEGMENT DESCRIPTION
1	1	NO	-240.0	610.0	0.0	L1 P1
	2	NO	20.0	212.0	0.0	L1 P2
	3	NO	285.0	-62.0	0.0	L1 P3
			450.0	-220.0	0.0	L1 P4
2	1	NO	-268.0	580.0	0.0	L2 P1
	2	NO	-10.0	190.0	0.0	L2 P2
	3	NO	268.0	-95.0	0.0	L2 P3
			420.0	-250.0	0.0	L2 P4
3	1	NO	450.0	-220.0	0.0	L3 P1
			2990.0	-2670.0	0.0	L3 P2
4	1	NO	420.0	-250.0	0.0	L4 P1
			2965.0	-2695.0	0.0	L4 P2
5	1	NO	2990.0	-2670.0	0.0	L5 P1
	2	NO	3450.0	-3010.0	0.0	L5 P2
			3925.0	-3142.0	0.0	L5 P3
6	1	NO	2965.0	-2695.0	0.0	L6 P1
	2	NO	3422.0	-3035.0	0.0	L6 P2
			3910.0	-3180.0	0.0	L6 P3

==========

BARRIER DATA

Barrier No. 1 Description: Existing Villa Calleguas berm
Type - (1)BERM
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

GROUND TOP BARRIER

SEG.	X	Y	(Z0)	(Z)	HEIGHTS AT ENDS
1	845.0	-775.0	0.0	5.0 *B1 P1	* 5
2	895.0	-770.0	0.0	14.0 *B1 P2	* 14
3	980.0	-850.0	0.0	12.0 *B1 P3	* 12
4	1005.0	-870.0	0.0	6.0 *B1 P4	* 6
	1120.0	-982.0	0.0	6.0 *B1 P5	* 6

Barrier No. 2 Description: VC berm 2
Type - (1)BERM
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	1120.0	-982.0	0.0	10.0 *ave ht	* 10
2	1163.0	-1025.0	0.0	10.0 *ave ht	* 10
	1110.0	-1080.0	0.0	1.0 *B2 P3	* 1

Barrier No. 3 Description: 8-ft sound wall for House 4
Type - (2)MASONRY
Height Increment (DELZ)= 1.0 No. Height Changes (P)=2

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	2730.0	-2370.0	0.0	8.0 *B3 P1	* 6 7 8 9 10
2	2778.0	-2422.0	0.0	8.0 *B3 P2	* 6 7 8 9 10
3	2838.0	-2485.0	0.0	8.0 *B3 P3	* 6 7 8 9 10
4	2950.0	-2590.0	0.0	8.0 *B3 P4	* 6 7 8 9 10
5	2970.0	-2585.0	0.0	8.0 *B3 P5	* 6 7 8 9 10
	2985.0	-2570.0	0.0	8.0 *B3 P6	* 6 7 8 9 10

Barrier No. 4 Description: 8 ft sound wall for House 3
Type - (2)MASONRY
Height Increment (DELZ)= 1.0 No. Height Changes (P)=2

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	2062.0	-1831.0	0.0	8.0 *B4 P1	* 6 7 8 9 10
2	2180.0	-1950.0	0.0	8.0 *B4 P2	* 6 7 8 9 10
	2290.0	-2050.0	0.0	8.0 *B4 P3	* 6 7 8 9 10

Barrier No. 5 Description: 6 ft wall for House 1
Type - (2)MASONRY
Height Increment (DELZ)= 1.0 No. Height Changes (P)=2

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	110.0	140.0	0.0	6.0 *B5 P1	* 4 5 6 7 8
	215.0	40.0	0.0	6.0 *B5 P2	* 4 5 6 7 8

Barrier No. 6 Description: 6 ft wall for House 2
Type - (2)MASONRY
Height Increment (DELZ)= 1.0 No. Height Changes (P)=2

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	265.0	-10.0	0.0	6.0 *B6 P1	* 4 5 6 7 8
	395.0	-130.0	0.0	6.0 *B6 P2	* 4 5 6 7 8

Barrier No. 7 Description: 8 ft wall for House 5
Type - (2)MASONRY
Height Increment (DELZ)= 1.0 No. Height Changes (P)=2

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	2960.0	-2730.0	0.0	8.0 *B7 P1	* 6 7 8 9 10
	3040.0	-2810.0	0.0	8.0 *B7 P2	* 6 7 8 9 10

RECEIVER DATA

REC. NO.	X	Y	Z	DNL	PEOPLE	ID
1	210.0	140.0	4.5	67	5	House 1
2	360.0	0.0	4.5	67	5	House 2
3	613.0	-1425.0	4.5	67	50	Villa 2
4	1150.0	-1440.0	4.5	67	100	Las Pos
5	1475.0	-1688.0	4.5	67	100	Casa Pac
6	2120.0	-2015.0	4.5	67	5	House 3
7	2819.0	-2438.0	4.5	67	5	House 4
8	1070.0	-1065.0	4.5	67	50	Villa 1
9	2930.0	-2810.0	4.5	67	5	House 5

DROP-OFF RATES

ALL LANE/RECEIVER PAIRS = 4.5 DBA

K - CONSTANTS

ALL LANE RECEIVER/PAIRS = 0.0 DBA

EFFECTIVENESS / COST RATIOS
****

BAR ELE	0	1	2	3	4	5	6	7	
1	-	0.*							B1 P1
2	-	0.*							B1 P2
3	-	0.*							B1 P3
4	-	0.*							B1 P4
5	-	0.*							ave ht
6	-	0.*							ave ht
7	-	30.	30.	30.*	30.	29.			B3 P1
8	-	41.	40.	39.*	37.	36.			B3 P2
9	-	27.	27.	27.*	26.	26.			B3 P3
10	-	22.	25.	26.*	26.	26.			B3 P4
11	-	0.	14.	18.*	20.	21.			B3 P5

12	-	33.	31.	30.*	31.	31.		B4 P1
13	-	33.	31.	30.*	30.	30.		B4 P2
14	-	33.	34.	32.*	30.	29.		B5 P1
15	-	33.	33.	30.*	29.	28.		B6 P1
16	-	32.	30.	30.*	30.	30.		B7 P1

0 1 2 3 4 5 6 7

1

BARRIER DATA
****

BAR ELE	0	1	2	3	4	5	6	7	BAR ID	LENGTH	TYPE
		BARRIER HEIGHTS									
1	-	10.*							B1 P1	51.0	BERM
2	-	13.*							B1 P2	116.7	BERM
3	-	9.*							B1 P3	32.6	BERM
4	-	6.*							B1 P4	160.5	BERM
5	-	10.*							ave ht	60.8	BERM
6	-	6.*							ave ht	76.9	BERM
7	-	6.	7.	8.*	9.	10.			B3 P1	70.8	MASONRY
8	-	6.	7.	8.*	9.	10.			B3 P2	87.0	MASONRY
9	-	6.	7.	8.*	9.	10.			B3 P3	153.5	MASONRY
10	-	6.	7.	8.*	9.	10.			B3 P4	20.6	MASONRY
11	-	6.	7.	8.*	9.	10.			B3 P5	21.2	MASONRY
12	-	6.	7.	8.*	9.	10.			B4 P1	167.6	MASONRY
13	-	6.	7.	8.*	9.	10.			B4 P2	148.7	MASONRY
14	-	4.	5.	6.*	7.	8.			B5 P1	145.0	MASONRY
15	-	4.	5.	6.*	7.	8.			B6 P1	176.9	MASONRY
16	-	6.	7.	8.*	9.	10.			B7 P1	113.1	MASONRY

0 1 2 3 4 5 6 7

1

REC	REC ID	DNL	PEOPLE	LEQ(CAL)
1	House 1	67.	5.	66.0
2	House 2	67.	5.	65.6
3	Villa 2	67.	50.	56.2
4	Las Pos	67.	100.	61.8
5	Casa Pac	67.	100.	63.1
6	House 3	67.	5.	66.3
7	House 4	67.	5.	66.9
8	Villa 1	67.	50.	62.8
9	House 5	67.	5.	67.2

BARRIER TYPE	COST
BERM	16938.
MASONRY	71551.
MASONRY/JERSEY	0.
CONCRETE	0.

TOTAL COST = $ 88000.

BARRIER HEIGHT INDEX FOR EACH BARRIER SECTION
1 1 1 1 1 1 3 3 3 3 3 3 3 3 3 3
CORRESPONDING BARRIER HEIGHTS FOR EACH SECTION
10.13. 9. 6.10. 6. 8. 8. 8. 8. 8. 8. 8. 6. 6. 8.

* * SOUND32 (CALTRANS VERSION OF STAMINA2/OPTIMA) * *

INPUT DATA FILE : LRFUTAL2.MIT
BARRIER COST FILE : CALIF$.DTA
DATE : 09-28-2000

Lewis Road Future Alt 2, Bridge to PVR, with mitigation

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TRAFFIC DATA

LANE NO.	AUTO VPH	AUTO MPH	MEDIUM TRKS VPH	MEDIUM TRKS MPH	HEAVY TRKS VPH	HEAVY TRKS MPH	DESCRIPTION
1	1139	50	24	50	37	50	SB future 12000 adt
2	1139	50	24	50	37	50	NB future 12000 ADT
3	1945	50	41	50	64	50	Future SB 20500 ADT
4	1945	50	41	50	64	50	NB future 20500 ADT
5	1803	50	38	50	59	50	SB Future 19000 ADT
6	1803	50	38	50	59	50	NB Future 19000 ADT

==========

LANE DATA

LANE NO.	SEG. NO.	GRADE COR.	X	Y	Z	SEGMENT DESCRIPTION
1	1	NO	-360.0	510.0	0.0	L1 P1
	2	NO	5.0	205.0	0.0	L1 P2
	3	NO	285.0	-62.0	0.0	L1 P3
			450.0	-220.0	0.0	L1 P4
2	1	NO	-380.0	480.0	0.0	L2 P1
	2	NO	-20.0	180.0	0.0	L2 P2
	3	NO	268.0	-95.0	0.0	L2 P3
			420.0	-250.0	0.0	L2 P4
3	1	NO	450.0	-220.0	0.0	L3 P1
			2990.0	-2670.0	0.0	L3 P2
4	1	NO	420.0	-250.0	0.0	L4 P1
			2965.0	-2695.0	0.0	L4 P2
5	1	NO	2990.0	-2670.0	0.0	L5 P1
	2	NO	3450.0	-3010.0	0.0	L5 P2
			3925.0	-3142.0	0.0	L5 P3
6	1	NO	2965.0	-2695.0	0.0	L6 P1
	2	NO	3422.0	-3035.0	0.0	L6 P2
			3910.0	-3180.0	0.0	L6 P3

==========

BARRIER DATA

Barrier No. 1 Description: Existing Villa Calleguas berm
Type - (1)BERM
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

GROUND TOP BARRIER

BAR-5

SEG.	X	Y	(Z0)	(Z)	HEIGHTS AT ENDS
1	845.0	-775.0	0.0	5.0 *B1 P1	* 5
2	895.0	-770.0	0.0	14.0 *B1 P2	* 14
3	980.0	-850.0	0.0	12.0 *B1 P3	* 12
4	1005.0	-870.0	0.0	6.0 *B1 P4	* 6
	1120.0	-982.0	0.0	6.0 *B1 P5	* 6

Barrier No. 2 Description: VC berm 2
Type - (1)BERM
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	1120.0	-982.0	0.0	10.0 *ave ht	* 10
2	1163.0	-1025.0	0.0	10.0 *ave ht	* 10
	1110.0	-1080.0	0.0	1.0 *B2 P3	* 1

Barrier No. 3 Description: 8 ft wall for House 4
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	2730.0	-2370.0	0.0	8.0 *B3 P1	* 8
2	2778.0	-2422.0	0.0	8.0 *B3 P2	* 8
3	2838.0	-2485.0	0.0	8.0 *B3 P3	* 8
4	2950.0	-2590.0	0.0	8.0 *B3 P4	* 8
5	2970.0	-2585.0	0.0	8.0 *B3 P5	* 8
	2985.0	-2570.0	0.0	8.0 *B3 P6	* 8

Barrier No. 4 Description: 8 ft wall for House 3
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	2062.0	-1831.0	0.0	8.0 *B4 P1	* 8
2	2180.0	-1950.0	0.0	8.0 *B4 P2	* 8
	2290.0	-2050.0	0.0	8.0 *B4 P3	* 8

Barrier No. 5 Description: 6 ft wall for House 1
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	110.0	140.0	0.0	6.0 *B5 P1	* 6
	215.0	40.0	0.0	6.0 *B5 P2	* 6

Barrier No. 6 Description: 6 ft wall for House 2
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	265.0	-10.0	0.0	6.0 *B6 P1	* 6
	395.0	-130.0	0.0	6.0 *B6 P2	* 6

Barrier No. 7 Description: 8 ft wall for House 5
Type - (2)MASONRY
Height Increment (DELZ)= 0.0 No. Height Changes (P)=0

SEG.	X	Y	GROUND (Z0)	TOP (Z)	BARRIER HEIGHTS AT ENDS
1	2960.0	-2730.0	0.0	8.0 *B7 P1	* 8
	3040.0	-2810.0	0.0	8.0 *B7 P2	* 8

RECEIVER DATA

REC. NO.	X	Y	Z	DNL	PEOPLE	ID
1	210.0	140.0	4.5	67	500	House 1
2	360.0	0.0	4.5	67	500	House 2
3	613.0	-1425.0	4.5	67	500	Villa 2
4	1150.0	-1440.0	4.5	67	500	Las Pos
5	1475.0	-1688.0	4.5	67	500	Casa P
6	2120.0	-2015.0	4.5	67	500	House 3
7	2819.0	-2438.0	4.5	67	500	House 4
8	1070.0	-1065.0	4.5	67	500	Villa 1
9	2930.0	-2810.0	4.5	67	500	House 5

DROP-OFF RATES

ALL LANE/RECEIVER PAIRS = 4.5 DBA

K - CONSTANTS

ALL LANE RECEIVER/PAIRS = 0.0 DBA

EFFECTIVENESS / COST RATIOS
****

BAR ELE	0	1	2	3	4	5	6	7	
1	-	0.*							B1 P1
2	-	0.*							B1 P2
3	-	0.*							B1 P3
4	-	0.*							B1 P4
5	-	0.*							ave ht
6	-	0.*							ave ht
7	-	0.*							B3 P1
8	-	0.*							B3 P2
9	-	0.*							B3 P3
10	-	0.*							B3 P4
11	-	0.*							B3 P5

BAR-7

12	-	0.*	B4 P1
13	-	0.*	B4 P2
14	-	0.*	B5 P1
15	-	0.*	B6 P1
16	-	0.*	B7 P1

0 1 2 3 4 5 6 7

1

BARRIER DATA
****

BAR ELE	0	1	2	3	4	5	6	7	BAR ID	LENGTH	TYPE
		BARRIER HEIGHTS									
1	-	10.*							B1 P1	51.0	BERM
2	-	13.*							B1 P2	116.7	BERM
3	-	9.*							B1 P3	32.6	BERM
4	-	6.*							B1 P4	160.5	BERM
5	-	10.*							ave ht	60.8	BERM
6	-	6.*							ave ht	76.9	BERM
7	-	8.*							B3 P1	70.8	MASONRY
8	-	8.*							B3 P2	87.0	MASONRY
9	-	8.*							B3 P3	153.5	MASONRY
10	-	8.*							B3 P4	20.6	MASONRY
11	-	8.*							B3 P5	21.2	MASONRY
12	-	8.*							B4 P1	167.6	MASONRY
13	-	8.*							B4 P2	148.7	MASONRY
14	-	6.*							B5 P1	145.0	MASONRY
15	-	6.*							B6 P1	176.9	MASONRY
16	-	8.*							B7 P1	113.1	MASONRY

0 1 2 3 4 5 6 7

1

REC	REC ID	DNL	PEOPLE	LEQ(CAL)
1	House 1	67.	500.	65.6
2	House 2	67.	500.	65.6
3	Villa 2	67.	500.	56.2
4	Las Pos	67.	500.	61.8
5	Casa P	67.	500.	63.1
6	House 3	67.	500.	66.3
7	House 4	67.	500.	66.9
8	Villa 1	67.	500.	62.8
9	House 5	67.	500.	67.2

BARRIER TYPE	COST
BERM	16938.
MASONRY	71551.
MASONRY/JERSEY	0.
CONCRETE	0.

TOTAL COST = $ 88000.

BARRIER HEIGHT INDEX FOR EACH BARRIER SECTION
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
CORRESPONDING BARRIER HEIGHTS FOR EACH SECTION
10.13. 9. 6.10. 6. 8. 8. 8. 8. 8. 8. 8. 6. 6. 8.

WORKSHEET "A" FOR CALCULATING REASONABLE ALLOWANCE PER RESIDENCE

PROJECT: Co. Rte. PM. EA: Hwy 34	PROJECT LOCATION: Lewis Road s/o University Dr	Page 1 of 6
NOISE BARRIER I.D. & LOCATION: No. 5, west side 350' s of University #5#1		
PROJECT ENGINEER: DVP		Date: 9/28/00

Base Allowance (1998 Dollars) Update for year 2____			$ 15,000 ____
1) Absolute Noise Levels (Choose One)		Check ✔	
69 dBA or less:	Add $ 2,000	✓	$2,000
70-74 dBA:	Add $ 4,000		
75-78 dBA:	Add $ 6,000		
More than 78 dBA:	Add $ 8,000		
2) "Build" VS Existing Noise Levels (Choose One)		Check ✔	
Less than 3 dBA:	Add $ 0		
3-7 dBA:	Add $ 2,000	✓	$2,000
8-11 dBA:	Add $ 4,000		
12 dBA or more:	Add $ 6,000		
3) Achievable Noise Reduction (Choose One)		Check ✔	
Less than 6 dBA:	Add $ 0	✓	$ 0
6-8 dBA:	Add $ 2,000		
9-11 dBA:	Add $ 4,000		
12 dBA or more:	Add $ 6,000		
4) Either New Construction Or Pre-date 1978? (Choose Yes or No)		Check ✔	
YES on either one:	Add $10,000	✓	$10,000
NO on both:	Add $ 0		
Unmodified Reasonable Allowance Per Residence			$29,000

Continued on Worksheet B

WORKSHEET "A" FOR CALCULATING REASONABLE ALLOWANCE PER RESIDENCE

PROJECT: Co. Rte. PM. EA: Hwy 34	PROJECT LOCATION: Lewis Road	Page of 2 6
NOISE BARRIER I.D. & LOCATION: No. 6, 70 ft s of University Dr, west side Home #2		
PROJECT ENGINEER: DUP		Date: 9/28/00
Base Allowance (1998 Dollars) Update for year 2____		$ 15,000 ____

1) Absolute Noise Levels (Choose One)		Check ✓	
69 dBA or less:	Add $ 2,000	✓	$2,000
70-74 dBA:	Add $ 4,000		
75-78 dBA:	Add $ 6,000		
More than 78 dBA:	Add $ 8,000		
2) "Build" VS Existing Noise Levels (Choose One)		Check ✓	
Less than 3 dBA:	Add $ 0		
3-7 dBA:	Add $ 2,000	✓	$2,000
8-11 dBA:	Add $ 4,000		
12 dBA or more:	Add $ 6,000		
3) Achievable Noise Reduction (Choose One)		Check ✓	
Less than 6 dBA:	Add $ 0	✓	0
6-8 dBA:	Add $ 2,000		
9-11 dBA:	Add $ 4,000		
12 dBA or more:	Add $ 6,000		
4) Either New Construction Or Pre-date 1978? (Choose Yes or No)		Check ✓	
YES on either one:	Add $10,000		$10,000
NO on both:	Add $ 0		
Unmodified Reasonable Allowance Per Residence			$29,000

Continued on Worksheet B

WORKSHEET "A" FOR CALCULATING REASONABLE ALLOWANCE PER RESIDENCE

PROJECT: Co. Rte. PM. EA: Hwy 34	PROJECT LOCATION: Lewis Road s/o Pleasant Valley Rd	Page of 3 6
NOISE BARRIER I.D. & LOCATION: No. 4, 850 ft s/o Calwelti, east side		Hs # 3
PROJECT ENGINEER: DVP		Date: 9/28/00

Base Allowance (1998 Dollars) Update for year 2____			$ 15,000 _____
1) Absolute Noise Levels (Choose One)		Check ✓	
69 dBA or less:	Add $ 2,000		
70-74 dBA:	Add $ 4,000	✓	$ 4,000
75-78 dBA:	Add $ 6,000		
More than 78 dBA:	Add $ 8,000		
2) "Build" VS Existing Noise Levels (Choose One)		Check ✓	
Less than 3 dBA:	Add $ 0		
3-7 dBA:	Add $ 2,000		
8-11 dBA:	Add $ 4,000	✓	$ 4,000
12 dBA or more:	Add $ 6,000		
3) Achievable Noise Reduction (Choose One)		Check ✓	
Less than 6 dBA:	Add $ 0	✓	0
6-8 dBA:	Add $ 2,000		
9-11 dBA:	Add $ 4,000		
12 dBA or more:	Add $ 6,000		
4) Either New Construction Or Pre-date 1978? (Choose Yes or No)		Check ✓	
YES on either one:	Add $10,000	✓	$10,000
NO on both:	Add $ 0		
Unmodified Reasonable Allowance Per Residence			$33,000
Continued on Worksheet B			

WORKSHEET "A" FOR CALCULATING REASONABLE ALLOWANCE PER RESIDENCE

PROJECT: Co. Rte. PM. EA: HWY 34	PROJECT LOCATION: Lewis Road s/o Pleasant Valley Rd	Page 4 of 6
NOISE BARRIER I.D. & LOCATION: No. 3, west side @ Calmelti Rd; Hs#4		
PROJECT ENGINEER: DVP		Date: 9/28/00

Base Allowance (1998 Dollars) Update for year 2____			$ 15,000 ____
1) Absolute Noise Levels (Choose One)		Check ✓	
69 dBA or less:	Add $ 2,000		
70-74 dBA:	Add $ 4,000		
75-78 dBA:	Add $ 6,000	✓	$6,000
More than 78 dBA:	Add $ 8,000		
2) "Build" VS Existing Noise Levels (Choose One)		Check ✓	
Less than 3 dBA:	Add $ 0		
3-7 dBA:	Add $ 2,000	✓	$2,000
8-11 dBA:	Add $ 4,000		
12 dBA or more:	Add $ 6,000		
3) Achievable Noise Reduction (Choose One)		Check ✓	
Less than 6 dBA:	Add $ 0		
6-8 dBA:	Add $ 2,000	✓	$2,000
9-11 dBA:	Add $ 4,000		
12 dBA or more:	Add $ 6,000		
4) Either New Construction Or Pre-date 1978? (Choose Yes or No)		Check ✓	
YES on either one:	Add $10,000	✓	10,000
NO on both:	Add $ 0		
Unmodified Reasonable Allowance Per Residence			$ 35,000

Continued on Worksheet B

WORKSHEET "A" FOR CALCULATING REASONABLE ALLOWANCE PER RESIDENCE

PROJECT: Co. Rte. PM. EA: Hwy 34	PROJECT LOCATION: Lewis Rd s/o Pleasant Valley Rd	Page of 5 6
NOISE BARRIER I.D. & LOCATION: No. 7, east side, N of Calwelti Rd; House #5		
PROJECT ENGINEER: DVP		Date: 7/28/00

Base Allowance (1998 Dollars) Update for year 2____			$ 15,000 ____
1) Absolute Noise Levels (Choose One)		Check ✓	
69 dBA or less:	Add $ 2,000	✓	$2,000
70-74 dBA:	Add $ 4,000		
75-78 dBA:	Add $ 6,000		
More than 78 dBA:	Add $ 8,000		
2) "Build" VS Existing Noise Levels (Choose One)		Check ✓	
Less than 3 dBA:	Add $ 0		
3-7 dBA:	Add $ 2,000		
8-11 dBA:	Add $ 4,000	✓	$4,000
12 dBA or more:	Add $ 6,000		
3) Achievable Noise Reduction (Choose One)		Check ✓	
Less than 6 dBA:	Add $ 0	✓	$0
6-8 dBA:	Add $ 2,000		
9-11 dBA:	Add $ 4,000		
12 dBA or more:	Add $ 6,000		
4) Either New Construction Or Pre-date 1978? (Choose Yes or No)		Check ✓	
YES on either one:	Add $10,000	✓	$10,000
NO on both:	Add $ 0		
Unmodified Reasonable Allowance Per Residence			$31,000
Continued on Worksheet B			

WORKSHEET "B" FOR CALCULATING REASONABLE ALLOWANCE PER RESIDENCE

PROJECT: Co.: Vta Rte: 34 PM:
EA:
PROJECT ENGINEER: DVP

PROJECT DESCRIPTION AND LOCATION: Lewis Road S/o Pleasant Valley Road County Segment

Page 6 of 6
Date: 9/28/00

NOISE BARRIER I.D. (From Worksheet A)	REASONABLE ALLOWANCE PER BENEFITED RESIDENCE, A_I (Worksheet A) (a)	NO. OF BENEFITTED RESIDENCES N_I (b)	REASONABLE ALLOWANCE PER NOISE BARRIER (A_I x N_I) (c) (c =a x b)	FRACTION OF TOTAL REASONABLE ALLOWANCE (A_I x N_I)/ A_T (d) (d =c/box 1)	REDUCTION OF REASONABLE ALLOWANCE PER NOISE BARRIER (e) (e =d x box 3)	REDUCTION OF REASONABLE ALLOWANCE PER BENEFITED RESIDENCE (f) (f =e/b)	MODIFIED REASONABLE ALLOWANCE PER BENEFITED RESIDENCE (A_{mI}) (g) (g =a – f)
No. 5, Hs 1	29,000	1	29,000				
No. 6, Hs 2	29,000	1	29,000				
No. 4, Hs 3	33,000	1	33,000				
No. 3, Hs 4	35,000	1	35,000				
No. 7, Hs 5	31,000	1	31,000				

TOTAL REASONABLE ALLOWANCE FOR ABATEMENT (A_T)	(Box1) 157,000
ESTIMATED PROJECT COST x 0.5	(Box2) 6,750,000
SUBTRACT BOX 2 FROM BOX 1 • If result is zero or less, STOP. Use the reasonable allowances per residence in column (a) above. • If result is greater than zero, the amount is TOTAL ALLOWANCE EXCESS (E_T); continue with columns (d) through (g).	(Box3) < 0

Alt 1 $13.5 million
Alt 2 $16.9 million
Alt 3 $17.2 million

Reasonableness Determination For Noise Barriers

Noise Barrier ID	Reasonable Allowance (from Worksheet "B")	Length	Height	Sq. Ft.	Cost/Sq ft *	Cost	At least 5 dBA reduction?	Cost Effective (Cost<Allowance)
No. 5, House 1	$29,000	145	6	870	$14	$12,180	No	Yes
No. 5, House 1	$29,000	145	10	1450	$14	$20,300	Yes	Yes
No. 6, House 2	$29,000	177	6	1062	$14	$14,868	No	Yes
No. 6, House 2	$29,000	218	11	2398	$14	$33,572	Yes	No
No. 4, House 3	$33,000	316	8	2528	$14	$35,392	Yes	No
No. 3, House 4	$35,000	353	8	2824	$14	$39,536	Yes	No
No. 7, House 5	$31,000	113	8	904	$14	$12,656	No	Yes
No. 7, House 5	$31,000	466	9	4194	$14	$58,716	Yes	No

** Cost based on value given in Traffic Noise Analysis Protocol, October 1998.*
Cost does not include the cost of possible additional right-of-way or easement acquisition.

Appendix I

Traffic Worksheets

LEVEL OF SERVICE DEFINITIONS

LEVEL OF SERVICE DEFINITIONS

In rating roadway and intersection operating conditions with existing or future traffic volumes, "Levels of Service" (LOS) A through F are used, with LOS A indicating very good operation and LOS F indicating poor operation. More complete level of service definitions are:

LOS	V/C Range	Delay(a)	Definition
A	0.00-0.60	< 5.0	Low volumes; primarily free flow operations. Density is low and vehicles can freely maneuver within traffic stream. Drivers can maintain their desired speeds with little or no delay.
B	0.61-0.70	5.1-15.0	Stable flow with potential for some restriction of operating speeds due to traffic conditions. Maneuvering is only slightly restricted. The stopped delays are not bothersome and drivers are not subject to appreciable tension.
C	0.71-0.80	15.1-25.0	Stable operations, however the ability to maneuver is more restricted by the increase in traffic volumes. Relatively satisfactory operating speeds prevail but adverse signed coordination or longer queues cause delays.
D	0.81-0.90	25.1-40.0	Approaching unstable traffic flow where small increases in volume could cause substantial delays. Most drivers are restricted in their ability to maneuver and their selection of travel speeds. Comfort and convenience are low but tolerable.
E	0.91-1.00	40.1-60.0	Operations characterized by significant approach delays and average travel speeds of one-half to one-third the free flow speed. Flow is unstable and potential for stoppages of brief duration. High signal density, extensive queuing, or signal progression/timing are the typical causes of delays.
F	> 1.01	> 60.0	Forced flow operations with high approach delays at critical signalized intersections. Speeds are reduced substantially and stoppages may occur for short or long periods of time because of downstream congestion.

(a) Average stop delay at intersections.

ROADWAY DESIGN CAPACITIES

4.2.1.1 Existing Regional Road Network

The 1986 Regional Road Network map (Figure 4.2.1 - separate map) depicts existing **freeways/expressways**, **conventional state highways**, **primary** and **secondary arterials** and **major collectors**. **Minor collectors** and **local streets/roads** are not shown because the myriad of small streets would be unreadable on the map and because such non-thoroughfares (by definition) are not required by the Government Code to be depicted. Information regarding the regional road network in the unincorporated portion of the County includes number of **lanes** (a.k.a., **road cross sections**) and **average daily traffic** (ADT). Within the ten incorporated cities in the County, major city streets and all conventional state highways are depicted on the map for locational purposes only, without reference to number of lanes or ADTs.

The cross section and ADT information for the County arterials and major collectors shown on the 1986 map were derived from the Ventura County Public Works Agency's April, 1986 Road Index-Inventory. The cross section information for the freeways/expressways was provided by the California Department of Transportation (CALTRANS) to the County in 1987 and the ADTs are from CALTRANS 1986 Traffic Volumes Report.

The number of lanes and ADT on a given road are two variables that contribute to an understanding of that road's general traffic condition. The traffic condition is referred to as **Level of Service** (LOS). LOSs are based on the following six step hierarchy:

LOS	Traffic Conditions
"A"	Free uninterrupted low volume flow at high speeds with no restriction on maneuverability (lane changing) and with little or no delays.
"B"	Stable flow with some restrictions to operating speed occurring.
"C"	Stable flow but with speed and maneuverability restricted by higher traffic volumes. Satisfactory operating speed for urban locations with some delays at signals.
"D"	Approaching unstable flow with tolerable operating speeds subject to considerable and sudden variation, little freedom to maneuver and with major delays at signals.
"E"	Unstable flow with volume at or near capacity, lower operating speeds and major delays and stoppages.
"F"	Forced flow operation with low speeds and stoppages for long periods due to congestion. Volumes below capacity.

County thoroughfares and conventional **State highways** in the unincorporated area are classified as Class I, II, or III roadways. Class I roadways are rural two-lane or multi-lane roads of essentially level terrain, where the road section has been improved to meet current road standard criteria; Class II roadways are rural two-lane roads, of essentially level and slightly rolling terrain, where the road section does not meet current road standard criteria; and Class III roadways are rural two-lane roads, of mountainous terrain or sharply curving alignment, where the road section does not meet current road standard criteria;

The ADT and LOS thresholds for Class I, II and III roadways and Federal and State freeways are shown on Figure 4.2.2.

FIGURE 4.2.2

AVERAGE DAILY TRAFFIC (ADT) LEVEL OF SERVICE (LOS) THRESHOLDS COUNTY ROADS AND CONVENTIONAL STATE HIGHWAYS					
	CLASS I			CLASS II	CLASS III
LOS	2 LANES	4 LANES	6 LANES	2 LANES	2 LANES
A	2,400	19,000	29,000	1,500	350
B	5,600	28,000	42,000	3,900	2,000
C	10,000	38,000	57,000	7,000	3,300
D	16,000	47,000	70,000	11,000	5,900
E	27,000	58,000	87,000	21,000	16,000

ADT/LOS THRESHOLDS FREEWAYS				
LOS	4 LANES	6 LANES	8 LANES	10 LANES
A	31,000	46,000	62,000	77,000
B	48,000	71,000	95,000	119,000
C	68,000	102,000	136,000	169,000
D	82,000	123,000	164,000	205,000
E	88,000	132,000	176,000	220,000

SOURCE: VENTURA COUNTY PUBLIC WORKS AGENCY 9/94

R. 12/20/94

LEVEL OF SERVICE CALCULATION METHODOLOGIES

DISCUSSION OF INTERSECTION CAPACITY UTILIZATION (ICU)

The ability of a roadway to carry traffic is referred to as capacity. The capacity is usually less at intersections because traffic flows continuously between them and only during the green phase at them. Capacity at intersections is best defined in terms of vehicles per lane per hour of green. The technique used to compare the volumes and capacity of an intersection is known as Intersection Capacity Utilization (ICU). ICU or volume-to-capacity ratio, usually expressed as a percentage, is the proportion of an hour required to provide sufficient capacity to accommodate all intersection traffic if all approaches operate at capacity. If an intersection is operating at 80 percent of capacity, then 20 percent of the signal cycle is not used.

The ICU calculation assumes that an intersection is signalized and that the signal is ideally timed. Although calculating ICU for an unsignalized intersection is invalid, the presumption is that a signal can be installed and the calculation shows whether the geometrics are capable of accommodating the expected volumes. It is possible to have an ICU well below 100 percent, yet have severe traffic congestion. This would occur if one or more movements is not getting sufficient time to satisfy its demand, and excess time exists on other movements. This is an operational problem which should be addressed.

Capacity is often defined in terms of roadway width. However, standard lanes have approximately the same capacity whether they are 11 or 14 feet wide. Data collected by Kunzman Associates indicates a typical lane, whether a through-lane or a left-turn lane, has a capacity of approximately 1,700 vehicles per hour, with nearly all locations showing a capacity greater than 1,600 vehicles per hour per lane. This finding is published in the August, 1978 issue of ITE Journal in the article entitled, "Another Look at Signalized Intersection Capacity" by William Kunzman. For this study, a capacity of 1,600 vehicles per hour per lane will be assumed for left-turn, through, and right-turn lanes as per City policy.

The yellow time can either be assumed to be completely used and no penalty applied, or it can be assumed to be only partially usable. Total yellow time accounts for less than 10 percent of a cycle, and a penalty of up to five percent is reasonable. On the other hand, during peak hour traffic operation, the yellow times are nearly completely used. In this study, no penalty will be applied for the yellow because the capacities have been assumed to be only 1,600 vehicles per hour per lane when in general they are 1,700-1,800 vehicles per hour per lane.

The ICU technique is an ideal tool to quantify existing as well as future intersection operations. The impact of adding a lane can be quickly determined by examining the effect the lane has on the intersection capacity utilization.

Source: Oxnard Airport Business Park Traffic Study, Kunzman Assoc., City of Oxnard, 1985.

DISCUSSION OF UNSIGNALIZED INTERSECTION LEVEL OF SERVICE METHODS OF CALCULATION

The original concept of "Level of Service", as applied to Urban Arterials, was based on examination of two elements[1]:

1. Average Overall Travel Speed
2. Volume To Capacity Ratio:
    a. Most Critical Point
    b. Each Subsection
    c. Entire Section

It has long been recognized that at-grade intersections are the principal elements limiting the flow of traffic on urban streets. The methods to calculate intersection capacity contained in the Highway Capacity Manual apply primarily to signalized intersections, since it was assumed that any intersection with lesser controls would be signalized when traffic volumes so warranted. While extensive work has been done in refining signalized intersection methods of calculation since 1960, it was not until publication in 1980 of "Interim Materials on Highway Capacity", Transportation Research Circular 212, that an analysis tool was presented for unsignalized intersections.

Unfortunately, when ATE began applying this method to existing intersections, it became apparent that under certain conditions, the calculated Level of Service and associated delay did not agree with our visual observations of intersection operation. For example, at the intersection of the North bound U.S. 101 Off-Ramp and Donovan Road in Santa Maria, a 1981 observation was calculated to be at Level of Service E, with very long delay for off-ramp traffic, when observation indicated an average delay per vehicle of 26 seconds. More recently, at the intersection of Love Place and Hollister Avenue in Goleta, the unsignalized Level of Service was calculated at E, whereas a delay study indicated average delay per vehicle was only 10.2 seconds. Since delay seems to be emerging as the principal determinant of intersection Level of Service, it is believed that the values contained in the Critical Movement Analysis (Signalized Intersections) portion of Circular 212, which relate delay to Level of Service, should be utilized for estimating intersection Levels of Service using average stopped time delay at unsignalized intersections. Table 7 of Highway Capacity Manual (HCM) Circular 212 is reproduced here for reference:

Delay and Level of Service

Level of Service	Typical V/C Ratio	Delay Range (a)
LOS A	0.00 - 0.60	0.0 - 5.0
LOS B	0.61 - 0.70	5.1 - 10.0
LOS C	0.71 - 0.80	10.1 - 20.0
LOS D	0.81 - 0.90	20.1 - 30.0
LOS E	0.91 - 1.00	30.1 - 45.0
LOS F	Varies	45.1 or greater

(a) Measured as "stopped delay" in seconds per vehicle. Delay values relate to the mean stopped delay incurred by all vehicles entering the intersection. Note that traffic signal coordination effects are not considered and could drastically alter the delay range for a given V/C ratio. Delay ranges obtained from HCM update October 1994.

Source: W.R. Reilly (NCHRP Project 3-28), based on a syntheses of various data.

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[1] Highway Capacity Manual, Highway Research Board, Special Report 87, 1965.

INTERSECTION LOS CALCULATION WORKSHEETS

LEWIS ROAD WIDENING PROJECT#00033

COUNT DATE: *10/28/97* 02AM

TIME PERIOD: ***A.M. PEAK HOUR*** ***7:30 - 8:30***

N/S STREET: LEWIS RD.

E/W STREET: VENTURA BLVD.

CONTROL TYPE: SIGNAL

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND L	NORTH BOUND T	NORTH BOUND R	SOUTH BOUND L	SOUTH BOUND T	SOUTH BOUND R	EAST BOUND L	EAST BOUND T	EAST BOUND R	WEST BOUND L	WEST BOUND T	WEST BOUND R
(A) EXISTING:	99	307	6	6	487	460	313	3	230	1	** 5	2

GEOMETRICS

EXISTING GEOMETRICS	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
	L TR	LT R	LT R	LTR

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	SCENARIO V/C RATIOS 1	2	3			
NBL	1	1600	99			0.06 *					
NBT	1	1600	307			0.20					
NBR	0	0	6			-					
SBL	0	0	6			-					
SBT	1	1600	487			0.31 *					
SBR	1	1600	460			0.29					
EBL	0	0	313			-					
EBT	1	1600	3			0.20 *					
EBR	1	1600	230			0.14					
WBL	0	0	1			-					
WBT	1	1600	5			0.01 *					
WBR	0	0	2			-					
					LOST TIME:	0.10					
					PROJECT-ADDED CRITICAL TRIPS:						
					INTERSECTION CAPACITY UTILIZATION:	**0.67**					
					LEVEL OF SERVICE:	**B**					

NOTES:

Printed: 06/22/00

LEWIS ROAD WIDENING PROJECT#00033

COUNT DATE: *10/28/97* 02AM

TIME PERIOD: ***P.M. PEAK HOUR*** ***4:30 - 5:30***

N/S STREET: LEWIS RD.

E/W STREET: VENTURA BLVD.

CONTROL TYPE: SIGNAL

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND L	NORTH BOUND T	NORTH BOUND R	SOUTH BOUND L	SOUTH BOUND T	SOUTH BOUND R	EAST BOUND L	EAST BOUND T	EAST BOUND R	WEST BOUND L	WEST BOUND T	WEST BOUND R
(A) EXISTING:	262	543	1	2	345	310	275	6	145	2	** 8	3

GEOMETRICS

EXISTING GEOMETRICS	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
	L TR	LT R	LT R	LTR

TRAFFIC SCENARIOS

SCENARIO 1 - EXISTING VOLUMES (A)

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	SCENARIO V/C RATIOS 1	2	3			
NBL	1	1600	262			0.16 *					
NBT	1	1600	543			0.34					
NBR	0	0	1			-					
SBL	0	0	2			-					
SBT	1	1600	345			0.22 *					
SBR	1	1600	310			0.19					
EBL	0	0	275			-					
EBT	1	1600	6			0.18 *					
EBR	1	1600	145			0.09					
WBL	0	0	2			-					
WBT	1	1600	8			0.01 *					
WBR	0	0	3			-					
					LOST TIME:	0.10					
					PROJECT-ADDED CRITICAL TRIPS:						
					INTERSECTION CAPACITY UTILIZATION:	0.67					
					LEVEL OF SERVICE:	B					

NOTES:

Printed: 06/22/00

LEWIS ROAD WIDENING PROJECT#00033
COUNT DATE: ***YEAR 2025***
TIME PERIOD: ***A.M. PEAK HOUR***
N/S STREET: LEWIS RD.
E/W STREET: VENTURA BLVD.
CONTROL TYPE: SIGNAL

01AM

Caltrans Alternatives 1 and 2

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND L	NORTH BOUND T	NORTH BOUND R	SOUTH BOUND L	SOUTH BOUND T	SOUTH BOUND R	EAST BOUND L	EAST BOUND T	EAST BOUND R	WEST BOUND L	WEST BOUND T	WEST BOUND R
(A) YEAR 2025:	**180**	**900**	**0**	**0**	**980**	**580**	**540**	**0**	**1020**	**0**	**0**	**0**

GEOMETRICS

PSR GEOMETRICS	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
	LL TT	TT R	LR R	

TRAFFIC SCENARIOS

SCENARIO 1 - YEAR 2025 VOLUMES (A)

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	SCENARIO V/C RATIOS 1	2	3			
NBL	2	3200	180			0.06 *					
NBT	2	3200	900			0.28					
NBR	0	0	0			-					
SBL	0	0	0			-					
SBT	2	3200	980			0.31 *					
SBR	1	1600	580			0.36					
EBL	0	0	540			-					
EBT	2	3200	0			0.39 *					
EBR(a)	0	0	714			-					
WBL	0	0	0			-					
WBT	0	0	0			-					
WBR	0	0	0			-					
					LOST TIME:						
					PROJECT-ADDED CRITICAL TRIPS:						
					INTERSECTION CAPACITY UTILIZATION:	**0.75**					
					LEVEL OF SERVICE:	**C**					

NOTES:
(a) 30% RTOR

Printed: 06/22/00

LEWIS ROAD WIDENING PROJECT#00033

COUNT DATE: ***YEAR 2025*** **01PM**

TIME PERIOD: ***P.M. PEAK HOUR***

N/S STREET: LEWIS RD.

E/W STREET: VENTURA BLVD.

CONTROL TYPE: SIGNAL Caltrans Alternatives 1and 2

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND L	NORTH BOUND T	NORTH BOUND R	SOUTH BOUND L	SOUTH BOUND T	SOUTH BOUND R	EAST BOUND L	EAST BOUND T	EAST BOUND R	WEST BOUND L	WEST BOUND T	WEST BOUND R
(A) YEAR 2025:	**340**	**1440**	**0**	**0**	**520**	**420**	**410**	**0**	**640**	**0**	**0**	**0**

GEOMETRICS

	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
PSR GEOMETRICS	LL TT	TT R	LR R	

TRAFFIC SCENARIOS

SCENARIO 1 - YEAR 2025 VOLUMES (A)

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	SCENARIO V/C RATIOS 1	2	3			
NBL	2	3200	340			0.11					
NBT	2	3200	1440			0.45 *					
NBR	0	0	0			-					
SBL	0	0	0			-					
SBT	2	3200	520			0.16					
SBR	1	1600	420			0.26					
EBL	0	0	410			-					
EBT	2	3200	0			0.27 *					
EBR(a)	0	0	448			-					
WBL	0	0	0			-					
WBT	0	0	0			-					
WBR	0	0	0			-					
					LOST TIME:						
					PROJECT-ADDED CRITICAL TRIPS:						
					INTERSECTION CAPACITY UTILIZATION:	0.72					
					LEVEL OF SERVICE:	C					

NOTES:

(a) 30% RTOR

Printed: 06/22/00

LEWIS ROAD WIDENING PROJECT#00033

COUNT DATE: ***YEAR 2025***

TIME PERIOD: ***A.M. PEAK HOUR***

N/S STREET: LEWIS RD.

E/W STREET: DAWSON PLACE

CONTROL TYPE: SIGNAL

02AM

Caltrans Alternatives 1 and 2

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND L	NORTH BOUND T	NORTH BOUND R	SOUTH BOUND L	SOUTH BOUND T	SOUTH BOUND R	EAST BOUND L	EAST BOUND T	EAST BOUND R	WEST BOUND L	WEST BOUND T	WEST BOUND R
(A) YEAR 2025:	**100**	**950**	**20**	**60**	**1720**	**190**	**100**	**30**	**20**	**30**	**20**	**40**

GEOMETRICS

PSR GEOMETRICS	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
	L T TR	L T T R	L TR	LTR

TRAFFIC SCENARIOS

SCENARIO 1 – YEAR 2025 VOLUMES (A)

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	SCENARIO V/C RATIOS 1	2	3			
NBL	1	1600	100			0.06 *					
NBT	2	3200	950			0.30					
NBR	0	0	20			-					
SBL	1	1600	60			0.04					
SBT	2	3200	1720			0.54 *					
SBR	1	1600	190			0.12					
EBL	1	1600	100			0.06 *					
EBT	1	1600	30			0.03					
EBR	0	0	20			-					
WBL	0	0	30			-					
WBT	1	1600	20			0.06 *					
WBR	0	0	40			-					
					LOST TIME:						
					PROJECT-ADDED CRITICAL TRIPS:						
					INTERSECTION CAPACITY UTILIZATION:	**0.72**					
					LEVEL OF SERVICE:	**C**					

NOTES:

Printed: 06/22/00

LEWIS ROAD WIDENING PROJECT#00033

COUNT DATE: ***YEAR 2025*** **02PM**

TIME PERIOD: ***P.M. PEAK HOUR***

N/S STREET: LEWIS RD.

E/W STREET: DAWSON PLACE

CONTROL TYPE: SIGNAL

Caltrans Alternatives 1 and 2

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND L	NORTH BOUND T	NORTH BOUND R	SOUTH BOUND L	SOUTH BOUND T	SOUTH BOUND R	EAST BOUND L	EAST BOUND T	EAST BOUND R	WEST BOUND L	WEST BOUND T	WEST BOUND R
(A) YEAR 2025:	**120**	**1610**	**20**	**10**	**1040**	**90**	**140**	**10**	**100**	**30**	**10**	**40**

GEOMETRICS

	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
PSR GEOMETRICS	L T TR	L T T R	L TR	LTR

TRAFFIC SCENARIOS

SCENARIO 1 - YEAR 2025 VOLUMES (A)

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	SCENARIO V/C RATIOS 1	2	3			
NBL	1	1600	120			0.08					
NBT	2	3200	1610			0.51 *					
NBR	0	0	20			-					
SBL	1	1600	10			0.01 *					
SBT	2	3200	1040			0.33					
SBR	1	1600	90			0.06					
EBL	1	1600	140			0.09 *					
EBT	1	1600	10			0.07					
EBR	0	0	100			-					
WBL	0	0	30			-					
WBT	1	1600	10			0.05 *					
WBR	0	0	40			-					
					LOST TIME:						
					PROJECT-ADDED CRITICAL TRIPS:						
					INTERSECTION CAPACITY UTILIZATION:	**0.65**					
					LEVEL OF SERVICE:	**B**					

NOTES:

Printed: 06/22/00

LEWIS ROAD WIDENING PROJECT#00033

COUNT DATE: *10/28/97* **02AM**

TIME PERIOD: ***A.M. PEAK HOUR*** ***7:30 - 8:30***

N/S STREET: LEWIS RD.

E/W STREET: PLEASANT VALLEY RD.

CONTROL TYPE: SIGNAL

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND L	NORTH BOUND T	NORTH BOUND R	SOUTH BOUND L	SOUTH BOUND T	SOUTH BOUND R	EAST BOUND L	EAST BOUND T	EAST BOUND R	WEST BOUND L	WEST BOUND T	WEST BOUND R
(A) EXISTING:	**17**	**133**	**167**	**144**	**200**	**227**	**178**	**537**	**6**	**205** **	**261**	**81**

GEOMETRICS

EXISTING GEOMETRICS	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
	L TTR	L T R	LL TR	L T R

TRAFFIC SCENARIOS

SCENARIO 1 - EXISTING VOLUMES (A)

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	SCENARIO V/C RATIOS 1	2	3			
NBL	1	1600	17			0.01					
NBT	1	1600	133			0.19 *					
NBR	0	0	167			-					
SBL	1	1600	144			0.09 *					
SBT	1	1600	200			0.13					
SBR	1	1600	227			0.14					
EBL	2	3200	178			0.06					
EBT	2	3200	537			0.17 *					
EBR	0	0	6			-					
WBL	1	1600	205			0.13 *					
WBT	2	3200	261			0.08					
WBR	1	1600	81			0.05					
					LOST TIME:						
					PROJECT-ADDED CRITICAL TRIPS:						
					INTERSECTION CAPACITY UTILIZATION:	**0.58**					
					LEVEL OF SERVICE:	A					

NOTES:

Printed: 07/03/00

LEWIS ROAD WIDENING PROJECT#00033

COUNT DATE: *10/28/97* **02AM**

TIME PERIOD: ***P.M. PEAK HOUR*** ***4:30 - 5:30***

N/S STREET: LEWIS RD.

E/W STREET: PLEASANT VALLEY RD.

CONTROL TYPE: SIGNAL

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND L	NORTH BOUND T	NORTH BOUND R	SOUTH BOUND L	SOUTH BOUND T	SOUTH BOUND R	EAST BOUND L	EAST BOUND T	EAST BOUND R	WEST BOUND L	WEST BOUND T	WEST BOUND R
(A) EXISTING:	40	319	248	95	146	302	219	285	16	183 **	758	180

GEOMETRICS

EXISTING GEOMETRICS	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
	L TR	L T R	LL T TR	L TT R

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	SCENARIO V/C RATIOS 1	2	3			
NBL	1	1600	40			0.03					
NBT	1	1600	319			0.35 *					
NBR	0	0	248			-					
SBL	1	1600	95			0.06 *					
SBT	1	1600	146			0.09					
SBR	1	1600	302			0.19					
EBL	2	3200	219			0.07 *					
EBT	2	3200	285			0.09					
EBR	0	0	16			-					
WBL	1	1600	183			0.11					
WBT	2	3200	758			0.24 *					
WBR	1	1600	180			0.11					
					LOST TIME:						
					PROJECT-ADDED CRITICAL TRIPS:						
					INTERSECTION CAPACITY UTILIZATION:	**0.72**					
					LEVEL OF SERVICE:	**C**					

NOTES:

Printed: 07/03/00

LEWIS ROAD WIDENING PROJECT#00033

COUNT DATE: ***YEAR 2025*** **03AM**

TIME PERIOD: ***A.M. PEAK HOUR***

N/S STREET: LEWIS RD.

E/W STREET: PLEASANT VALLEY RD.

CONTROL TYPE: SIGNAL

Caltrans Alternatives 1 and 2

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND L	NORTH BOUND T	NORTH BOUND R	SOUTH BOUND L	SOUTH BOUND T	SOUTH BOUND R	EAST BOUND L	EAST BOUND T	EAST BOUND R	WEST BOUND L	WEST BOUND T	WEST BOUND R
(A) YEAR 2025:	**60**	**870**	**390**	**90**	**1300**	**330**	**220**	**500**	**350**	**550**	**280**	**80**

GEOMETRICS

PSR GEOMETRICS	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
	L TT R	L TT R	LL T T R	LL TT R

TRAFFIC SCENARIOS

SCENARIO 1 = YEAR 2025 VOLUMES (A)

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	SCENARIO V/C RATIOS 1	2	3			
NBL	1	1600	60			0.04 *					
NBT	2	3200	870			0.27					
NBR	1	1600	390			0.24					
SBL	1	1600	90			0.06					
SBT	2	3200	1300			0.41 *					
SBR	1	1600	330			0.21					
EBL	2	3200	220			0.07					
EBT	2	3200	500			0.16 *					
EBR	1	1600	350			0.22					
WBL	2	3200	550			0.17 *					
WBT	2	3200	280			0.09					
WBR	1	1600	80			0.05					
			LOST TIME:								
			PROJECT-ADDED CRITICAL TRIPS:								
			INTERSECTION CAPACITY UTILIZATION:			**0.77**					
			LEVEL OF SERVICE:			C					

NOTES:

Printed: 06/22/00

LEWIS ROAD WIDENING PROJECT#00033

COUNT DATE: ***YEAR 2025*** **04PM**

TIME PERIOD: ***P.M. PEAK HOUR***

N/S STREET: LEWIS RD.

E/W STREET: CAMARILLO DR.

CONTROL TYPE: SIGNAL

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND L	NORTH BOUND T	NORTH BOUND R	SOUTH BOUND L	SOUTH BOUND T	SOUTH BOUND R	EAST BOUND L	EAST BOUND T	EAST BOUND R	WEST BOUND L	WEST BOUND T	WEST BOUND R
(A) YEAR 2025:	**0**	**1249**	**45**	**344**	**714**	**0**	**0**	**0**	**0**	**89**	**0**	**682**

GEOMETRICS

PSR GEOMETRICS	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
	T TR	LL TT		L R

TRAFFIC SCENARIOS

SCENARIO 1 - YEAR 2025 VOLUMES (A)

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	SCENARIO V/C RATIOS 1	2	3			
NBL	0	0	0			-					
NBT	2	3200	1249			0.40 *					
NBR	0	0	45			-					
SBL	2	3200	344			0.11 *					
SBT	2	3200	714			0.22					
SBR	0	0	0			-					
EBL	0	0	0			-					
EBT	0	0	0			-					
EBR	0	0	0			-					
WBL	1	1600	89			0.06 *					
WBT	0	0	0			-					
WBR	1	1600	682			0.43					
					LOST TIME:						
					PROJECT-ADDED CRITICAL TRIPS:						
					INTERSECTION CAPACITY UTILIZATION:	**0.57**					
					LEVEL OF SERVICE:	**A**					

NOTES:

Printed: 07/03/00

LEWIS ROAD WIDENING PROJECT#00033

COUNT DATE: ***YEAR 2025*** **05AM**

TIME PERIOD: ***A.M. PEAK HOUR***

N/S STREET: LEWIS RD.

E/W STREET: SANTA BARBARA ST.

CONTROL TYPE: SIGNAL

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND L	NORTH BOUND T	NORTH BOUND R	SOUTH BOUND L	SOUTH BOUND T	SOUTH BOUND R	EAST BOUND L	EAST BOUND T	EAST BOUND R	WEST BOUND L	WEST BOUND T	WEST BOUND R
(A) YEAR 2025:	**0**	**222**	**142**	**1092**	**321**	**0**	**0**	**0**	**0**	**62**	**0**	**472**

GEOMETRICS

PSR GEOMETRICS	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
	T R	LL T		L R

TRAFFIC SCENARIOS

SCENARIO 1 - YEAR 2025 VOLUMES (A)

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	SCENARIO V/C RATIOS 1	2	3			
NBL	0	0	0			-					
NBT	1	1600	222			0.14 *					
NBR	1	1600	142			0.09					
SBL	2	3200	1092			0.34 *					
SBT	1	1600	321			0.20					
SBR	0	0	0			-					
EBL	0	0	0			-					
EBT	0	0	0			-					
EBR	0	0	0			-					
WBL	1	1600	62			0.04 *					
WBT	0	0	0			-					
WBR	1	1600	472			0.30					
					LOST TIME:						
					PROJECT-ADDED CRITICAL TRIPS:						
					INTERSECTION CAPACITY UTILIZATION:	**0.52**					
					LEVEL OF SERVICE:	**A**					

NOTES:

Printed: 07/03/00

LEWIS ROAD WIDENING PROJECT#00033

COUNT DATE: ***YEAR 2025*** **05PM**

TIME PERIOD: ***P.M. PEAK HOUR***

N/S STREET: LEWIS RD.

E/W STREET: SANTA BARBARA ST.

CONTROL TYPE: SIGNAL

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND L	NORTH BOUND T	NORTH BOUND R	SOUTH BOUND L	SOUTH BOUND T	SOUTH BOUND R	EAST BOUND L	EAST BOUND T	EAST BOUND R	WEST BOUND L	WEST BOUND T	WEST BOUND R
(A) YEAR 2025:	**0**	**272**	**68**	**517**	**286**	**0**	**0**	**0**	**0**	**134**	**0**	**1022**

GEOMETRICS

PSR GEOMETRICS	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
	T R	LL T		L R

TRAFFIC SCENARIOS

SCENARIO 1 - YEAR 2025 VOLUMES (A)

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES 1	2	3	SCENARIO V/C RATIOS 1	2	3			
NBL	0	0	0			-					
NBT	1	1600	272			0.17 *					
NBR	1	1600	68			0.04					
SBL	2	3200	517			0.16 *					
SBT	1	1600	286			0.18					
SBR	0	0	0			-					
EBL	0	0	0			-					
EBT	0	0	0			-					
EBR	0	0	0			-					
WBL	1	1600	134			0.08 *					
WBT	0	0	0			-					
WBR	1	1600	1022			0.64					
					LOST TIME:						
					PROJECT-ADDED CRITICAL TRIPS:						
					INTERSECTION CAPACITY UTILIZATION:	**0.42**					
					LEVEL OF SERVICE:	**A**					

NOTES:

Printed: 07/03/00

HCS: Unsignalized Intersections Release 2.1f EX03AM.HC0 Page 1

Center For Microcomputers In Transportation
University of Florida
512 Weil Hall
Gainesville, FL 32611-2083
Ph: (904) 392-0378

Streets: (N-S) Lewis Road (E-W) Potrero Road
Major Street Direction.... NS
Length of Time Analyzed... 60 (min)
Analyst..... D. Nelson
Date of Analysis..... 6/22/0
Other Information.....Existing A.M. Peak Hour Conditions
Two-way Stop-controlled Intersection

	Northbound			Southbound			Eastbound			Westbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	1	1	1	1	0	0	0	0	1	0	1
Stop/Yield			N			N						
Volumes		230	56	16	437					64		13
PHF		.95	.95	.95	.95					.95		.95
Grade		0			0						0	
MC's (%)												
SU/RV's (%)												
CV's (%)												
PCE's				1.00						1.10		1.10

Adjustment Factors

Vehicle Maneuver	Critical Gap (tg)	Follow-up Time (tf)
Left Turn Major Road	5.00	2.10
Right Turn Minor Road	5.50	2.60
Through Traffic Minor Road	6.00	3.30
Left Turn Minor Road	6.50	3.40

Worksheet for TWSC Intersection

Step 1: RT from Minor Street	WB	EB
Conflicting Flows: (vph)	242	
Potential Capacity: (pcph)	1044	
Movement Capacity: (pcph)	1044	
Prob. of Queue-Free State:	0.99	

Step 2: LT from Major Street	SB	NB
Conflicting Flows: (vph)	301	
Potential Capacity: (pcph)	1232	
Movement Capacity: (pcph)	1232	
Prob. of Queue-Free State:	0.99	

Step 4: LT from Minor Street	WB	EB
Conflicting Flows: (vph)	718	
Potential Capacity: (pcph)	406	
Major LT, Minor TH Impedance Factor:	0.99	
Adjusted Impedance Factor:	0.99	
Capacity Adjustment Factor due to Impeding Movements	0.99	
Movement Capacity: (pcph)	400	

Intersection Performance Summary

Movement		Flow Rate (pcph)	Move Cap (pcph)	Shared Cap (pcph)	Avg. Total Delay (sec/veh)	95% Queue Length (veh)	LOS	Approach Delay (sec/veh)
WB	L	74	400		11.0	0.8	C	9.8
WB	R	15	1044		3.5	0.0	A	
SB	L	17	1232		3.0	0.0	A	0.1

Intersection Delay = 1.0 sec/veh

HCS: Unsignalized Intersections Release 2.1f EX03PM.HC0 Page 1

Center For Microcomputers In Transportation
University of Florida
512 Weil Hall
Gainesville, FL 32611-2083
Ph: (904) 392-0378

Streets: (N-S) Lewis Road (E-W) Potrero Road
Major Street Direction.... NS
Length of Time Analyzed... 60 (min)
Analyst..... D. Nelson
Date of Analysis..... 6/22/0
Other Information.....Existing P.M. Peak Hour Conditions
Two-way Stop-controlled Intersection

	Northbound			Southbound			Eastbound			Westbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	1	1	1	1	0	0	0	0	1	0	1
Stop/Yield			N			N						
Volumes		444	74	4	239					78		17
PHF		.95	.95	.95	.95					.95		.95
Grade		0			0						0	
MC's (%)												
SU/RV's (%)												
CV's (%)												
PCE's				1.00						1.10		1.10

Adjustment Factors

Vehicle Maneuver	Critical Gap (tg)	Follow-up Time (tf)
Left Turn Major Road	5.00	2.10
Right Turn Minor Road	5.50	2.60
Through Traffic Minor Road	6.00	3.30
Left Turn Minor Road	6.50	3.40

Worksheet for TWSC Intersection

Step 1: RT from Minor Street	WB	EB
Conflicting Flows: (vph)	467	
Potential Capacity: (pcph)	803	
Movement Capacity: (pcph)	803	
Prob. of Queue-Free State:	0.98	

Step 2: LT from Major Street	SB	NB
Conflicting Flows: (vph)	545	
Potential Capacity: (pcph)	943	
Movement Capacity: (pcph)	943	
Prob. of Queue-Free State:	1.00	

Step 4: LT from Minor Street	WB	EB
Conflicting Flows: (vph)	723	
Potential Capacity: (pcph)	404	
Major LT, Minor TH Impedance Factor:	1.00	
Adjusted Impedance Factor:	1.00	
Capacity Adjustment Factor due to Impeding Movements	1.00	
Movement Capacity: (pcph)	402	

Intersection Performance Summary

Movement	Flow Rate (pcph)	Move Cap (pcph)	Shared Cap (pcph)	Avg. Total Delay (sec/veh)	95% Queue Length (veh)	LOS	Approach Delay (sec/veh)
WB L	90	402		11.5	1.0	C	10.3
WB R	20	803		4.6	0.0	A	
SB L	4	943		3.8	0.0	A	0.1

Intersection Delay = 1.2 sec/veh

HCS: Unsignalized Intersections Release 2.1f FUT03AM.HC0 Page 1

Center For Microcomputers In Transportation
University of Florida
512 Weil Hall
Gainesville, FL 32611-2083
Ph: (904) 392-0378

Streets: (N-S) Lewis Road (E-W) Potrero Road
Major Street Direction.... NS
Length of Time Analyzed... 60 (min)
Analyst..... D. Nelson
Date of Analysis..... 6/22/0
Other Information.....Year 2025 A.M. Peak Hour Conditions
Two-way Stop-controlled Intersection

	Northbound			Southbound			Eastbound			Westbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	1	1	1	1	0	0	0	0	1	0	1
Stop/Yield			N			N						
Volumes		304	74	51	332					78		60
PHF		.95	.95	.95	.95					.95		.95
Grade		0			0						0	
MC's (%)												
SU/RV's (%)												
CV's (%)												
PCE's				1.00						1.10		1.10

Adjustment Factors

Vehicle Maneuver	Critical Gap (tg)	Follow-up Time (tf)
Left Turn Major Road	5.00	2.10
Right Turn Minor Road	5.50	2.60
Through Traffic Minor Road	6.00	3.30
Left Turn Minor Road	6.50	3.40

Worksheet for TWSC Intersection

Step 1: RT from Minor Street	WB	EB
Conflicting Flows: (vph)	320	
Potential Capacity: (pcph)	953	
Movement Capacity: (pcph)	953	
Prob. of Queue-Free State:	0.93	

Step 2: LT from Major Street	SB	NB
Conflicting Flows: (vph)	398	
Potential Capacity: (pcph)	1108	
Movement Capacity: (pcph)	1108	
Prob. of Queue-Free State:	0.95	

Step 4: LT from Minor Street	WB	EB
Conflicting Flows: (vph)	723	
Potential Capacity: (pcph)	404	
Major LT, Minor TH Impedance Factor:	0.95	
Adjusted Impedance Factor:	0.95	
Capacity Adjustment Factor due to Impeding Movements	0.95	
Movement Capacity: (pcph)	384	

Intersection Performance Summary

Movement	Flow Rate (pcph)	Move Cap (pcph)	Shared Cap (pcph)	Avg. Total Delay (sec/veh)	95% Queue Length (veh)	LOS	Approach Delay (sec/veh)
WB L	90	384		12.2	1.0	C	8.7
WB R	69	953		4.1	0.1	A	
SB L	54	1108		3.4	0.0	A	0.5

Intersection Delay = 1.5 sec/veh

HCS: Unsignalized Intersections Release 2.1f FUT03PM.HC0 Page 1

Center For Microcomputers In Transportation
University of Florida
512 Weil Hall
Gainesville, FL 32611-2083
Ph: (904) 392-0378

Streets: (N-S) Lewis Road (E-W) Potrero Road
Major Street Direction.... NS
Length of Time Analyzed... 60 (min)
Analyst..... D. Nelson
Date of Analysis..... 6/22/0
Other Information.....Year 2025 P.M. Peak Hour Conditions
Two-way Stop-controlled Intersection

	Northbound			Southbound			Eastbound			Westbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	1	1	1	1	0	0	0	0	1	0	1
Stop/Yield			N			N						
Volumes		300	56	65	355					64		40
PHF		.95	.95	.95	.95					.95		.95
Grade		0			0						0	
MC's (%)												
SU/RV's (%)												
CV's (%)												
PCE's				1.00						1.10		1.10

Adjustment Factors

Vehicle Maneuver	Critical Gap (tg)	Follow-up Time (tf)
Left Turn Major Road	5.00	2.10
Right Turn Minor Road	5.50	2.60
Through Traffic Minor Road	6.00	3.30
Left Turn Minor Road	6.50	3.40

Worksheet for TWSC Intersection

Step 1: RT from Minor Street	WB	EB
Conflicting Flows: (vph)	316	
Potential Capacity: (pcph)	958	
Movement Capacity: (pcph)	958	
Prob. of Queue-Free State:	0.95	

Step 2: LT from Major Street	SB	NB
Conflicting Flows: (vph)	375	
Potential Capacity: (pcph)	1136	
Movement Capacity: (pcph)	1136	
Prob. of Queue-Free State:	0.94	

Step 4: LT from Minor Street	WB	EB
Conflicting Flows: (vph)	758	
Potential Capacity: (pcph)	385	
Major LT, Minor TH Impedance Factor:	0.94	
Adjusted Impedance Factor:	0.94	
Capacity Adjustment Factor due to Impeding Movements	0.94	
Movement Capacity: (pcph)	362	

Intersection Performance Summary

Movement	Flow Rate (pcph)	Move Cap (pcph)	Shared Cap (pcph)	Avg. Total Delay (sec/veh)	95% Queue Length (veh)	LOS	Approach Delay (sec/veh)
WB L	74	362		12.5	0.9	C	9.2
WB R	46	958		3.9	0.0	A	
SB L	68	1136		3.4	0.1	A	0.5

Intersection Delay = 1.3 sec/veh

Appendix J

Hazardous Materials Attachments

Fact Sheet-Variance for Caltrans Districts 4,6,7,8,10,11,12 For Reuse of Lead-Contaminated Soils

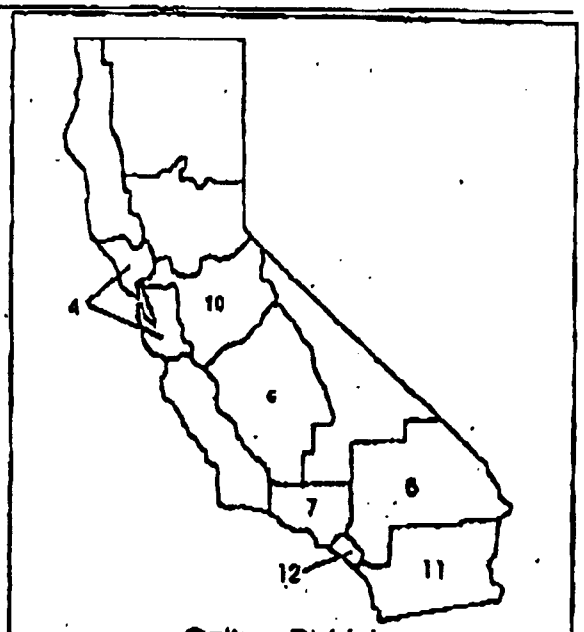
FACT SHEET

State of California
California Environmental Protection Agency
Department of Toxic Substances Control

Variance for Caltrans Districts 4,6,7,8,10,11,12 For Reuse of Lead-Contaminated Soils

The California Environmental Protection Agency, Department of Toxic Substances Control (DTSC), prepared this fact sheet to describe the request of California Department of Transportation (Caltrans) District 4,6,7,8,10,11,12 to collect and reuse soil containing low levels of aerially deposited lead. The request applies only to various freeway construction sites in the specified Caltrans Districts. Normally, state and federal environmental rules would require Caltrans to go through a complex bureaucratic process to deal with every location in which crews found lead in the soil. Those same rules, however, allow DTSC to grant what is called a "variance" if certain conditions are met. This fact sheet covers:

- Background
- Caltrans Request
- Health Risk Assessment
- The Variance
- Information Sources



Caltran Districts
(Those numbered are affected by variance.)

The variance will allow Caltrans to reuse soil containing lead, as long as it is handled properly, replaced along the same section of highway (within a designated freeway corridor), and covered with non-hazardous soil or pavement. The goals are to make sure that the lead will stay where it is placed and that neither humans nor animals can come into contact with it. The variance will be in effect for five years. Caltrans is the state agency that builds and maintains the state's highways. Several of those highways need to be widened because so many cars and trucks use them. When Caltrans widens a road, it either fills in the median, the area between existing lanes of traffic, or it makes another lane from the existing shoulder.

Until the mid- 1980s, gasoline and other fuels contained lead, a toxic metal. As each car or truck traveled the

highways, tiny particles of lead came out in the exhaust and settled on the soils next to the road. Most of the time, lead tends not to move very far or very fast in the environment. Over the years, lead built-up alongside the highways.

Caltrans highway-widening projects disturb the soil, some of which contains this lead. DTSC's regulations specify at what levels lead in soil is considered to be a hazardous waste. In some areas where construction will occur. Caltrans has found levels of lead that are higher than allowed. For the most part, Caltrans found lead within 30 feet of the edge of the pavement, and within the top six inches of soil. Sometimes, the lead is as deep as two to three feet below the surface. Because the soil contains these levels of lead, Caltrans must comply with environmental regulations or seek a variance from the regulations.

Caltrans Request

In April 1996, Caltrans asked DTSC to grant a variance from the hazardous waste rules to allow road construction projects to reuse lead containing soils on the project site. Although the level of lead found in some areas is higher than that what is considered to be a hazardous waste, Caltrans stated that it could reuse the soil along the roadway under construction without the lead posing a threat to human health or the environment.

Caltrans identified several potential uses for the soil containing lead. Those include:

- to build embankments at freeway overcrossings and interchanges;
- for the small hills Caltrans sometimes creates along parts of roads;
- to use as backfill for structures, to replace soils which construction crews remove to construct sound walls and the like;
- to re-fill trenches and holes created by removing obstacles, such as trees and barriers that am no longer needed;
- as roadbase fill, to level-out the ground;
- to raise ground level for building park-and ride lots; and to put under new roads.

Caltrans stated that each of these proposed uses keeps the lead-containing soil in defined areas. Also, those are areas in which people spend little, if any, time so they would not come into contact with the lead.

In addition, Caltrans has incorporated special sections in its contracts with the construction contractors. Those sections would require contractors to handle the lead-containing soil in certain ways. For example, soil found to contain lead would be kept separate from non-hazardous soil, and the contractor would have to take dust control and security measures to keep people from coming into contact with it until it was reused.

Finally, the lead would stay in place (beneath the roadway, etc.) for the life of the highway. Even though modern freeways are designed to last only 30 to 50 years, Caltrans notes that additional upgrades and widening are much more likely than abandoning old freeways. Therefore, the lead remains secure, and human health and the environment are protected.

At present, the Caltrans Districts 4,6,7,8,10,11, and 12 offices are developing construction projects where Caltrans expects that contractors will find lead in the soil. Those freeway projects are described in a Project Summary List available from DTSC. Anyone interested in obtaining a Project Summary List should contact DTSC Public Participation Coordinator, Randy Sturgeon by calling (916) 255-3649. Caltrans requested that the variance apply to projects in the counties identified, over a period of five years. However, the list will change

surface water, and the soil must be placed where it will be protected from erosion and runoff.

- Caltrans will keep records and provide detailed reports to DTSC when it handles the soil containing lead. Caltrans will make copies of those records available to the public at applicable Caltrans District offices and at the appropriate field engineer offices

The variance contains several other detailed technical requirements, as well. Finally, it should be noted that as Caltrans plans and designs its highway projects, each project must comply with federal as well as state environmental quality laws.

To put the numbers shown in the table in context, soil containing lead is considered a hazardous waste if the total lead level is more than 1,000 parts per million (ppm), or if the soluble lead level is more than 5 ppm. Soil naturally has small amounts of lead in it, about 50 ppm. City soils commonly contain 200 to 500 ppm of lead.

Extractable Lead[1]	Total Lead[2]	Caltrans may take the following steps
less than 0.5 ppm	less than 350 ppm[3]	Soil may be reused, as long as it is placed at least five feet above the maximum water table elevation and covered with one foot of non-hazardous soil.
more than 0.5 ppm and less than 50 ppm	less than 350 ppm[4]	Soil may be used as fill, as long as it is placed five feet above the maximum water table elevation and covered with pavement or similar cap.

[1] These numbers relate to tests that determine if lead is likely to move in water through the environment The figures are in parts per million, and are approximate conversions from micrograms per liter.

[2] Total Lead is the total amount of lead in the soil. The numbers are shown in parts per million, approximate conversion from milligrams per kilogram.

[3] Total ppm lead shall be at or below the statutory limits in effect when the soil is used as fill or the risk based limit of 1496 mg/kg, whichever is less. On the effective date of this variance, HSC section 25187.8 limits total lead concentrations to 350 ppm. That section may be amended and/or expire in the future. Additionally, other parts of relevant statutes may be added or amended in the future to include lead limits applicable to this variance.

[4] Total ppm lead shall be at or below the statutory limits in effect when the soil is used as fill or the risk based limit of 3979 mg/kg, whichever is less. On the effective date of this variance, HSC section 25187.8 limits total lead concentrations to 350 ppm. That section may be amended and/or expire in the future. Additionally, other parts of relevant statutes may be added or amended in the future to include lead limits applicable to this variance.

Information Sources

Because this variance applies to Caltrans activities in multiple counties for a period of five years, DTSC has required that Caltrans establish a central point of contact and put in place methods for making information available to interested members of the public. The Caltrans District offices will maintain information about the variance and about instances when soil containing lead is handled. As indicated below, the District offices can refer people to the field engineer's office where project-specific information can be found. In addition, the DTSC contact is also available to answer questions. The full Administrative Record pertaining to this matter is available for review at the DTSC address shown below. Anyone interested in obtaining copies of this or future fact sheets about the project should contact DTSC Public Participation Coordinator, Randy Sturgeon, by calling (916) 255-3649.

Cal/EPA-DTSC

Headquarters
Contact: Bob Piacentini
400 P Street 4th Floor
P.O. Box 806
Sacramento, CA 95612
(916) 322-4819

Caltrans Headquarters

Ed Imai or Julia Turney
1120 N Street, MS 27
Sacramento, CA 95814
(916) 653-3876

Central Valley

Caltrans District 10
Contact: Dale Jones
1976 E. Charter Way
P.O. Box 2048
Stockton, CA 95201
(209) 948-3811

Caltrans District 6
Contact: Agnes Jenkins
1352 W. Olive Ave.
Fresno, CA 93728
(559) 243-8234

San Francisco Bay Area

Caltrans District 4
Contact:Celia McCuaig
111 W. Grand Avenue
P.O. Box 23660
Oakland, CA 94623-0660
(510) 286-5659

LA/San Bernardino

Caltrans District 7
Contact: George Ghebranious
120 South Spring Street
Los Angeles, CA 90012
(213) 897-0693

Caltrans District 8
Contact: Tony Louka
464 West 4th Street, 6th Floor
San Bernardino, CA 92402
(909) 383-6385

Orange Co./San Diego

Caltrans District 11
Contact: Jayne Dowda
2829 Juan Street, MS 46
San Diego, CA 92110
(619) 688-3377

Caltrans District 12
Contract:Reza Aurasteh
3347 Michelson Drive, # 100
Irvine, CA 92612
(714) 724-2097

DTSC will accept written comments on the proposed Negative Declaration until August 27, 2000. Send comments to Bob Piacentini at the Cal/EPA DTSC Headquarters address or e-mail to rpaicent@dtsc.ca.gov. At the close of the comment period, DTSC will make the final decision after considering all comments. All commentors will receive responses and be notified of the decision.

Cal/EPA DTSC Headquarters, Attn: Bob Piacentini, P.O. Box 806, Sacramento, CA 95812-0806

AERIALLY DEPOSITED LEAD

California Department of Toxic Substances Control (DTSC)

Health and Safety Code (HSC)

Title 22 of the California Code of Regulations (CCR)

General:

- Per Title 22 of CCR, Division 4.5, Chapter 11, Article 3, 66261.24 - Soil containing lead is considered a "California Hazardous Waste" when 1) the total metal content exceeds the Total Threshold Limit Concentration (TLLC) of 1000 parts per million (ppm); or 2) the soluble metal content exceeds the Soluble Threshold Limit Concentration (STLC) limit of 5 ppm based on a Waste extraction Test (WET) analysis.
- Caltrans was granted a Variance from the hazardous waste rules from DTSC in April 1996 to allow road construction projects to reuse lead containing soils on the project site. With certain restrictions, soil could be reused on site if the soil test samples were below the variance limit of 1500 ppm for total lead. This variance expired in April of 2000.
  CA HSC section 25157.8 now limits total lead concentration to 350 ppm. Soil with total lead limits in excess of 350 ppm shall be disposed in a Class I hazardous waste disposal facility. This section of Statute was enacted January 1, 1999 and remains in effect until July 1, 2003.
- Caltrans is currently applying for a new Variance from DTSC. The requested Draft Variance dated May 12, 2000 references HSC Section 25167.8 and asks for a limit of 350 ppm for total lead.
- Soil naturally has small amounts of lead in it, about 50 ppm. City soils commonly contain 200 to 500 ppm of lead.

Route 880 Project Specifics:

- The top 1-1/2 feet of soil on the Santa Clara Measure B Route 880 Widening project contains aerially deposited lead from leaded gasoline.
- Total lead was detected in 7 of the 60 samples collected from the top 0 to 0.5 feet level at concentrations greater than the lead TTLC value of 1000 ppm.
- Total lead was not detected at concentrations above the TTLC value of 1000 ppm in any of the 60 samples collected from the 1.5 to 2-foot sampling depth.
- Total lead was detected in 26 of the 60 soil samples collected from 0 to 0.5 feet level at concentrations greater than the 350 ppm Class I hazardous waste facility disposal threshold established per section 25157.8 of the CA HSC.
- Total lead was detected at concentrations greater than 350 ppm in only 4 of the 60 samples collected from the 1.5 to 2-foot sampling depth.
- The estimated cost to dispose of 20,000 cubic meters of soil with lead as hazardous waste is approximately $3.5 - $4.0 million based on an estimated disposal cost of $150 to $200 cubic meter.

Caltrans Construction Program Procedure Bulletin For Yellow Traffic Stripe and Pavement Markers

State of California Department of Transportation

Construction Program Procedure Bulletin

CPB 99-2 Removal of Yellow Traffic Stripe and Pavement Markings

References: Standard Specifications, Sections 15-2.02B and 15-2.03
Standard Special Provisions 10-1
Construction Manual 6-84 Traffic Stripes and Pavement Markings

Effective Date: June 21, 1999

Approved: Brent Felker
Program Manager

Approval Date: June 21, 1999

BACKGROUND

This Construction Program Bulletin establishes procedures to be followed in assessing, removing, and disposing of yellow traffic stripe and pavement marking materials (paint, thermoplastic, permanent tape, and temporary tape more than three years old) on all projects. This Bulletin does not apply to white pavement striping. Yellow paints currently specified for pavement striping are generally free of lead as are temporary yellow striping tapes less than three years old. The use of lead free paint was implemented approximately four years ago except in District 1. Yellow striping materials specified in the past exceed hazardous waste criteria under Title 22 California Code of Regulations (>1000ppm total lead or >5ppm water soluble lead) and/or regulated lead levels (>350ppm but <1000ppm total lead and <5ppm water soluble lead) requiring disposal to a class 1 landfill. Though yellow paint should now be lead free, it is possible that older striping containing lead has been painted over.

Removal of these striping materials and older paint formulations from the pavement (including the yellow pavement striping paint that continues to be used by District 1) may create residues that exceed regulatory thresholds for lead. These striping materials may also emit toxic fumes when heated.

EXISTING PROCEDURE

The removal and disposal of pavement striping from the roadway surface is addressed in the Standard Specifications in Sections 15-2.02B and 15-2.03. However, the issue of identifying, testing, and disposing of regulated levels of lead contained in the residues resulting from striping removal is not currently addressed in the Standard Specifications, Standard Provisions, or the Construction Manual.

NEW PROCEDURE

1. **Review Construction Contract:** The Resident Engineer (RE) shall review the construction contract to determine whether yellow traffic stripe and pavement marking material (paint, thermoplastic, permanent tape or temporary tape older than three years) must be removed and, if so, whether special handling as a hazardous waste is specified.

2. **Project Can Proceed If:** a) no such materials are to be removed; or b) striping has been previously assessed and found to be free of lead; or c) striping has been assessed and found to contain lead and the removal and disposal of striping as a regulated or hazardous waste is specified.

3. **Testing and Removal Requirements:** If yellow striping is to be removed and its removal has not been addressed in the contract, then the RE shall consult with the District Hazardous Waste Coordinator and have lead testing done. The RE may have the prime contractor undertake this initial testing and, if required, any additional lead abatement work.

   a. **Non-Regulated Levels of Lead Found:** If no lead is detected by this initial testing or is detected at levels <350ppm total lead and <5ppm soluble, then the removal of the yellow pavement striping does not require either additional testing or collection of residues. The striping residues can be disposed of by the contractor as any other construction debris.

   b. **Non-Hazardous Regulated Levels of Lead Found:** When lead levels detected by the initial testing are <5ppm water soluble and <1,000ppm total but >350ppm total, then an employee safety and health plan does not have to be prepared, though measures to suppress dust and follow good personal hygiene are still required. All residues including pavement debris, striping material, and removal agent are to be collected and stored in sealed drums. The material shall be retested and disposed of appropriately as set forth in No. 4. (Retesting and Disposal) below.

   c. **Hazardous Levels of Lead Found:** Should the lead levels detected by this initial testing be >1,000ppm total lead and/or >5ppm soluble lead, then removal shall be treated as lead abatement work. Even when not contemplated in the contract, the abatement of lead contained in striping by the construction contractor is allowable under Section 25914.2 of the Health and Safety Code and Section 7058.7(d) of the Business and Professions Code. While the construction contractor must test the striping material when directed, he may refuse the abatement work under these circumstances. Should the contractor refuse the work, then the lead abatement shall be performed by one of the construction emergency Hazardous Materials contractors.

      1) **Training:** Prior to performing any yellow traffic stripe and pavement marking removal, personnel who have no prior lead training, including State personnel shall complete a safety training program provided by the contractor, which meets the requirements of Title 8 Section 1532.1.

2) **Lead Abatement Program:** Work practices and worker health and safety shall conform to Section 1532.1, "Lead," of Construction Safety Orders Title 8, of the California Code of Regulations. The Contractor shall submit the written compliance programs required in Subsection (e)(2), "Compliance Program," of Section 1532.1, "Lead," of the Construction Safety Orders to the Engineer before starting removal of yellow traffic stripes and pavement markings on the project and at such times when revisions to the programs are required by Section 1532.1, "Lead." The compliance programs shall be prepared by an industrial hygienist certified by the American Board of Industrial Hygiene and monitored by a competent person capable of taking corrective action. Copies of all inspection reports made in accordance with Section 1532.1, "Lead," shall be furnished to the engineer.

3) **Storage of Residues:** The collected residue shall be stored in properly labeled containers approved for the transport of hazardous waste by the United States Department of Transportation while awaiting any test results required by the disposal facility. The containers shall be covered and handled in such a manner that no spillage will occur. The stored containers shall be enclosed by temporary fence at a location within the project limits approved by the engineer. The contractor shall begin disposing of the contained residue in no more than 90 days after accumulating 100 kg. of residue.

4. **Retesting and Disposal:** The residue collected in the containers shall be retested as the level of lead waste contained in the removal material will be diluted by pavement debris that has also been removed. If still found to contain regulated levels of lead, such materials shall be disposed of as set forth below:

   a. **Non-Regulated Levels of Lead Found:** If the lead in the material collected is detected at levels <350ppm and <5ppm soluble, then the material remains the property of the contractor and can be disposed of as any other construction debris.

   b. **Non-Hazardous Regulated Levels of Lead Found:** If lead in the material collected is detected at levels >350ppm but less than <1,000ppm total lead and <5ppm soluble, then the material remains the property of the State and must be taken to a Class 1 disposal site. However, these materials do not require hazardous waste manifesting or handling by a registered hauler. Records of the testing, amounts of material and its disposition must be filed in the project files.

   c. **Hazardous Levels of Lead Found:** If the lead in the collected materials is detected to be at levels >1,000ppm total lead or >5ppm soluble, then the materials must continue to be treated as a hazardous waste. Record keeping shall meet current requirements for hazardous waste handling and disposal and filed in the construction files. All debris produced when yellow traffic stripes and pavement markings

are removed will remain the property of the State and shall be disposed of by the contractor at an approved Class 1 disposal facility in accordance with the requirements of the disposal facility operator. The yellow traffic stripe and pavement marking debris shall be hauled by a transporter currently registered with the California Department of Toxic Substances Control using correct manifesting procedures. The contractor shall make all arrangements with the operator of the disposal facility and perform any testing of the yellow traffic stripe and pavement marking debris required by the operator. The contractor shall submit the name and location of the disposal facility along with the testing requirements to the engineer before starting removal of yellow traffic stripes and pavement markings on the project. The engineer will obtain the United States Environmental Protection Agency Identification Number and sign all manifests as the generator.

5. **Payment:** Unless the lead removal work was already contemplated in the construction contract, all work performed for testing, additional removal costs, retesting, and additional disposal cost shall be paid for as extra work.

This procedure will be incorporated into the next revision of Chapter 6-84 of the Construction Manual and is also available on the Construction Program's intranet web site:
http://babyc-ray2.caltrans.ca.gov/hq/construc/cpbindx.htm

Appendix K

Negative Historic Property Survey Report

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSINGAGENCY Grey Davis, Governor

DEPARTMENT OF TRANSPORTATION
DISTRICT 7, 120 SO. SPRING ST.
LOS ANGELES, CA 90012-3606
TDD (213) 897-6610

October 13, 2000

Jaime King
Associate Environmental Scientist
Rincon Consultants, Inc.
790 East Santa Clara Street
Ventura, CA 93001

Jaime King:

Enclosed is the Negative HPSR for inclusion in the Lewis Road Widening Project EIR/EA. Please return the original HPSR when finished. If you have any questions please call me at (213) 897-1090. Thank you.

Sincerely,

Rich Galvin
Environmental Planner

NEGATIVE HPSR FORM

California Department of Transportation

1. HIGHWAY PROJECT DESCRIPTION AND LOCATION

District	County	Route	Post Mile	Charge Unit	Expenditure Authorization
7	VEN	34	14.85/20.6	170	195800 & 931207

Description:
This project proposes to widen from 2-4 lanes on State Route 34 (Lewis Road) in Ventura County. The proposed project involves the widening of State Route 34 between the Hueneme Road Bridge on the south and Ventura Road on the north. The project is located partially in unincorporated south central Ventura County and partially in the City of Camarillo, south of U.S. Highway 101.

2. AREA OF POTENTIAL EFFECTS

Description:
See attached map. Signed by FHWA Engineer Ceasar Perez on Tuesday August 9, 2000.

3. SOURCES CONSULTED

	Month/Year
■ National Register of Historic Places and updates to:	2000___
☐ OHP Database of Determinations of Eligibility and updates to:	_____
■ California Register of Historical Resources and updates to:	2000___
■ California Historical Landmarks and updates to:	1990___
■ California Points of Historical Interest and updates to	1992___
■ California Inventory of Historic Resources	1976___
☐ Caltrans Historic Highway Bridge Inventory	_____
☐ Archaeological Site Records [Name of institutions]	_____
☐ Local Historical Society (Names and dates contacted)	_____
☐ Other (Names and dates) Refer to Negative ASR	_____

4. LIST OF ATTACHED DOCUMENTATION

- ■ Archaeological Survey Report (ASR)
- ☐ Correspondence from SHPO
- ■ Post-1945 MOU Short-form HASR
- ■ Caltrans Historic Highway Bridge Inventory print-out
- ☐ Other (Specify)

5. CALTRANS APPROVALS

Recommended for Approval: _____ 8/9/00
District 7 Heritage Resource Coordinator — Date

Approved: _____ 8-9-00
Chief, District Environmental Planning Branch — Date

6. FHWA DETERMINATION

Check one:

☐ A. No cultural resources are present within or adjacent to the project's APE.

■ B. The only cultural resources present within or adjacent to the project's APE are:

- ■ Post-1945, Moved or Altered Pre-1945 buildings treated in accordance with the Post-1945 MOU
- ■ Buildings or structures previously determined ineligible in consultation with the SHPO
- ■ Bridges listed as Category 5 in the Caltrans Historic Highway Bridge Inventory

7. FHWA TRANSPORTATION ENGINEER APPROVAL

Cultural studies are complete and satisfactory. The requirements of 36 CFR 800 have been completed.

Name: [signature]

Date: 8/9/00

Negative Historic Property Survey Report For The Lewis Road Widening Project Ventura County, California

(07 VEN101/Lewis Road)

Prepared for:

RINCON CONSULTANTS, INC.
790 East Santa Clara Street
Ventura, California 93001
Phone: 805-641-1000 - Fax: 805-641-1072
E-mail: rinconvta@aol.com

Prepared and submitted by:

Robert J. Wlodarski
PRINCIPAL INVESTIGATOR
Historical, Environmental, Archaeological, Research, Team
8701 Lava Place, West Hills, California 91304-2126
Phone/Fax (818) 340-6676
Email: robanne@ix.netcom.com

August, 2000

SUMMARY OF FINDINGS

The California Department of Transportation (Caltrans) in cooperation with the Federal Highway Administration (FHWA) is conducting the Lewis Road Widening project from Ventura Boulevard to Hueneme Road Bridge, Ventura County, California. The studies are to culminate in a Tier 1 environmental document.

H.E.A.R.T. has prepared an Historic Property Survey Report (HPSR) in accordance with Section 106 of the National Historic Preservation Act. The purpose of the HPSR is to determine whether any potentially eligible properties exist within the proposed Area of Potential Effects (APE) pursuant to 36 CFR 60.4 and 36 CFR 800.

The preparation of the HPSR entailed an intensive archaeological survey of the APE. Since it was determined that there would be no impacts to existing structures along the right-of-way, the preparation of a Historic Architectural Survey Report (HASR) was not warranted.

A Bridge Evaluation for the Hueneme Road Bridge was performed by Mary Maki and Judy Triem in 1994 and was not found to be significant (Mary Maki 1994a, A Phase 1 Cultural Resources Survey of 9 Acres for the Hueneme Bridge Replacement Project, County Bridge No. 280/State Bridge No. 52C10034, Ventura County, California (VN1299), and (Mary Maki 1994b, Replacing the Existing Hueneme Road Bridge (County Bridge No. 280/State Bridge No. 52C0034, Spanning Calleguas Creek, Ventura County, California (VN1299). Additionally, the two bridges within the APE have been evaluated for significance by the California Department of Transportation - Division of Structure and Investigations, Engineering Service Center: Historic Significance - State Bridges as follows:
Bridge 050010L - Calleguas Creek - 07-VEN-001-9.87 - built 1934 - Not eligible for NRHP
Bridge 050010R - Calleguas Creek - 07-VEN-001-9.87 - built 1957 - Not eligible for NRHP
Bridge 520193L - Hueneme RoadUC - 07-VEN-001-12.79 - built in 1957 - Not eligible for NRHP
Bridge 520193R - Hueneme RoadUC - 07-VEN-001-12.79 - built in 1957 - Not eligible for NRHP

A Negative Archaeological Survey Report (ASR) is presented as Attachment A.

An archaeological records search revealed the following information:

* No prehistoric isolates have been recorded within the project area.
* No historic archaeological sites and/or isolates have been recorded within the project area.
* Thirty surveys and/or excavations have been conducted within a one-eight mile radius of the project area (Anon 1992, 1994a,b; Brock 1987; Clewlow 1975; Dames & Moore 1988; King 1992, 1994; Leonard et. al 1970; Lopez 1978, 1986, 1988; Maki 1994a,b, 1996; Peak & Associates 1991; Romani 1994a,b; Rosen 1975, 1978; Singer 1974, 1986; Singer & Atwood 1990; Steele & Gallardo 1982; W & S Consultants 1990a,b, 1992, 1995; and Wlodarski 1989, 1998). Twenty-two surveys and/or excavations overlap portions of the project area (Anon 1992, 1994a,b; Brock 1987; Clewlow 1975; Dames & Moore 1988, King 1992; Lopez 1988; Maki 1994a,b, 1996; Peak & Associates 1991, Romani 1994b; Rosen 1975, 1978; Singer 1974, 1986; Singer & Atwood 1990, Steele & Gallardo 1982, W & S Consultants 1990b, 1992; and Wlodarski 1998).
* No significant properties are listed on the National Register of Historic Places within the APE.

* The California State Historic Resources Inventory lists non properties that have been evaluated for historical significance within the APE
* No California Historical Landmarks (1990) of the Office of Historic Preservation, California Department of Parks and Recreation are listed within the APE.
* No resources are listed on the California Points of Historical Interest (1992), Office of Historic Preservation, California Department of Parks and Recreation within the APE.

Inspection of the Hueneme USGS topographic map, indicated that by 1900, Laguna Road, Hueneme Road, Potrero Road, as well as several other unimproved roads were in existence. Round Mountain appears on the map, and a portion of Calleguas Creek cuts through the project area north of Round Mountain and Long Grade Road. The city of Camarillo is illustrated on the map, along with the Somis Branch of the Southern Pacific Railroad Line. Only a few small farm houses dot the landscape in the area of Lewis Road.

PROJECT DESCRIPTION

The project involves widening of a 5.75-km (3.57-mile) segment of Lewis Road between the Hueneme Road Bridge on the south and Ventura Boulevard on the north to accommodate increased traffic, primarily from the new CSU, Channel Islands University. The project is located in unincorporated south central Ventura County and is south of U.S. Highway 101. The project lies west of Newbury Park, south of Camarillo and Highway 101, east of Oxnard, and north of Point Mugu, within Ventura County, California. The project area is located on the Camarillo, California USGS 7.5 minute topographic quadrangle (1950-photorevised 1967) within Township 1 North, Range 21 West, in portion of sections 1, 11, 12, and 14; Township 2 North, Range 21 West, section 36, and unsectioned portions of Rancho Calleguas and Rancho Guadalasca. The Area of Potential Effects (APE) for the project is the proposed project's right-of-way and/or areas of direct ground disturbance (Project maps are presented within the Negative ASR document - Attachment A).

For the Caltrans Segment of the proposed project, Lewis Road would be widened from the existing two lanes to four 3.6-meter (12-foot) travel lanes. The bridge over the Union Pacific Railroad tracks would be widened to the east. From Pleasant Valley Road to Dawson Place, the proposed roadway would also have two 2.4-meter (8-foot) shoulders and two 3.6-meter (12-foot) parkways that comprise the Caltrans standard 6-meter clear recovery zone for safety purposes. The 2.4-meter (8-foot) shoulders would be striped to accommodate on-road bicycle lanes on both sides of the roadway. Total right-of-way width for this section would be approximately 28 meters (92 feet). From Dawson Place to Ventura Boulevard, the 3.6-meter (12-foot) parkways would be eliminated and replaced by safety guards and retaining walls. Right-of-way widths for this section would be 19 meters (62 feet).

For the County Segment of the proposed project, Lewis Road would be widened from the existing two 3.6-meter (12-foot) lanes with 0.3-0.6-meter (1-2-foot) shoulders to four 3.6-meter (12-foot) travel lanes, a 4.3-meter (14-foot) median, two 2.4-meter (8-foot) shoulders, and two 2.4-meter (8-foot) parkways. Total right-of-way width for this section would be 28.7 meters (94 feet). The 2.4-meter (8-foot) shoulders would be striped to accommodate on-road bicycle lanes on both sides of the roadway. The roadway would narrow to two lanes between the Hueneme Road Bridge on the south and the proposed CSU Channel Islands Santa Barbara Avenue extension on the north. This section would consist of two 3.6-meter (12-foot) lanes with two 2.4-meter (8-foot) shoulders and two 3-meter (10-foot) parkways for a total right-of-way width of 18 meters (60 feet). In this section of road, the Calleguas Creek bridge would be removed and replaced with a wider bridge. Parkways and medians would be eliminated over the bridge. The curve north of Cawelti Road would be straightened from the existing 130-meter (900-foot) radius to a 457-meter (1,500-foot) radius in order to increase the design speed of the roadway from 50 to 60 mph. The intersection of Lewis Road and Pleasant Valley Road would have an additional 3.6-meter (12 foot) lane to accommodate left turns from both the north and south for a total right-of-way width of 31.7 meters (104 feet).

The following alternatives were evaluated in the EIR/EA in addition to the proposed project.

1. No Project Alternative: This alternative assumes no improvements to Lewis Road. This alternative would not meet the demands of the areas projected increase in traffic or the

conditions of the 1998 CSUCI EIR. Intersection and roadway levels of service would gradually decline as the university reached buildout and traffic increased correspondingly.

2. Widening of Calleguas Creek Bridge Alternative: This alternative proposes widening the bridge over Calleguas Creek on the west side instead of replacing the bridge entirely. This alternative would minimize construction costs and avoid encroachment on vertical clearance over the channel; however, it would not allow for the straightening of the alignment of Lewis Road as it approaches the bridge.

3. Alignment West of Calleguas Creek Alternative This alternative would construct a roadway west of Calleguas Creek for the segment of Lewis Road between the existing Calleguas Creek bridge and Hueneme Road. The existing right of way south of the Calleguas Creek bridge would be abandoned, with a new right-of-way passing through the agricultural corridor on the west side of the creek. While plans for this alternative are still pending, preliminary designs indicate that the roadway would connect to Hueneme Road in the vicinity of Laguna Road for westbound traffic and to the Hueneme Road bridge for eastbound traffic. A new bridge would be constructed across Calleguas Creek directly opposite the proposed CSUCI Santa Barbara Avenue extension in order to provide efficient access to the university. This alternative would result in larger right-of-way acquisitions and conversion of agricultural land to urban use. See the attached list of project maps for the project alignment and alternatives.

RESUME OF SURVEY

The Historic Property Survey Report (HPSR) and Archaeological Survey Report (ASR) were prepared by Robert J. Wlodarski (Principal Investigator) of H.E.A.R.T. The ASR is included as Attachment A.

The archaeological study consisted of a records search at the South Central Coastal Information Center, UCLA Institute of Archaeology, Fowler Museum of Cultural History, Los Angeles, California, and an on-foot field reconnaissance of the proposed APE. The records search revealed no recorded prehistoric or historic archaeological sites within the APE. During the archival-background research phase the following resources were consulted:

* National Register of Historic Places (Federal Register-8/94 - supplements to date).
* The California Inventory of Historic Resources (California Department of Parks and Recreation 1976).
* The California Historic Landmarks Directory (California Department of Parks and Recreation 1990).
* The California State Historic Resources Inventory, Office of Historic Preservation, California Department of Parks and Recreation,
* California Points of Historical Interest (1992), Office of Historic Preservation, California Department of Parks and Recreation,
* Historic maps on file at the Geography Department Map Reference Center, California State University, Northridge, Bureau of Engineering, Ventura County Government Center; and Ventura County Museum of History and Art (VCMHA).
* Previous studies within a one-eighth mile radius of the APE: Anon 1992, 1994a,b; Brock 1987; Clewlow 1975; Dames & Moore 1988; King 1992, 1994; Leonard et. al 1970; Lopez 1978, 1986, 1988; Maki 1994a,b, 1996; Peak & Associates 1991; Romani 1994a,b; Rosen 1975, 1978; Singer 1974, 1986; Singer & Atwood 1990; Steele & Gallardo 1982; W & S Consultants 1990a,b, 1992, 1995; and Wlodarski 1989, 1998). The following surveys overlap portions of the project area (Anon 1992, 1994a,b; Brock 1987; Clewlow 1975; Dames & Moore 1988, King 1992; Lopez 1988; Maki 1994a,b, 1996; Peak & Associates 1991, Romani 1994b; Rosen 1975, 1978; Singer 1974, 1986; Singer & Atwood 1990, Steele & Gallardo 1982, W & S Consultants 1990b, 1992; and Wlodarski 1998).
* Inspection of the Hueneme USGS topographic map, indicated that by 1900, Laguna Road, Hueneme Road, Potrero Road, as well as several other unimproved roads were in existence. Round Mountain appears on the map, and a portion of Calleguas Creek cuts through the project area north of Round Mountain and Long Grade Road. The city of Camarillo is illustrated on the map, along with the Somis Branch of the Southern Pacific Railroad Line. Only a few small farm houses dot the landscape in the area of Lewis Road.

PUBLIC PARTICIPATION AND COORDINATION

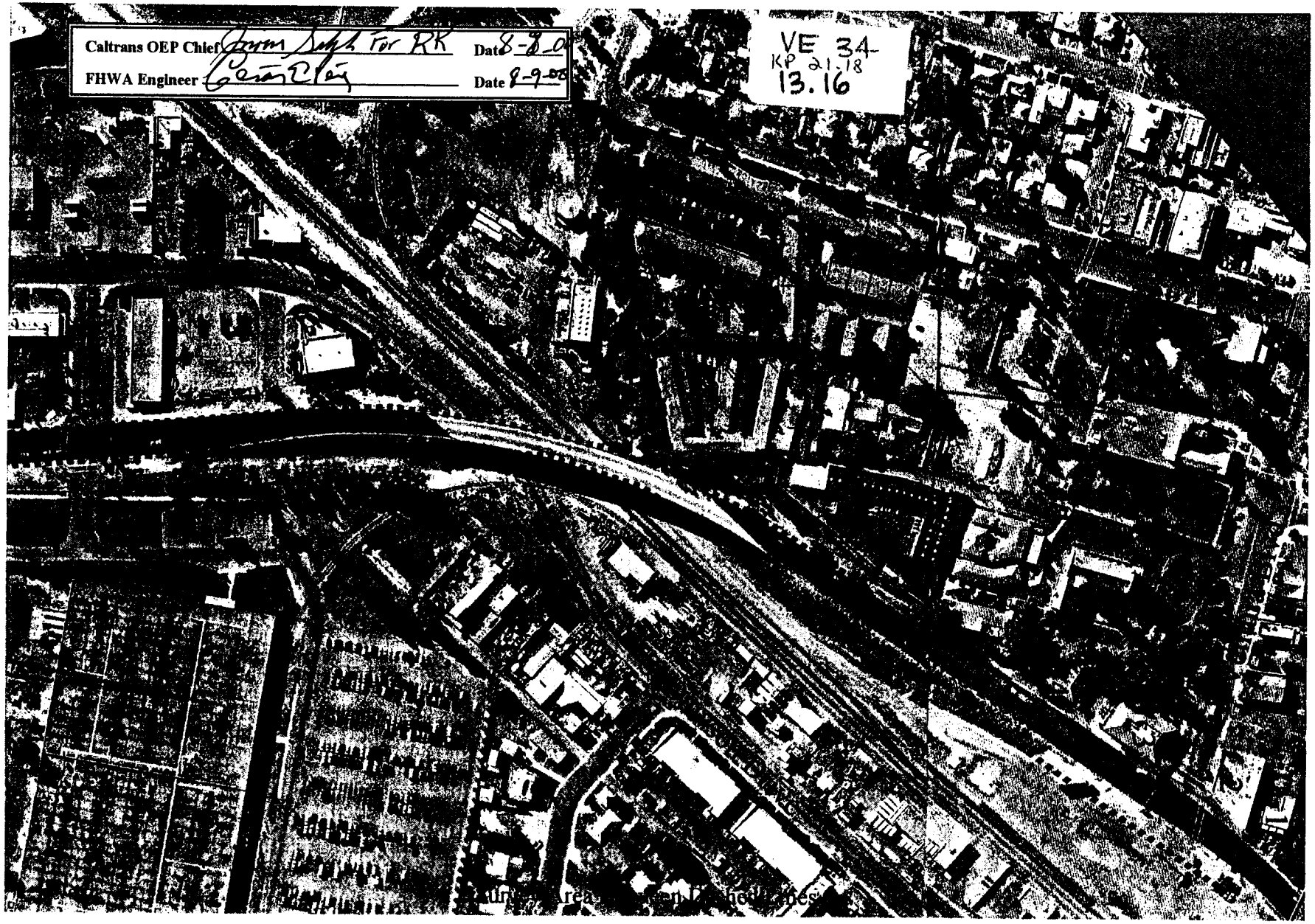
Public participation in the development of the EIR/EA and in the selection of the final design concept occurred at several points during the planning process: Notice of Preparation (NOP) and Public Scoping Meeting). Over 116 agencies and individuals were part of a distribution list who received the contacted for input during the NOP stage and for review and comment during the Draft Environmental Impact Report/Environmental Assessment phase of the project. Debbie Treadway of the Native American Heritage Commission and Hans Kreutzberg of the State Historic Preservation Office (SHPO) were also contacted.

RESOURCES IDENTIFIED

No prehistoric or historic archaeological sites or isolates were recorded within the APE. Additionally, no potentially eligible structures were identified due to the fact that the APE as delineated would have no impact on the built environment.

If the project APE is expanded beyond its present limits, then additional archaeological reconnaissance will be required. In the event that buried cultural materials are unearthed during the course of construction, Caltrans policy (Environmental Handbook, Volume 2, Chapter 1) states that "work must be halted in the vicinity of the find until a qualified archaeologist can assess its significance." If human remains are unearthed during construction, State Health and Safety Code Section 7050.5 states that "no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code Section 5097.98." In such instances, District Environmental Branch staff shall be immediately notified.

Area of Potential Effects Map A	VEN 34- Lewis Road Widening Project	KP 14.85/20.6 EA 195800 & 931207



Area of Potential Effects Map B	VEN 34- Lewis Road Widening Project	KP 14.85/20.6 EA 195800 & 931207

NEGATIVE ARCHAEOLOGICAL SURVEY REPORT (ASR)
THE LEWIS ROAD WIDENING PROJECT
VENTURA COUNTY, CALIFORNIA

Prepared for:

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July, 2000

I. HIGHWAY PROJECT DESCRIPTION

District	County	Route	Post Mile	Charge Unit	Expenditure Authorization
07	VEN	101/Lewis Rd.		N/A	N/A

The project involves widening of a 5.75-km (3.57-mile) segment of Lewis Road between the Hueneme Road Bridge on the south and Ventura Boulevard on the north to accommodate increased traffic, primarily from the new CSU, Channel Islands University.

For the Caltrans Segment of the proposed project, Lewis Road would be widened from the existing two lanes to four 3.6-meter (12-foot) travel lanes. The bridge over the Union Pacific Railroad tracks would be widened to the east. From Pleasant Valley Road to Dawson Place, the proposed roadway would also have two 2.4-meter (8-foot) shoulders and two 3.6-meter (12-foot) parkways that comprise the Caltrans standard 6-meter clear recovery zone for safety purposes. The 2.4-meter (8-foot) shoulders would be striped to accommodate on-road bicycle lanes on both sides of the roadway. Total right-of-way width for this section would be approximately 28 meters (92 feet). From Dawson Place to Ventura Boulevard, the 3.6-meter (12-foot) parkways would be eliminated and replaced by safety guards and retaining walls. Right-of-way widths for this section would be 19 meters (62 feet). See Figure 3 for the project alignment.

For the County Segment of the proposed project, Lewis Road would be widened from the existing two 3.6-meter (12-foot) lanes with 0.3-0.6-meter (1-2-foot) shoulders to four 3.6-meter (12-foot) travel lanes, a 4.3-meter (14-foot) median, two 2.4-meter (8-foot) shoulders, and two 2.4-meter (8-foot) parkways. Total right-of-way width for this section would be 28.7 meters (94 feet). The 2.4-meter (8-foot) shoulders would be striped to accommodate on-road bicycle lanes on both sides of the roadway. The roadway would narrow to two lanes between the Hueneme Road Bridge on the south and the proposed CSU Channel Islands Santa Barbara Avenue extension on the north. This section would consist of two 3.6-meter (12-foot) lanes with two 2.4-meter (8-foot) shoulders and two 3-meter (10-foot) parkways for a total right-of-way width of 18 meters (60 feet). In this section of road, the Calleguas Creek bridge would be removed and replaced with a wider bridge. Parkways and medians would be eliminated over the bridge. The curve north of Cawelti Road would be straightened from the existing 130-meter (900-foot) radius to a 457-meter (1,500-foot) radius in order to increase the design speed of the roadway from 50 to 60 mph. The intersection of Lewis Road and Pleasant Valley Road would have an additional 3.6-meter (12 foot) lane to accommodate left turns from both the north and south for a total right-of-way width of 31.7 meters (104 feet).

The following alternatives will be evaluated in the EIR/EA in addition to the proposed project.

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Alternatives - Continued

plans for this alternative are still pending, preliminary designs indicate that the roadway would connect to Hueneme Road in the vicinity of Laguna Road for westbound traffic and to the Hueneme Road bridge for eastbound traffic. A new bridge would be constructed across Calleguas Creek directly opposite the proposed CSUCI Santa Barbara Avenue extension in order to provide efficient access to the university. This alternative would result in larger right-of-way acquisitions and conversion of agricultural land to urban use. See the attached list of project maps for the project alignment and alternatives.

Location of the Project

The proposed project involves the widening of Lewis Road between the Hueneme Road bridge on the south and Ventura Road on the north. The project is located in unincorporated south central Ventura County and is south of U.S. Highway 101. The project lies west of Newbury Park, south of Camarillo and Highway 101, east of Oxnard, and north of Point Mugu, within Ventura County, California. The project area is located on the Camarillo, California USGS 7.5 minute topographic quadrangle (1950-photorevised 1967) within Township 1 North, Range 21 West, in portion of sections 1, 11, 12, and 14; Township 2 North, Range 21 West, section 36, and unsectioned portions of Rancho Calleguas and Rancho Guadalasca (Maps: Figure 2). The Area of Potential Effects (APE) for the project is the proposed project's right-of-way and/or areas of direct ground disturbance (Maps: Figure 3). See attached project maps: Figures 1-12 for location information.

II. STUDY FINDINGS

No cultural resources were identified within the APE-direct (the proposed project right-of-way and/or areas of direct ground disturbance). The project will not affect natural soils, since the areas proposed for modification have been sufficiently altered due to prior man-made impacts since the turn-of-the-century. Therefore, there is minimal potential for the encountering prehistoric or historic archaeological materials with the APE-direct. No further archaeological work will be necessary unless project plans change to include unsurveyed areas. If buried cultural remains are encountered during construction, it is Caltrans policy that work in that area shall halt until a qualified archaeologist evaluates the nature and significance of the find based on policies and guidelines established by the Advisory Council on Historic Preservation concerning the Protection and Preservation of Historic and Cultural Properties (36 CFR 800).

III. INTRODUCTION

Name(s) of Survevor(s)/Qualifications	Dates
Robert J. Wlodarski (Principal Investigator): M.A. in Anthropology California State University Northridge with twenty-nine years of experience in southern California prehistoric and historic archaeology, and certified in field archaeology by the Register of Professional Archaeologists (RPA);	December 22, 1998, December 27, 1998 May 13, 2000
Dan A. Larson (Survey Archaeologist): B.A. in Anthropology California State University Northridge (CSUN), with over thirty five years of experience in southern California archaeology, and qualified by the Register of Professional Archaeologists (RPA).	38 person hours

Present Environment: The Caltrans segment is located along an existing road corridor that is generally developed with commercial and industrial uses. The County Segment encompasses predominantly rural, agricultural lands from Pleasant Valley Road to Round Mountain and Potrero Road on the south.

Ethnography: At the time of Spanish Contact, the project area was occupied by the Hokan- speaking Chumash (Maps: Figures 13-14). The Chumash were not a true cultural entity, but were comprised of a large and diverse population living in what were probably autonomous though contiguous settlements along the California coast from Malibu Creek to the southeast, Estero Bay in the north (including the islands of San Miguel, Santa Rosa, and Santa Cruz), and as far as Tejon pass, Lake Casitas and the Cuyama River inland (see Bibliography).

IV. SOURCES CONSULTED

National Register of Historic Places: 1974 - with updates through 1999
California Inventory of Historic Resources: 1976
California Historical Landmarks: 1990
California Points of Historical Interest: 1/1998

Archaeological Site Records: South Central Coastal Information Center, UCLA Institute of Archaeology, Los Angeles, California (Appendix A - Janette Anne Dinishak, Information Center Staff - December 23, 1998). Other: Historical maps on file at California State University Northridge Geography Department Map Library, the County of Ventura Bureau of Engineering, and the Ventura County Museum of History and Art (VCMHA). Thirty surveys and/or excavations have been conducted which encompass portions of the project area (see Bibliography). Inspection of the Hueneme USGS topographic map, indicated that by 1900, Laguna Road, Hueneme Road, Potrero Road, as well as several other unimproved roads were in existence. Round Mountain appears on the map, and a portion of Calleguas Creek cuts through the project area north of Round Mountain and Long Grade Road. The city of Camarillo is illustrated on the map, along with the Somis Branch of the Southern Pacific Railroad Line. Only a few small farm houses dot the landscape in the area of Lewis Road. Additional archival research was performed at the Ventura County Museum of History and Art (VCMHA).

Results: No historic or prehistoric resources have been identified within the Area of Potential Effects as illustrated on the attached maps.

V. FIELD METHODS

The survey required 38 person-hours to complete over a two year period. All open space within the APE-direct was thoroughly inspected for cultural resource remains. All rodent spoil, eroded cuts, and other fortuitous exposures were carefully examined for evidence of buried archaeological remains. A mixed survey strategy was employed throughout the survey. Open space areas were surveyed at five meter intervals until all ground surface was inspected. Disturbed areas or areas covered with pavement, etc. were spot checked. The land adjacent to Calleguas Creek drainage was more extensively surveyed due to the fact that there are a number of prehistoric archaeological sites recorded along the creek from Pleasant Valley where Conejo Creek flows west and then south, all the way to Point Mugu. The potential for buried prehistoric archaeological resources in this zone is also considered very high.

VI. REMARKS

The study yielded negative results with regard to the presence of prehistoric and historic archaeological resources. Extensive disturbances have occurred to the entire APE in the form of road construction, and maintenance, agricultural activities since the late 1800s, channelization of Calleguas Creek, other water related channels and activities, access roads and junction roads connecting to Lewis Road, and landscaping.

VII. CERTIFICATION

Preparer: Robert J. Wlodarski Title: Principal Investigator
Signature: Date: 7-17-2005
Reviewer: Title:
Signature: Date:

VIII. MAPS

Vicinity Map:	Figure 1
Location of the Survey - USGS Topographic Quadrangle:	Figure 2
Lewis Road Widening Site Map - Caltrans Segment	Figure 3
Lewis Road Widening Site Map - Ventura County Segment	Figure 4
APE Map: Stations 1 to 26 and Stations 27 to 57	Figure 5A
APE Map: Stations 58 to 88 and Stations 89 to 118 (Ventura County Alternative 1)	Figure 5B
APE Map: Stations 118 to 144 and Stations 144 to 168 (Ventura County Alternative 1)	Figure 5C
APE Map: Stations 164 to 185 (Ventura County Alternative 1)	Figure 5D
APE Map: Stations 66 to 97 (Ventura County Alternative 2)	Figure 5E
APE Map: Stations 95-125 and Stations 125 to 154 (Ventura County Alternative 3)	Figure 5F
APE Map: Stations 168-98 and Stations 154 to 194 (Ventura County Alternative 3)	Figure 5G
APE Map: Stations 206-215 and Stations 210 to 218 (Alternative 1 - Pleasant Valley Road to Ventura Boulevard)	Figure 5H
APE Map: Stations 206-213 and Stations 210 to 218 (Alternative 2 - Pleasant Valley Road to Ventura Boulevard)	Figure 5I
Project Area and Native American Boundaries	Figure 6
Project Area in Relation to Chumash Placenames	Figure 7
Plat of Rancho Guadalasca	Figure 8
Diseno of Rancho Calleguas	Figure 9
Project Area on Hueneme USGS Quad Map - Surveyed in 1901	Figure 10

IX. PHOTOGRAPHS

24 photographs were taken by the Principal Investigator of the project area. The photographs are on file at Historical, Environmental, Archaeological, Research, Team, 8701 Lava Place, West Hills, California 91304-2126 - Phone/Fax (818) 340-6676 - Email: robanne@ix.netcom.com
File Number: HEART-Lewis Road (LW1-24)

X. BIBLIOGRAPHY

Applegate, Richard (1974) Chumash Placenames. The Journal of California Anthropology 1(2):187-205). Banning, (1975) An Index of Chumash Placenames. In, Papers on the Chumash. San Luis Obispo County Archaeological Society Occasional Paper Number 9:19-47; Grant, Campbell (1978), Interior Chumash. In, Handbook of North American Indians, Volume 8: California, edited by Robert F. Heizer, pp. 530-534. Smithsonian Institution, Washington; (1994), Prehistoric Native American Cultural Sites in the Santa Monica Mountains. Report prepared for the Santa Monica Mountains and Seashore Foundation, National Park Service, Western Region, Denver, (1982) The Evolution of Chumash Society. PH.D. Dissertation, University of California, Davis.; Kroeber, Alfred L. (1925), Handbook of the Indians of California. Bureau of American Ethnology Bulletin 78. Smithsonian Institution, Washington; Landberg, Leif C.W. (1965), The Chumash Indians of Southern California. SW Museum Papers 19. Highland Park; Miller, Bruce (1988), Chumash: A Picture of Their World. Sand River Press, Los Osos, California.; Santa Barbara Museum of Natural History (1986), California's Chumash Indians. John Daniel, Publisher.

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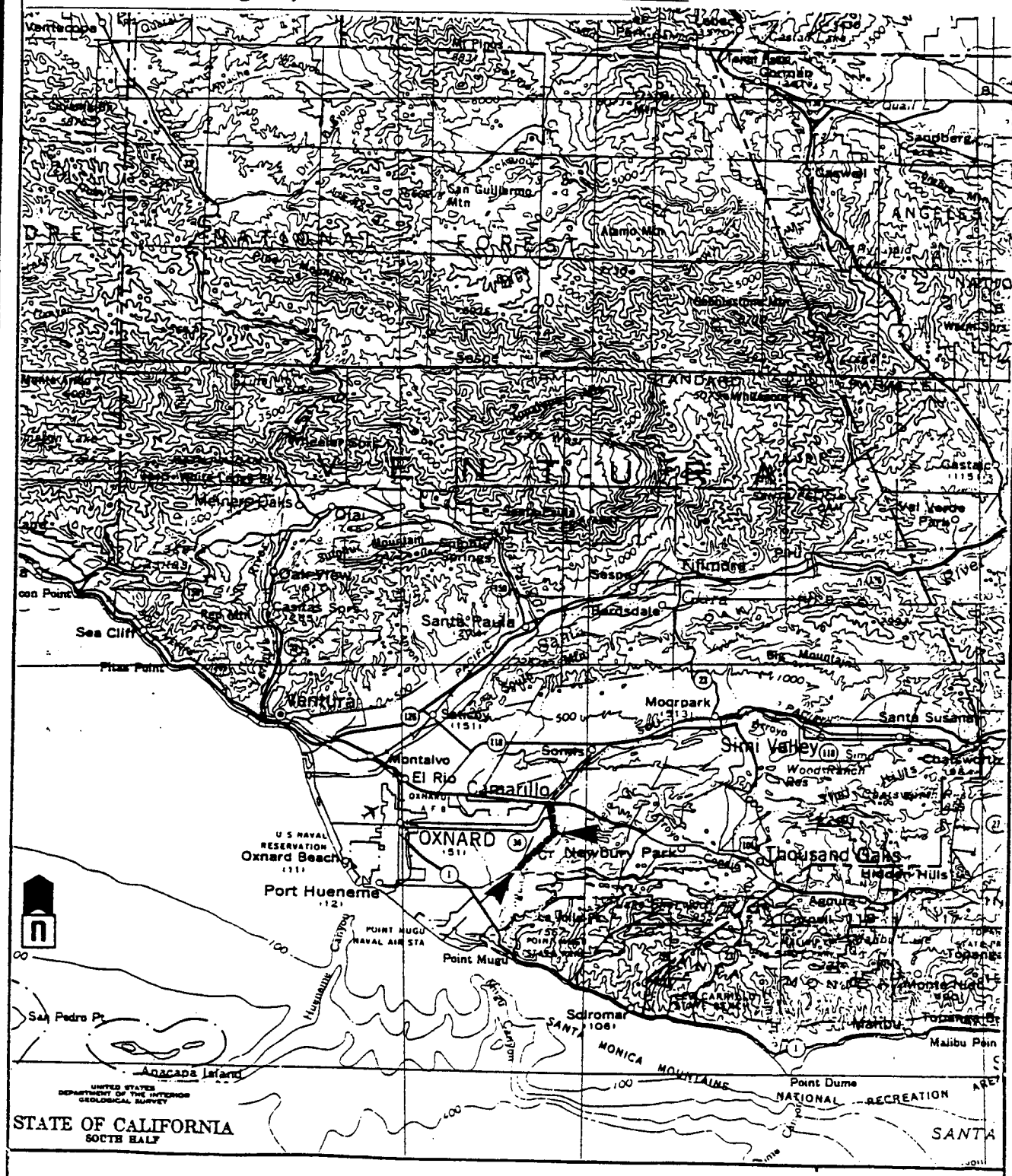
Thirty archaeological reports of surveys/excavations on file at the South Central Coastal Information Center, UCLA Institute of Archaeology, Los Angeles encompass portions of the project area.

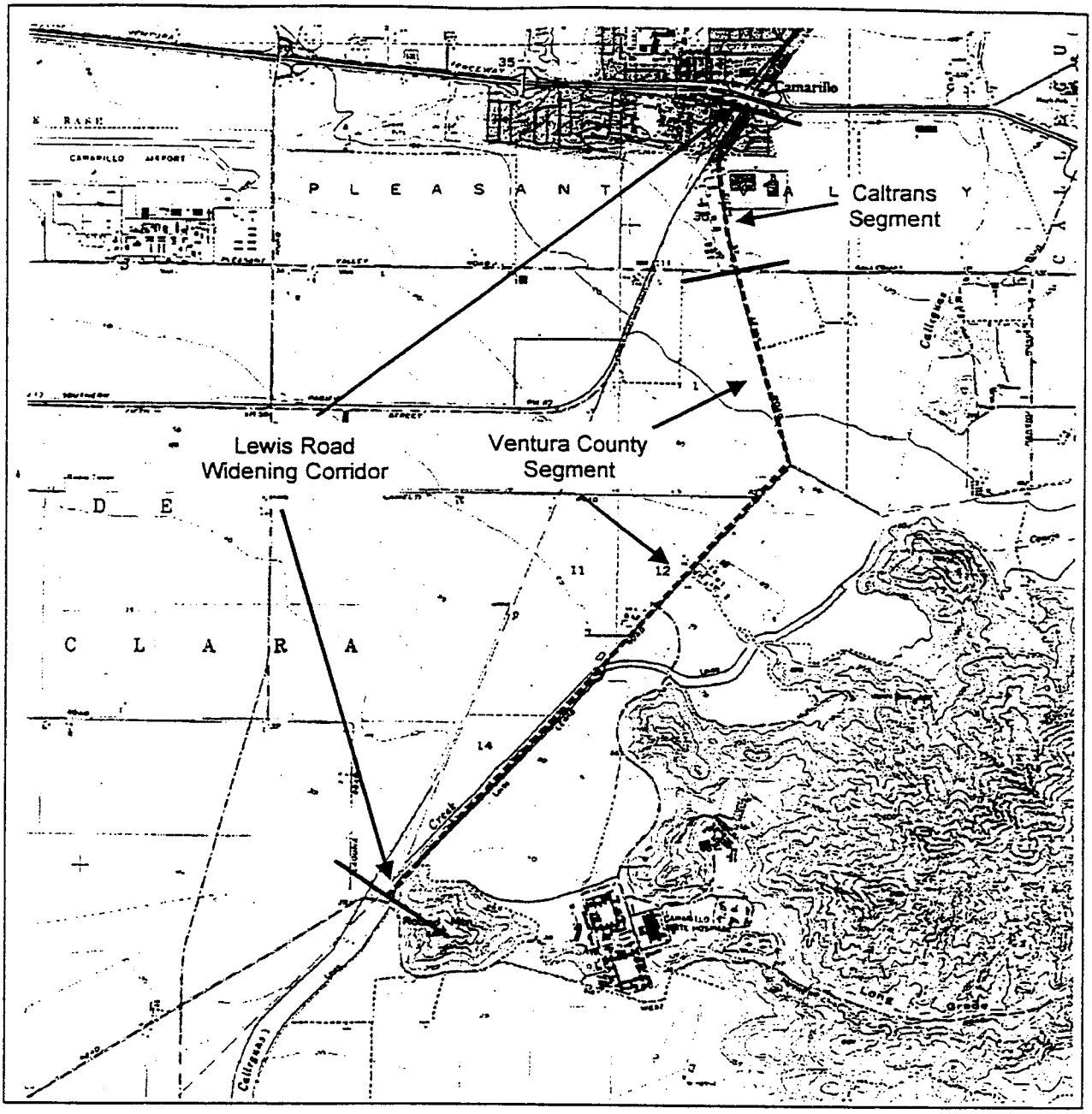
Anon *(1992)* Consolidated Report: Cultural Resource Studies for the Proposed Pacific Pipeline Project (VN1265), *(1994a)* Farmland Study for the Replacement of the Hueneme Bridge (Bridge No. 200/52C0034) (VN1513), *(1994b)* Phase 1 Archaeological Survey of the Proposed Hill Canyon 9.2 Mile Pipeline Corridor, Ventura County, California (VN1402); **Brock, James** *(1987)* An Archaeological Resources Overview of Lower Calleguas Creek (VN583); **Clewlow, Carl William, Jr.** *(1975)* Archaeological Resources of the Proposed Calleguas Creek Project (VN126/VN1156); **Dames and Moore** *(1988)* Phase 1 Cultural Resources Survey, Fiber Optic Cable Project, Burbank to Santa Barbara, California for US Sprint Communications Company (VN572); **Lopez, Robert** *(1978)* An Archaeological Reconnaissance of the proposed Route of a Pipeline for the Exchange of Water and Sewer Services between the Camrosa County Water District and the Camarillo State Hospital, Ventura County, California (VN321), *(1986)* An Archaeological Reconnaissance of Portions of the Area Proposed for Camarillo Regional Recreation Park, Ventura County, California (VN629), *(1988)* An Archaeological Reconnaissance of the Areas involved in the Proposed S.W.E.P.I. Well Locations and Pipeline Routes, Oxnard Plain, Ventura, County, California (VN575); **Maki, Mary** *(1994a)* A Phase 1 Cultural Resources Survey of 9 Acres for the Hueneme Bridge Replacement Project, County Bridge No. 280/State Bridge No. 52C10034, Ventura County, California (VN1299), *(1994b)* Replacing the Existing Hueneme Road bridge (County Bridge No. 280/State Bridge No. 52C0034, Spanning Calleguas Creek,Ventura County, California (VN1299), *(1996)* A Phase 1 Cultural Resources Survey of 7.4 Linear Miles for the Conejo Creek Diversion Project, Ventura County, California (VN1378); **Peak & Associates** *(1991)* Class 3 Cultural Resource Assessment of the Proposed Carpenteria and Souther Reroutes, Santa Barbara, Ventura, and Los Angeles Counties, California (VN1153); **Romani, John F.** *(1994a)* A Cultural Resource Survey for the Proposed Renovation of the Camrosa Wastewater Treatment Plant Round Mountain, Ventura County (VN1375), *(1994b)* Historic Property Survey Report for the Proposed Construction of a Full Interchange at Lewis Road (SR-30) and the 101 Freeway (VN1557); **Rosen, Martin D.** *(1975)* Evaluation of the Archaeological Resources and Potential Impact of Proposed Widening and Realignment of the Ventura Freeway (Federal Highway 101), Ventura County (VN28), *(1978)* Archaeological Impact Assessment of Proposed Additions to the Calleguas Municipal Water District, Ventura County, California (VN120); **Singer, Clay A.** *(1974)* Assessment of Potential Impact Upon Archaeological Resources From Proposed Excavation of Borrow Material from Calleguas Creek Streambed, Ventura County, California (VN804), *(1986)* Cultural Resources in the Vicinity of Five Potential County Jail Sites in the Western Part of the Oxnard Plain, Ventura County, California: A Review of Records and Documents (VN509); **Singer, Clay A., and John Atwood** *(1989)* Cultural Resources Survey and Impact Assessment for the Proposed Camrosa 4.5 MG Reservoir in the City of Camarillo, Ventura County, California (VN782); *(1990)* Cultural Resources Survey and Impact Assessment for Casa Pacifica and the Lewis Road Housing Project in Camarillo, Ventura County, California (VN835); **Steele, Kenneth, and Albert Gallardo** *(1982)* For Improvements of the Operational Characteristics of Route 101, The Ventura Freeway in Los Angeles and Ventura Counties, Between Route 405 in Los Angeles, and the Santa Clarita River in Oxnard (VN1040); **Whitley and Simon** *(1990a)* Phase 1 Archaeological Survey of Unincorporated Portions of the Dos Vientos Ranch, Ventura County, California (VN923), *(1990b)* Preliminary Phase 1 Archaeological Survey for the Hill Canyon Wastewater Reclamation Project, Ventura County, California (VN928), *(1992)* Phase 1 Archaeological Survey for Pleasant Valley and Lewis Roads Intersection Widening Project, Camarillo, Ventura County, California (VN1179),

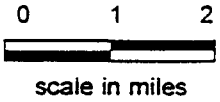
X. BIBLIOGRAPHY (continued)

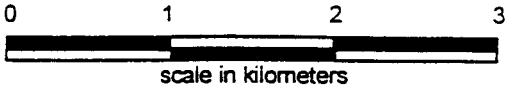
Whitley and Simon (continued)*: (1995)* Phase 1 Archaeological Survey and Cultural Resources Assessment of the Avalon Theater Project Study Area, Camarillo Ventura County, California. Report on file (VN1355); **Wlodarski, Robert J.** *(1989)* An Archaeological Reconnaissance Report for Tentative Tract Located in Long Grade Canyon Along Potrero Road, Ventura County, California (VN735), *(1996)* A Phase 1 Archaeological Study/Management Plan for the Proposed Widening of a Portion of Santa Rosa Road, City of Camarillo, County of Ventura, California, *(1998)*, A Phase 1 Archaeological Study and Historic Resources Review, California State University Channel Islands Campus Master Plan Program Environmental Impact Report, Ventura County, California (VN1605), *(1998)* A Phase 1 Archaeological Study for the Lewis Road Widening Project, Ventura County, California.



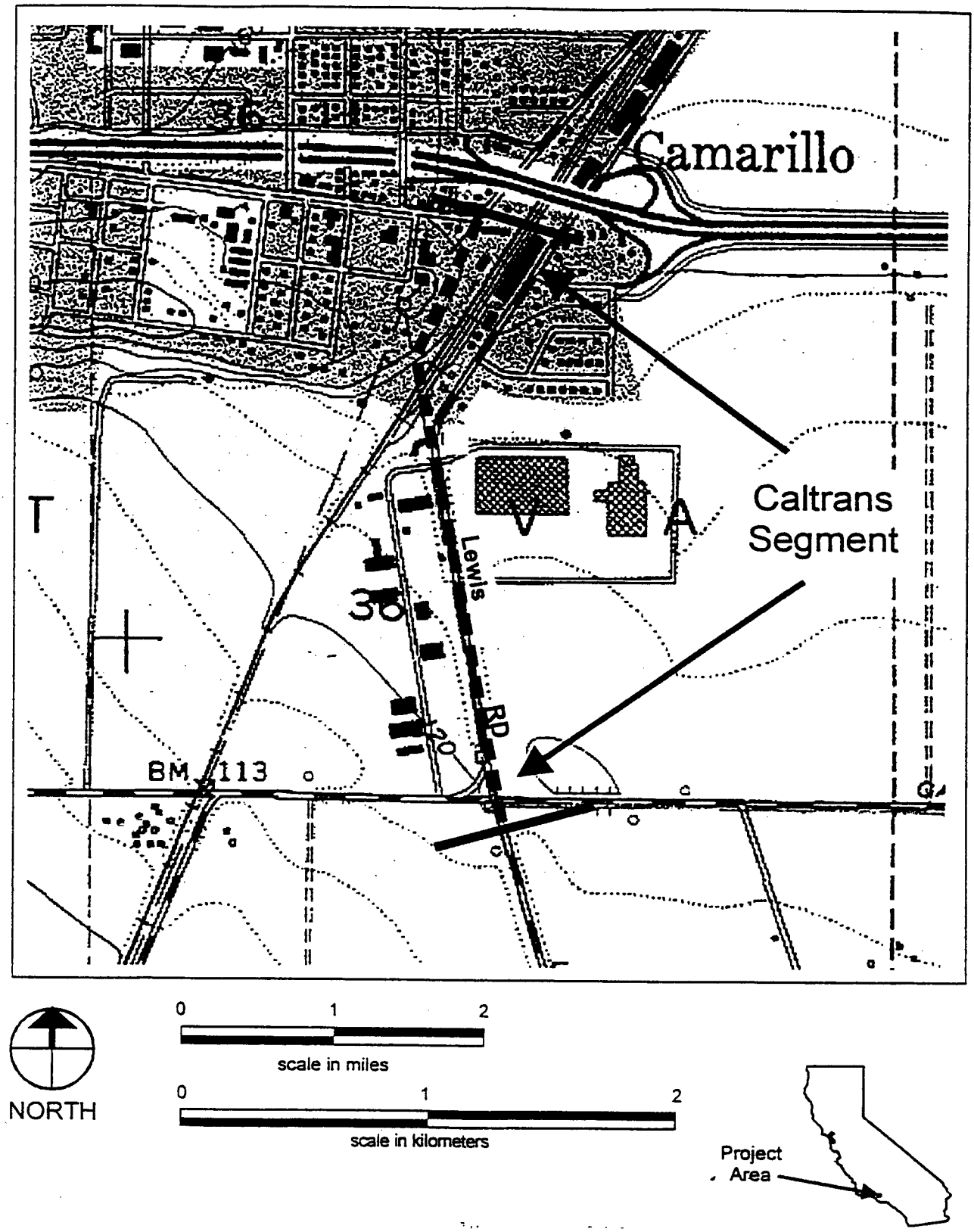
Maps: Figure 1 - Vicinity Map



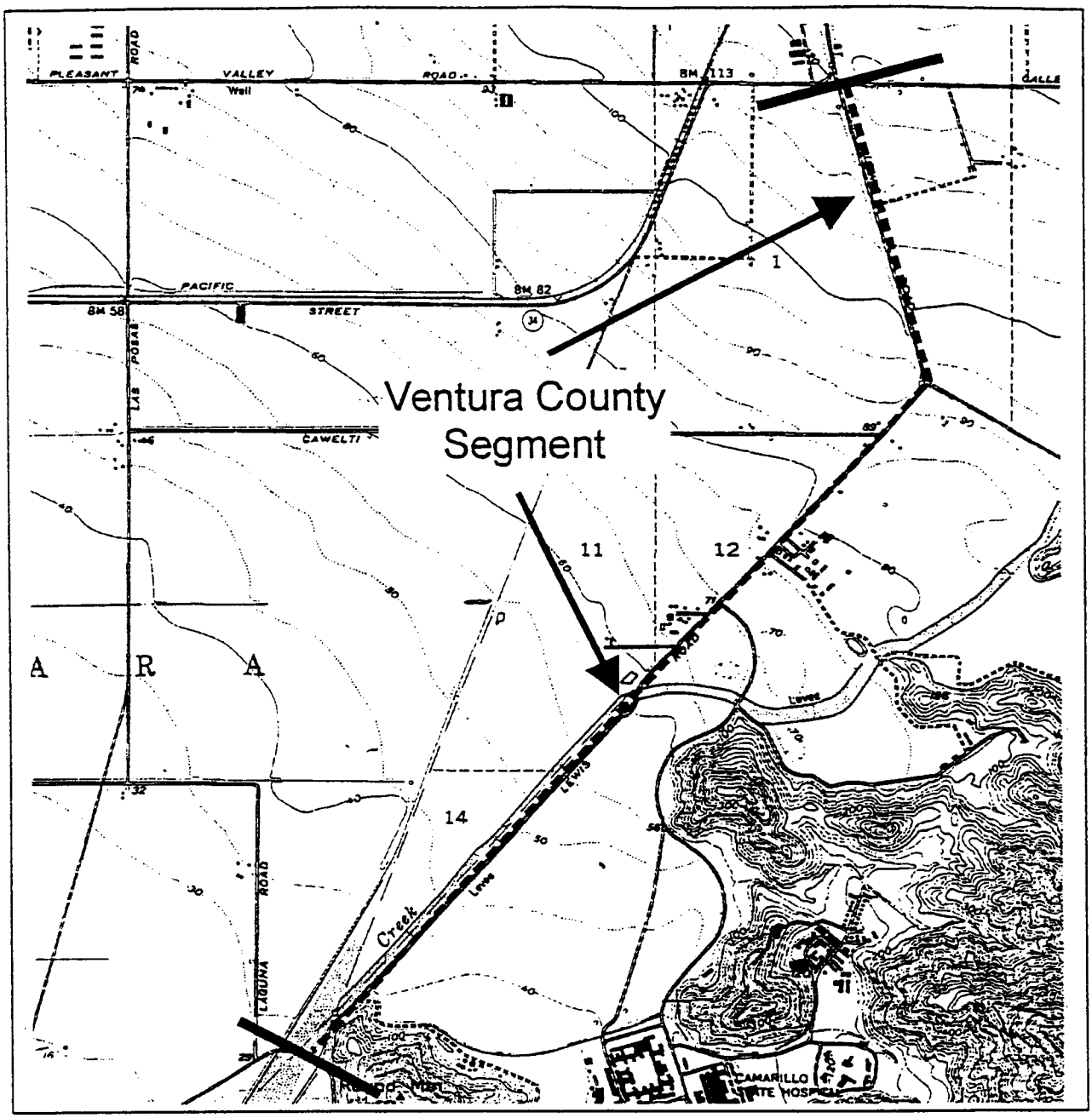


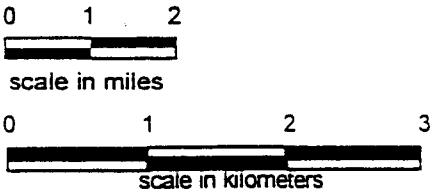


Maps: Figure 2 - Location of the Survey



Maps: Figure 3 - Lewis Road Widening Site Map - Caltrans Segment

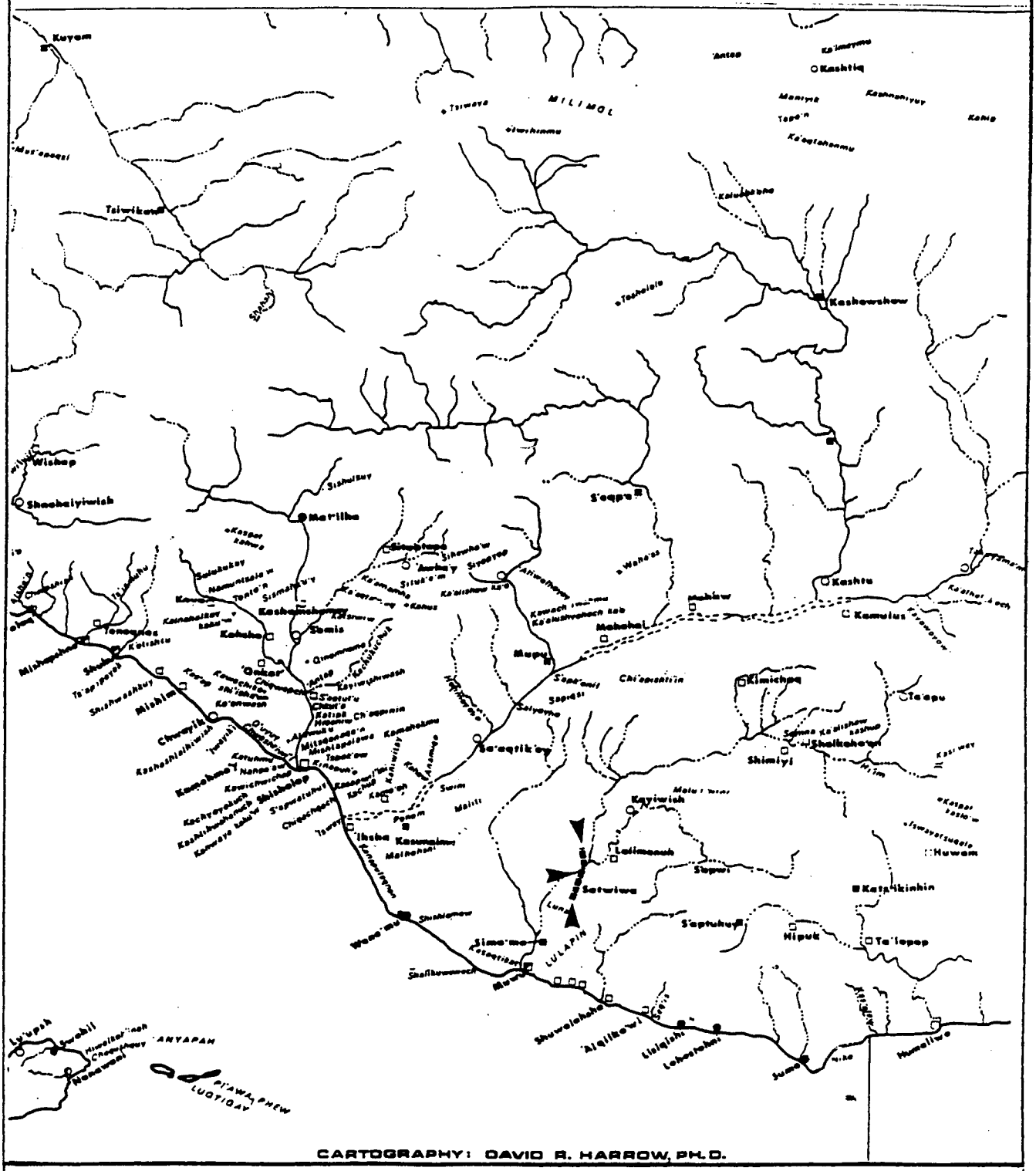




Maps: Figure 4 - Lewis Road Widening Site Map - Ventura County Segment

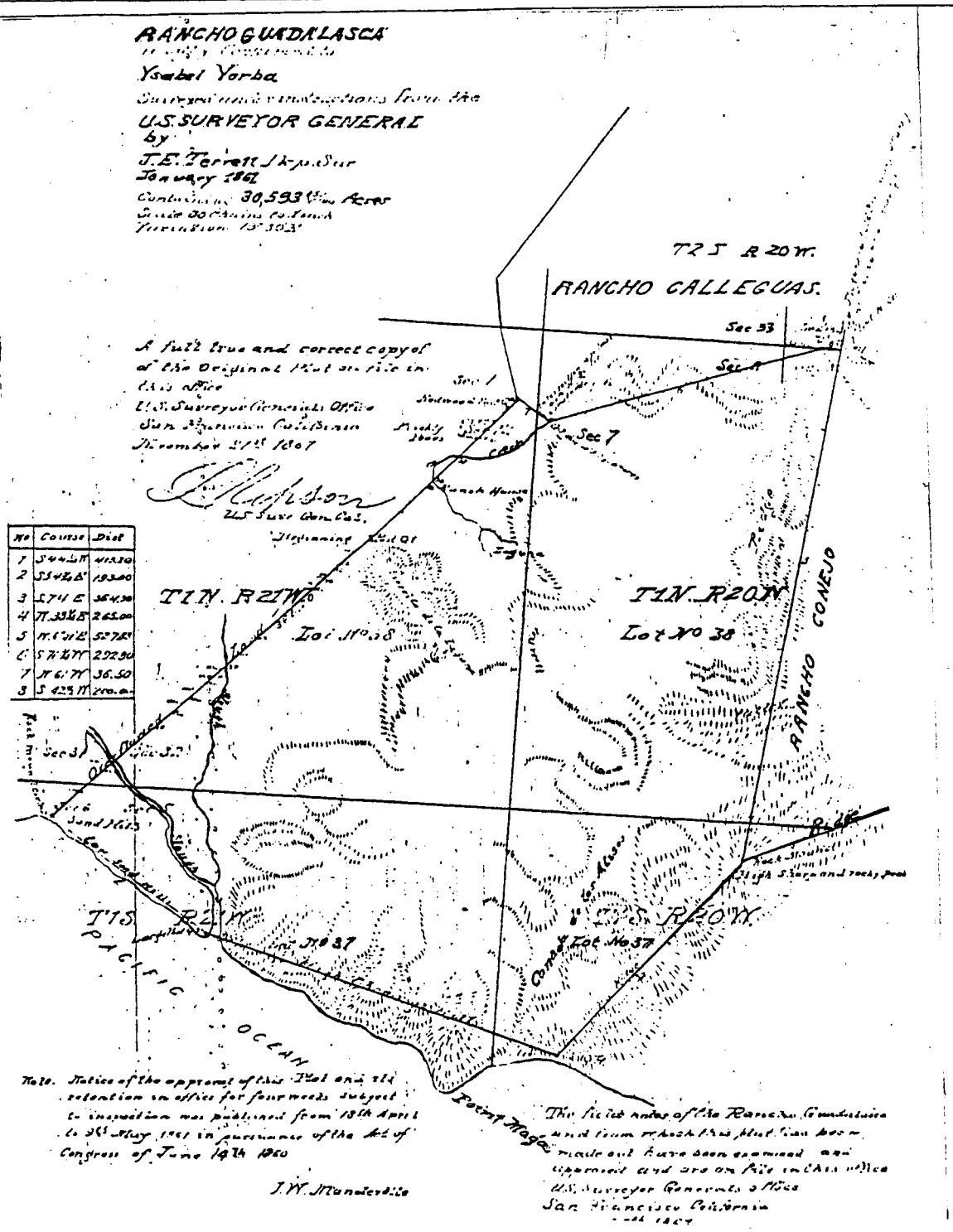
Modifications made by Kroeber on the basis of research after 1922.

Maps: Figure 6 - Project Area and Native American Boundaries

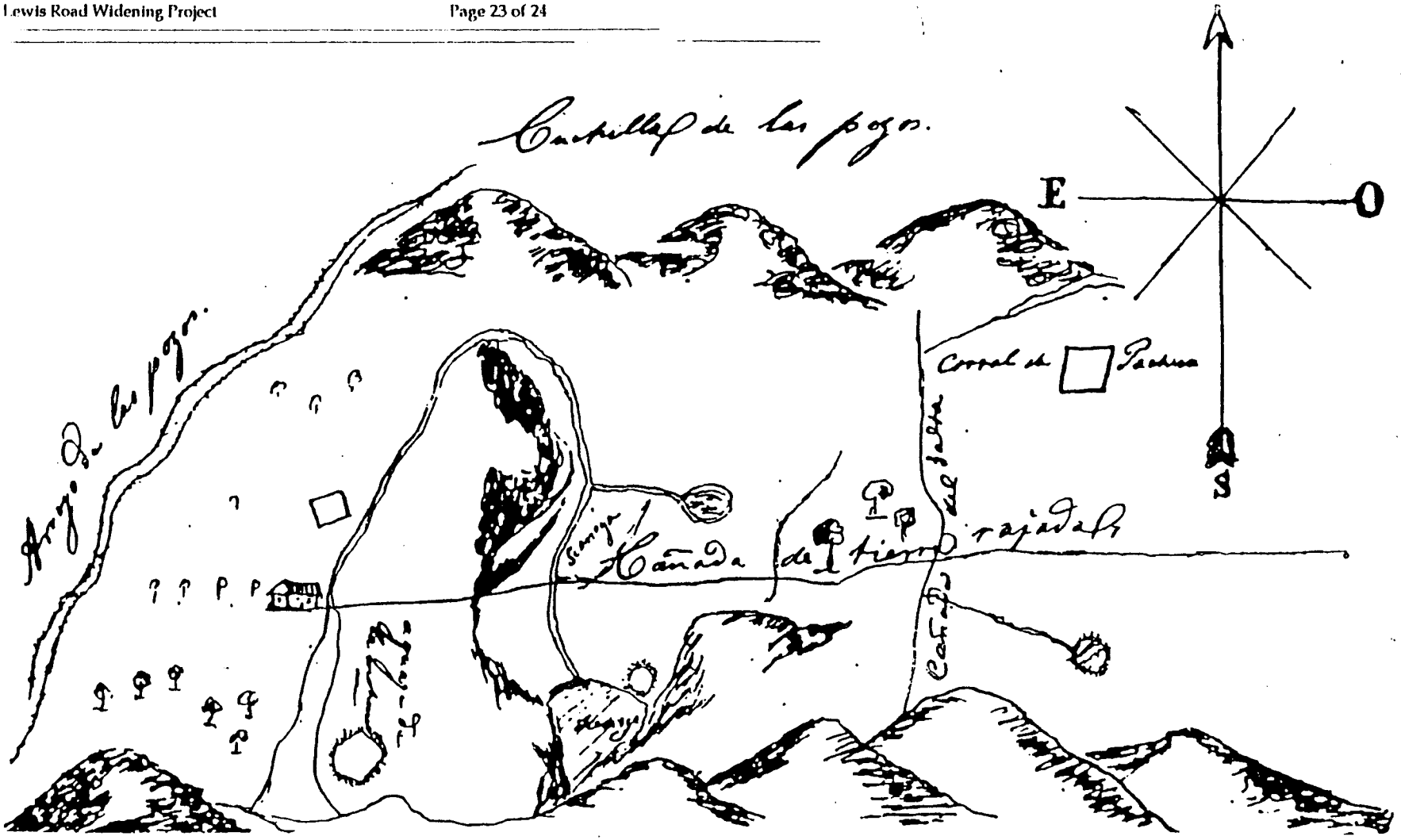


CARTOGRAPHY: DAVID R. HARROW, PH.D.

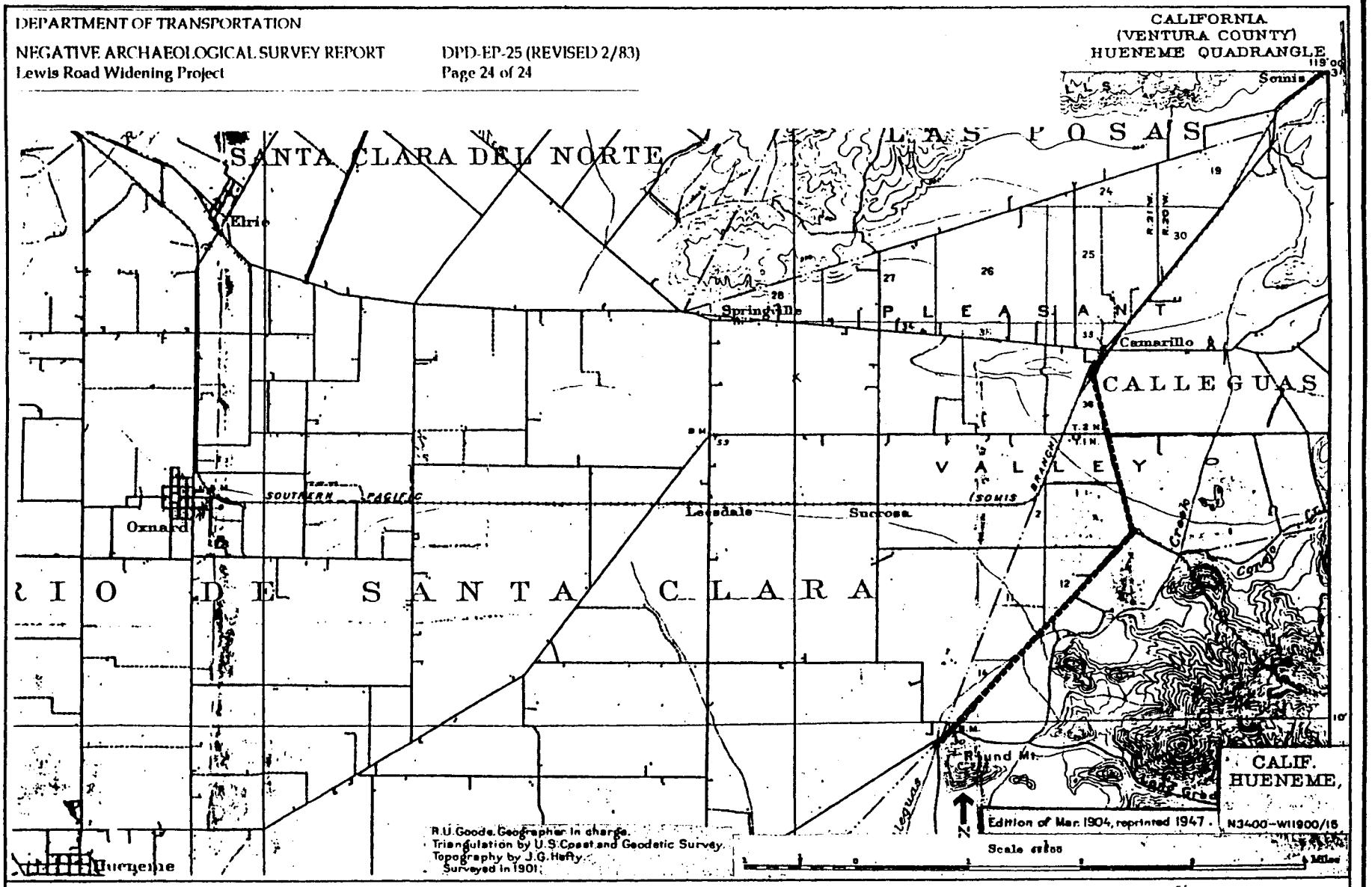
Maps: Figure 7 - Project Area in Relation to Chumash Placenames



Maps: Figure 8 - Plat of Rancho Guadalasca



Maps: Figure 9 - Diseno of Rancho Calleguas



Maps: Figure 10 - Project Area on Hueneme
USGS Quad Map - Surveyed in 1901

APPENDIX A

South Central Coastal Information Center

California Historical Resources Information Center
UCLA Institute of Archaeology
A163 Fowler Building
Los Angeles, California 90095-1510
Phone: 310-825-1980 - Fax: 310-206-4723 - Email: sccic@ucla.edu
(Janette Anne Dinishak, Information Center Staff - December 23, 1998 - Invoice #7627)

South Central Coastal Information Center
California Historical Resources Information System
UCLA Institute of Archaeology
A163 Fowler Building
Los Angeles, California 90095-1510
(310) 825-1980 / FAX (310) 206-4723 / sccic@ucla.edu

Los Angeles
Orange
Ventura

December 23, 1998

Rob Wlodarski
H.E.A.R.T.
8701 Lava Place
West Hills, CA 91304-2126
Phone/Fax: 818-340-6676

RE: Expedited Records Search for the Lewis Road Widening Project, Ventura County

Dear Mr. Wlodarski,

As per your request received on December 22, we have conducted an expedited records search for the above referenced project. This search includes a review of all recorded historic and prehistoric archaeological sites within a one eighth-mile radius of the project area as well as a review of all known cultural resource survey and excavation reports. In addition, we have checked our file of historic maps, the National Register of Historic Places, the California State Historic Resources Inventory, the California Points of Historical Interest, and the listing of California Historical Landmarks in the region. The following is a discussion of our findings for the project area.

PREHISTORIC RESOURCES:

One prehistoric site (VEN174) has been identified within a one eighth-mile radius of the project area. It is within the project area (see enclosed map).

HISTORIC RESOURCES:

No historic archaeological sites have been identified within a one eighth-mile radius of the project area.

Inspection of our historic map -- Hueneme (1904) 15' series – indicated that in 1904, Calleguas Creek and Round Mountain were marked. Several intermittent waterways and improved roads were in the vicinity. A loose street grid pattern surrounded the project area.

The California State Historic Resources Inventory lists numerous properties that have been evaluated for historical significance within a one eighth-mile radius of the project area (see enclosed list).

The National Register of Historic Places lists no properties within a one eighth-mile radius of the project area.

The listings of the California Historical Landmarks (1990) of the Office of Historic Preservation, California Department of Parks and Recreation, indicate that there are no California Historical Landmarks within a one eighth-mile radius of the project area.

The California Points of Historical Interest (1992) identifies numerous properties within a one eighth-mile radius of the project area (see enclosed map enlargement).

PREVIOUS ARCHAEOLOGICAL INVESTIGATIONS:

Twenty-seven surveys and/or excavations have been conducted within a one eighth-mile radius of the project area. As per your request, I have not re-mapped the twelve surveys and/or excavations that overlap the records search that you noted in your request letter (Invoice #7165). These surveys and/or excavations are VN126, VN509, VN583, VN804, VN1084, VN1299, VN1355, VN1375, VN1441, VN1462, VN1496, and VN1513. All of the remaining fifteen surveys and/or excavations occur within the project area (see enclosed map and bibliography). Sixteen additional investigations are located within the Camarillo quadrangle and potentially within the project area. These investigations are not mapped due to insufficient locational information.

Please forward a copy of any reports resulting from this project to our office as soon as possible. Due to the sensitive nature of site location data, we ask that you do not include record search maps in your report. If you have any questions regarding the results presented herein, please feel free to contact our office at (310) 825-1980.

Invoices are mailed approximately two weeks after records searches are completed. This enables your firm to request further information under the same invoice number. Please reference the invoice number listed below when making inquires. Requests made after invoicing will result in the preparation of a separate invoice with a $15.00 handling fee.

Sincerely,

Janette Dinishak

Janette Anne Dinishak
Information Center Staff

Enclosures:

(X) Map
(X) Bibliography
(X) HRI list
(X) PHI map enlargement
(X) Confidentiality Form
( ) Invoice # 7627

Location	Bridge Number	Structure Name or Description	Structure Types Main - Appr	City	Bridge Length	Width	Number of Spans	Route VC Left	Route VC Right	Sidewalk Widths Left	Sidewalk Widths Right	Year Built	Year Wid/ Ext	Permit Rating	P
07-VEN-33															
052.59	52 0121	TIMBA CREEK	CS		6.7	9.6	1					1951		PPPPP	
053.80	52 0089	APACHE CNYN CR	QU		36.5	9.7	6					1959		PPPPP	
055.61	52 0418	CYAMA SDHL VIA	CS		12.1	1.2	1					1984		PPPPP	
057.31	52 0090	BERGES CREEK	CSC		15.8	9.6	2					1953		PPPPP	
057.51		SANTA BARB CO													
07-VEN-34															
004.30		JCT RTE 1													
007.86	52 0396Y	ALVAREZ DRAIN	TS		4.5	8.2	1					1999		PPPPP	
008.15	52 0410	REVOLON SLOUG	CC		16.1	12.1	2					1979		PPPPP	
R 013.27	52 0348	LEWIS ROAD OH	CBC	CMRL	163.7	12.1	5					1972		PPPPP	
013.60	52 0016	CAMARLO OH/SEP	QIC-CGC	CMRL	175.9	37.5	10	7.72	6.60			1953	1987	PPPPP	
013.61		JCT RTE 101													
017.66		JCT RTE 118	END RTE 34												
07-LA-39															
009.78		JCT RTE 10													
010.70		JCT RTE 10													
010.71	53 0669	AZUSA SP 10/39	QBC	WCOV	49.0	49.6	2	4.62	4.67			1975		PPPPP	
010.71	53 0669	10 39 SEP PP	PUMP PLANT	WCOV								1975			
012.63	53 1383	SAN DIMAS CHAN	CS	COV	10.0	25.6	1			1.5	1.5	1959		PPPPP	
013.01	53 0320	BIG DALTON WA	CGC	COR	35.3	25.6	3			1.8	1.8	1941	1959	PPPPP	
013.79	53 0321	LIL DALTON WA	CG	AZU	15.8	25.6	1			1.8	1.8	1959		PPPPP	
014.00	53 1886F	RTE 210/39 SEP	CBC	AZU	47.2	6.7	4	4.95	5.18			1968		PPPPP	
014.00	53 1886F	RTE 210/39 SEP	CBC	AZU	47.2	6.7	4					1968		PPPPP	
014.05	53 1886	RTE 210/39 SEP	CBC	AZU	53.6	49.0	4	4.95	4.92			1968		PPPPP	
014.06		JCT RTE 210													
017.81	53 0113	SAN GABRIEL R	STD-CG		108.5	10.3	3			0.3	0.3	1933		OOXXX	
018.36	53 0114	CHAPMAN CANYO	CG		21.3	10.3	3			0.3	0.3	1934		PPPPP	
020.66	53 0115	VAN ORNUM CANY	CG		25.6	10.3	3			0.3	0.3	1933		PPPPP	
021.45	53 0116	CARPENTER CANY	CG		15.8	10.3	2				0.3	1933		PPPPP	
022.17	53 0117	PEJSA CANYON	CG		10.9	10.3	1			0.3	0.3	1933		PPPPP	
026.96	53 0342	WFK SN GABRIEL	CBC		85.3	8.5	3			0.6	0.6	1962		PPPPP	
R 030.63	53 2244	NFK SN GABRIEL	SGA		82.3	8.5	2					1967		PPPPP	
R 031.25	53 2245	NFK SN GABRIEL	CGC		67.0	8.5	3			0.6	0.6	1967		PPPPP	
032.50	53 0515	NFK SN GABRIEL	MP		7.6	22.2	2					1932		PPPPP	
044.40		JCT RTE 2	END RTE 39												
07-LA-47															
R 000.00		JCT RTE 110													
R 000.01	53 1944	RTE 110/47 SEP	QB	LA	45.1	33.5	1		4.62			1970		PPPGG	
R 000.04	53 1945F	GAFFEY OFF OC	QBC	LA	83.8	11.2	2					1970		PPPPP	
R 000.17	53 2031L	PACIFIC AVE UC	QB	LA	47.2	16.1	1					1970		PPPPP	
R 000.17	53 2031R	PACIFIC AVE UC	QBC	LA	41.1	14.9	1					1970		PPPPP	
R 000.44		R0043 IS 0072	EQUATION												
R 000.72	53 0807	HARBOR B RMP U	CBC	LA	43.5	20.7	3					1963		PPPPP	
000.86	53 1471	VINCE THOM BR	SU-SG		1848.1	15.8	23	15.84	15.84	0.6	0.6	1963		PPPPG	
002.20		TOLL PLAZA													
003.58	53 2618	SCHUYLR HEIM B	STX-SG	LBCH	1212.1	21.3	77	4.57	4.57	0.6	0.6	1946		PPPPP	
004.57		JCT RTE 103	END RTE 47												
07-LA-48															
000.00		JCT RTE 138													
000.00		BET PM 0.0 &													
000.00		32.8 IS SIGNED													
000.00		AS RTE 138													
010.53	53 2047	CALIF AQUEDUCT	QB		40.8	12.1	1					1968		PPPGG	
032.78	53 1835	AVE D SEP	CBC		72.5	19.5	2			1.5		1968		PPPPP	
032.80		JCT RTE 14													
034.00		END CONST 48													

DISTRICT 07

BRIDGE NUMBER	LOCATION CO-RTE-PM	STRUCTURE NAME	CITY	HISTORICAL SIGNIFICANCE
52 0346R	VEN-118-R02415	CALDWELL AV UC	SIMV	5
52 0347M	VEN-023-R00261	NFK POTRERO CR	THOK	5
52 0348	VEN-034-R01327	LEWIS ROAD OH	CMRL	5
52 0349	VEN-101- 00016	LAKEVIEW CY OC	THOK	5
52 0350	VEN-101-R03940	SEACLIFF PUC		5
52 0351	VEN-101-R03918	MADRANIO CY CR		5
52 0352	VEN-101-R03952	LAS SAUCES CR		5
52 0354L	VEN-118-R02299	MADERA RD UC	SIMV	5
52 0354R	VEN-118-R02299	MADERA RD UC	SIMV	5
52 0355L	VEN-118-R02186	ALAMOS CYN RD		5
52 0355R	VEN-118-R02186	ALAMOS CYN UC		5
52 0358	VEN-150-R01342	VENTURA RIVER		5
52 0359	VEN-101-R03966	LAS SAUCES PUC		5
52 0360	VEN-101-R04026	PUNTA GORD PUC		5
52 0367L	VEN-101-R03889	HOBSON AC R UC		5
52 0367R	VEN-101-R03889	HOBSON AC R UC		5
52 0368	VEN-023-R00984	TIERRA REJD CH		5
52 0370	VEN-101- 01569	CAMARILLO H DN	CMRL	5
52 0386	VEN-118-T02097	EQUIP PASS UC		5
52 0387	VEN-118-R02256	DUMP ACCESS OC		5
52 0389Y	VEN-023- 02350	SIDE DRAIN	FIL	5
52 0390	VEN-101-R04362	RINCON CREEK		5
52 0396Y	VEN-034- 00786	ALVAREZ DRAIN		5
52 0398	VEN-001- 01836	THIRD ST OC	OXN	5
52 0401	VEN-101- 00107	CORD AVE CULV	THOK	5
52 0404	VEN-150- 02892	SANTA PAUL SHV		5
52 0405Y	VEN-023- 02300	SIDE DN(GROVE)		5
52 0406Y	VEN-023- 02310	SIDE DN PACKHS		5
52 0407Y	VEN-023- 02340	SIDE DN(GROVE)		5
52 0408Y	VEN-023- 02350	SIDE DRAIN N02	FIL	5
52 0409	VEN-118- 01453	MEJICO CREEK		5
52 0410	VEN-034- 00815	REVOLON SLOUGH		5
52 0411L	VEN-101- 00453	ARROYO CJO SHV	THOK	5
52 0411R	VEN-101- 00458	ARROYO CJO SHV	THOK	5
52 0412R	VEN-101- 00471	ARROYO CJO SHV	THOK	5
52 0416F	VEN-101- 00316	THOU OAKS B UC	THOK	5
52 0417F	VEN-023-R00356	THOU OAKS B UC	THOK	5
52 0418	VEN-033- 05561	CYAMA SDHL VIA		5
52 0419Z	VEN-150- 02314	LION CANYON CR		5
52 0421L	VEN-001- 01000	REVOLON CHL		5
52 0421R	VEN-001- 01000	REVOLON CHL		5
53 0002	LA -101- 03482	MEDEA CREEK	AGRH	5
53 0003	LA -101- 03137	LAS VIRGENE CR		5
53 0004	LA -072- 00855	RIO HONDO	MTBL	5
53 0005	LA -072- 00824	MONTEBELLO UP	PRV	5
53 0005W	- -	MONTEBELLO PP	PRV	
53 0006	LA -072- 00686	SAN GABRIEL RI		5
53 0007	LA -072- 00424	WHITTIER UP	WIT	4
53 0008	LA -187- 00002	MCCLURE TUNNEL	SMCA	3

HISTORICAL SIGNIFICANCE - STATE BRIDGES

DISTRICT 07

BRIDGE NUMBER	LOCATION CO-RTE-PM	STRUCTURE NAME	CITY	HISTORICAL SIGNIFICANCE
52 0003	VEN-001- 02815	WILLOW CREEK		5
52 0007L	VEN-101-R02312	SANTA CLARA R		5
52 0007R	VEN-101-R02312	SANTA CLARA RI		5
52 0008L	VEN-101- 01144	ARROYO CONEJO	CMRL	5
52 0008R	VEN-101- 01144	ARROYO CONEJO	CMRL	5
52 0009L	VEN-101- 01276	ARROYO CALLUAS	CMRL	5
52 0009R	VEN-101- 01276	ARROYO CALLUAS	CMRL	5
52 0010L	VEN-001- 00987	CALLEGUAS CRK		5
52 0010R	VEN-001- 00987	CALLEGUAS CRK		5
52 0011	VEN-001- 00454	BIG SYCAMORE C		5
52 0012	VEN-001- 00123	LITTLE SYCAM C (19		5
52 0014	VEN-101- 00701	SBR ARROYO CJO	THOK	5
52 0016L	VEN-101- 01375	CAMARILLO OH S	CMRL	5
52 0016M	VEN-101- 01375	CAMARILLO POH	CMRL	5
52 0016R	VEN-101- 01375	CAMARILLO OH S	CMRL	5
52 0017L	VEN-101-R02435	MONTALVO OH	VEN	5
52 0017R	VEN-101-R02434	MONTALVO OH	VEN	5
52 0018	VEN-001- 02061	EL RIO UPASS	OXN	5
52 0018W	- -	EL RIO UP PP		
52 0020L	VEN-101- 02725	LEMON OVERHEAD	VEN	5
52 0020R	VEN-101- 02725	LEMON OVERHEAD	VEN	5
52 0021L	VEN-101-R02398	MONTALVO SP OH	VEN	5
52 0021R	VEN-101-R02399	MONTALVO SP OH	VEN	5
52 0029	VEN-126-R01357	HAUN CREEK		5
52 0033	VEN-126- 02197	POLE CREEK	FIL	5
52 0036	VEN-126- 02648	HOPPER CRK		5
52 0037	VEN-126- 02882	PIRU CREEK		5
52 0040	VEN-001- 02154	VENTURA OH		5
52 0041	VEN-033- 01373	MC DONALD CRK		5
52 0042	VEN-033- 01458	COZY DELL CANY		5
52 0043	VEN-033- 01552	NFK MATILIJA C		5
52 0044	VEN-033- 01582	NFK MATILIJA C		5
52 0046	VEN-023-T00153	LAKE ELEANOR C	THOK	5
52 0049	VEN-118- 00163	SANTA CLARA R		5
52 0050	VEN-118- 00732	BR CALLEGUAS C		5
52 0051	VEN-118- 01298	LONG CANYON CR		5
52 0055	VEN-118- 01934	HAPPY CAMP CR		5
52 0056Z	VEN-118- 02061	WIXADI CREEK		5
52 0065	VEN-033- 00758	SAN ANTONIO CR		5
52 0066	VEN-033- 01741	NFK MATILIJA C		5
52 0067	VEN-033- 01784	NFK MATILIJA C		5
52 0068	VEN-033- 01823	S MATILIJA TUN		5
52 0069	VEN-033- 01867	NFK MATILIJA C		5
52 0070	VEN-033- 01881	MID MATILJA TU		5
52 0071	VEN-033- 01884	NFK MATILIJA C		5
52 0072	VEN-033- 01885	N MATILIJA TUN		5
2 0073	VEN-033- 01888	NFK MATILIJA C		5
52 0074	VEN-033- 01936	BEAR CRK		5
52 0075	VEN-033- 01972	NFK MATILIJA C		5

HISTORIC ARCHITECTURAL SURVEY REPORT - MOU SHORT FORM
California Department of Transportation

1. Highway Project Description					
District	County	Route	Post Miles	EA	Charge Unit
7	VEN	34	Kilo Post 14.85/20.6	195800 & 931207	07-170

PROJECT DESCRIPTION

The proposed project consists of a roadway widening on State Route 34 (Lewis Road) from Hueneme Road Bridge and Ventura Road, a distance of 5.75 kilometers, in Ventura County. The project traverses the unincorporated south central Ventura County and part of the City of Camarillo, south of U.S Highway 101. Right of way acquisitions are necessary at various locations for improvements associated with the proposed project.

II. STUDY FINDINGS

All of the properties listed below, and indicated on the attached map, were found to qualify for treatment under the December 20, 1989 "Memorandum of Understanding Regarding Evaluation of Post-1945 Buildings, Moved Pre-1945 Buildings, and Altered Pre-1945 Buildings," as updated in the "Interim Post-1945 MOU Guidelines," of July 7, 1997. They do not appear to be eligible for inclusion in the National Register of Historic Places because they are:

Post-1950 [X] Moved [ ] Substantially altered [ ]

III. PROPERTY ADDRESSES

Map Number	Parcel Number	Street Address	Property Description	Date
1	162-0-050-040	31 Lewis Rd.	Garage- Post 1952	c. 1970s
3	162-0-160-420	2650 E. Ventura Blvd.	Commercial-Post 1952	1986
4	162-0-160-420	2616 E. Ventura Blvd.	Commercial-Post 1952	1986

IV. FIELD METHODOLOGY	
Researcher Diane Kane	Date 8/9/00

The properties in the study area for this project were reviewed
in the field [ ] from photographs [X]

by the architectural historian named above who is specified in the MOU
as being qualified to make the required determination.

V. SOURCES CONSULTED

National Register of Historic Places, updates to May 1999 [x]
California Inventory of Historic Resources [x]
California Historical Landmarks, 1996 [x]
California Points of Historical Interest, 1997 [x]
Caltrans Historic Bridge Inventory, 1986 [x]
Other: Ventura County Current Assessors' Records, Assessor's Files and Assessor's Archives

VI. RESULTS OF RESEARCH

The buildings listed in this MOU Short Form are commercial, buildings dating from the 1970s through the 1980s. None exhibit exceptional architectural merit.

VII. REMARKS

This report is intended to satisfy the historical aspects of cultural studies and does not reflect prehistoric archaeological concerns that may need to be addressed as part of a Historic Properties Survey Report.

VIII. ATTACHED DOCUMENTATION

A. Maps
Project Location [x] Project Vicinity [x] APE [x]
U.S.G.S. [ ] Quad: Date:
Sketch Map(s) [ ]

B. Photographs [ ] Date:
C. Other

1. PROPERTIES IDENTIFIED

(List properties, or refer reader to appropriate technical study attached, according to their National Register status. Provide, as appropriate, complete address, period and level of significance, criteria, map reference, and any existing state or local designation)

Properties previously listed or determined eligible or ineligible (include date of listing or determination)

Map Number	Parcel Number	Street Address	Property Description	Date
2	162-0-050-050	2619,2627,2633 E. Ventura Blvd.	Commercial	c. 1917

See attached SHPO concurrence letter for the Historic Property Survey Report For the Proposed Construction of a Full Interchange at Lewis Road (SR 34) and the 101 Freeway. Prepared by John F. Romani of Greenwood and Associates for the California Department of Transportation, April 13, 1994.

Properties which appear eligible/ineligible

Properties unevaluated (provide reason why, e.g., archaeological properties not evaluated because of multiple alignments: property will be protected as an ESA, etc.)

STATE OF CALIFORNIA — THE RESOURCES AGENCY PETE WILSON, Governor

OFFICE OF HISTORIC PRESERVATION
DEPARTMENT OF PARKS AND RECREATION
P.O. BOX 942896
SACRAMENTO 94296-0001
(916) 653-6624
FAX: (916) 653-9824

(916) 653-6624
FAX (916) 653-9824

September 16, 1994

FHWA940615A

Roger Borg, Division Administrator
Region Nine
Federal Highway Administration
California Division
980 9th Street
SACRAMENTO CA 95814-2724

Re: Construction of a Full Interchange at Lewis Road (State Route 34) and 101 Freeway, and Northbound On and Off Ramps at Flynn Road, Camarillo, Ventura County.

Dear Mr. Borg:

Thank you for submitting to our office your June 15, 1994 letter and supporting documentation regarding the proposed construction of a full interchange at Lewis Road (State Route 34) and 101 Freeway, and Northbound On and Off Ramps at Flynn Road, Camarillo, Ventura County. At present there is only a partial interchange at Lewis Road, a westbound of-ramp and an eastbound on-ramp at Fulton Street.

You are seeking our comments on your determination of the eligibility of 23 pre-1945 structures and a eucalyptus tree grove C located in Camarillo, Ventura County for inclusion on the National Register of Historic Places (NRHP) in accordance with Section 106 of the National Historic Preservation Act. These properties are listed, by address, on pages 16 and 17 of the Historic Property Survey Report (HPSR) enclosed with your letter. Our review of the submitted documentation leads us to concur with your determination that the following properties are eligible for inclusion on the NRHP at the level of local significance under criteria established by 36 CFR 60.4:

- St Mary Magdalen Church, 2532 Ventura Boulevard, (Criterion B and C)
- Pleasant Valley Baptist Church, 2315 Ventura Boulevard, (Criterion C)
- The Adolfo Camarillo Heritage Grove, (Criterion B)

Both church buildings are excellent examples of their architectural types and have retained their integrity of design and setting. In addition the St. Mary Magdelen Church has strong associations with Adolfo Camarillo, a founding member of the town of Camarillo. We disagree however with your determination that the Adolfo Camarillo Heritage Grove is eligible for inclusion on the NRHP under Criterion C as a Rural Historic Landscape. We feel that the Grove has lost too much of its original feeling of design and setting to be eligible for the NRHP under Criterion C.

We also concur with your determination that all other pre-1945 structures listed on pages 16 and 17 of the HRSP are not eligible for inclusion on the NRHP under any of the criteria established by 36 CFR 60.4. None of the structures have strong associations with historic events or persons, nor are any of these structures architecturally significant.

Thank you for seeking our comments on your project. If you have any questions, please contact staff historian Clarence Caesar at (916) 653-8902.

Sincerely,

Cherilyn Widell
State Historic Preservation Officer

Ventura Boulevard, and in the area west of Arneill Road, has occurred within the past 20 years. The City has managed to preserve the scale and character of the commercial district, with green park areas provided by the landscaped grounds of St. Mary Magdalen Church and Dizdar Park. Careful consideration has been given in the placement of curbside planters and street trees.

A mixture of residential construction exists in the area north of U.S. 101 between North Glenn Drive and Lewis Road, with houses dating to the period of initial development, between 1916 and 1930, and also to the years immediately following World War II. Anecdotal information suggests that some houses in this predominantly Mexican-American neighborhood may have been relocated here during construction of the Ventura Freeway (Whitacker, personal communication 1993). More recently, small scale, residential construction and conversion of outbuildings have occurred along alleys located at mid-block in this section. Earlier structures have been demolished to allow new commercial construction at the corners of Daily Drive and Lewis and Arneill Roads.

In 1985, following several years of debate and local controversy, a project was commenced to widen and improve the 101 Freeway where it passes through Camarillo. Removal of the Camarillo Heritage Grove, a row of historic eucalyptus trees which lined Route 101 east of the city, was avoided when the highway's westbound lanes were rerouted south of the trees.

Field Methods

The researcher/field data collector, Dana Slawson, an architectural historian with a Master's Degree in architecture and approximately eight years professional experience in evaluating historic resources, surveyed properties within the project area in August 1993 and February 1994. Notes were taken in the field using the Caltrans "Historic Structures Field Notes" format. Each pre-1945 structure within the APE was photographed, and photographs were also taken of representative post-1945 buildings. Architectural Inventory/Evaluation forms have been prepared for all pre-1945 properties.

Findings and Conclusions

A total of 58 properties was identified by the field investigations. Architectural Inventory/Evaluation forms were prepared for 23 pre-1945 structures and a eucalyptus tree row (See Appendix A). Two of the identified pre-1945 structures and the tree row appear to meet the criteria for eligibility to the National Register of Historic Places. The structures are as follows:

Address	Map ID #
2315 Ventura Boulevard	A-12
2532 Ventura Boulevard	A-1

The 21 pre-1945 buildings which appear to be ineligible for the National Register are as follows:

Address	Map ID #
2619, 2627, 2633 Ventura Boulevard	A-2
Nellora Street, address unknown	A-3
2557 Ventura Boulevard	A-4
2545 Ventura Boulevard	A-5
2433-2447 Ventura Boulevard	A-6
2423, 2429, 2431 Ventura Boulevard	A-7
2401 Ventura Boulevard	A-8
58 Glenn Drive	A-9
68 Glenn Drive	A-10
2369 Ventura Boulevard	A-11
2433 Daily Drive	A-13
180 Glenn Drive	A-14
2416 Lomita Street	A-15
2438 Lomita Street	A-16
Lomita Street, address unknown	A-17
2454 Lomita Street	A-18
2466 Lomita Street	A-19
189 Fulton Street	A-20
166 Fulton Street	A-21
176 Fulton Street	A-22
190, 192 Fulton Street	A-23

None of the 34 post-1945 buildings identified within the project area was found to have the overriding significance to qualify for the National Register.

February 20, 2001

Rob Wood
Native American Heritage Commission
915 Capitol Mall, Room 384
Sacramento, California 90095

Dear Mr. Wood,

Caltrans is currently undertaking a study for the Lewis Road Widening Project, Ventura County, California (07 VEN101/Lewis Road). A USGS Topographic Map is attached. Generally, the project involves widening of a 5.75-km (3.57-mile) segment of Lewis Road between the Hueneme Road Bridge on the south and Ventura Boulevard on the north to accommodate increased traffic, primarily from the new CSU Channel Islands University. The project is located in unincorporated south central Ventura County and is south of U.S. Highway 101.

The project lies west of Newbury Park, south of Camarillo and Highway 101, east of Oxnard, and north of Point Mugu, within Ventura County, California. The project area is located on the Camarillo, California USGS 7.5 minute topographic quadrangle (1950-photorevised 1967) within Township 1 North, Range 21 West, in portion of sections 1, 11, 12, and 14; Township 2 North, Range 21 West, section 36, and unsectioned portions of Rancho Calleguas and Rancho Guadalasca. The Area of Potential Effects (APE) for the project is the proposed project's right-of-way and/or areas of direct ground disturbance.

The archaeological study consisted of a records search at the South Central Coastal Information Center, UCLA Institute of Archaeology, Fowler Museum of Cultural History, Los Angeles, California, and an on-foot field reconnaissance of the proposed APE. The records search revealed no recorded prehistoric or historic archaeological sites within the APE and an inspection of the National Register of Historic Places; The California Inventory of Historic Resources (1976); The California Historic Landmarks Directory (1990); The California State Historic Resources Inventory; California Points of Historical Interest (1992); and historic maps on file at the Geography Department Map Reference Center, California State University, Northridge, Bureau of Engineering, Ventura County Government Center; and Ventura County Museum of History and Art (VCMHA).

I would appreciate the following information from the NAHC: A check of your Sacred Lands files for any properties that might face impacts through the implementation of the proposed study; and, a list of appropriate Native American consultants for the general area. A faxed response would be fine.

Please consider this request urgent.

Thank you for your time and cooperation.

Sincerely,

Robert J. Wlodarski
Principal Investigator
H.E.A.R.T.
8701 LavaPlace
West Hills, California 91304-2126

Attachments/Project map

Appendix L

List of Acronyms

LIST OF ACRONYMS

Section 4(f)	Use of Parkland
Section 404	ACOE Permit process
Section 1601	Streambed Alteration Agreement
AADT	Annual Average Daily Traffic
ACCS/ MVKM	Accidents per million Vehicle Kilometers
ACOE	US Army Corps of Engineers
ACHP	Adv. Council on Historic Preservation
ADT	Average Daily Traffic
APCD	Air Pollution Control District
APE	Area of Potential Effect
AQMP	Air Quality Management Plan
AQCR	Air Quality Control Region(s)
ARB	Air Resource Board
ASR	Archaeological Survey Report
BMP	Best Management Practices
CAAA	Clean Air Act Amendments
CAAQS	California Ambient Air Quality Standards
Caltrans	California Department of Transportation
CARB	California Air Resource Board
CCR	California Code of Regulations
CDFG	California Department of Fish and Game
CE	Categorical Exempt/Categorical Exclusion
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
cfs	cubic feet per second
CHP	California Highway Patrol
CHSC	California Highway & Safety Code
CIP	Capital Improvement Program
CO	Carbon Monoxide
CMP	Congestion Management Program
CNDDB	California Natural Diversity Data Base
CSUCI	Cal State University, Channel Islands
CTC	California Transportation Commission
CVC	California Vehicle Code
DED	Draft Environmental Document
DEIR	Draft Environmental Impact Report
DEIS	Draft Environmental Impact Statement
DHV	Design Hourly Vehicles
DOT	Department of Transportation
DOI	US Department of the Interior
DTSC	Department of Toxic Substances Control
EA	Environmental Assessment
ED	Environmental Document
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
EPB	Environmental Planning Branch (District)

LIST OF ACRONYMS

FED	Final Environmental Document
FEIR	Final Environmental Impact Report
FEIS	Final Environmental Impact Statement
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map
FONSI	Finding Of No Significant Impact
FPPA	Farmland Protection Policy Act
FTA	Federal Transit Act
FTIP	Federal Transportation Improvement Plan
FWS	US Fish and Wildlife Service
FY	Fiscal Year
HASP	Health & Safety Plan
HB4N	Non-capacity Increasing Operational Improvements
HCM	Highway Capacity Manual
HPSR	Historic Property Survey Report
HASR	Historic Architectural Survey Report
HW	Hazardous Waste
ICU	Intersection Capacity Utilization
IFI	Important Farmland Inventory
IS	Initial Study
ISA	Initial Site Assessment (HW)
Kg	kilogram
km	Kilometer
l	liter
LCA	Land Conservation Act
Leq	Unit that measures sound levels via their energy output per hour
LOS	Level of Service
MDL	Method Detection Limit
mg	milligram
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
MPO	Metropolitan Planning Organization
MTA	Metropolitan Transportation Authority
MTC	Metropolitan Transportation Commission
NAAQS	National Ambient Air Quality Standards
NAE	No Adverse Effect
NAEDR	No Adverse Effect Data Recovery
NAER	National Architectural and Eng. Record
NAHC	Native American Heritage Comm.
NASR	Neg. Arch. Survey Report
NCHRP	National Corp. Hwy. Research Program
NE	No Effect
NEPA	National Environmental Policy Act
NHPA	National Historic Properties Act
NO_2	Nitrogen Dioxide
NOD	Notice of Determination
NOI	Notice of Intent

LIST OF ACRONYMS

NOP	Notice Of Preparation
NOX	Nitrogen Oxides
NPDES	National Pollutant Discharge Elimination System
NPS	National Park Service
NRCS	Natural Resource Conservation Service
NRHP	National Record of Historic Places
OEA	Office of Environmental Analysis
OHWM	Ordinary High Water Mark
OLA	Office of Local Assistance
OLA	Office of Landscape Architecture
OPR	State Office of Planning and Research
OPPD	Office of Project Planning and Design
OPR	State Office of Planning and Research
OTP	Office of Transportation Planning
PAM	Permits, Agreements, Mitigations and Commitments
PAR	Project Approval Report
PCR	Preliminary Case Report
PDPM	Proj. Development Procedure Manual
PDT	Project Development Team
PDU	Project Development Unit
PH	Public Hearing
PM_{10}	Particulate Matter < 10 micron diameter
POC	Pedestrian Overcrossing
P&P	Policy and Procedure Directive
PS&E	Plans, Specifications and Estimates
PSI	Preliminary Site Investigation (HW)
PSR	Project Study Report
PUC	Public Utilities Commission
PWP	Project Work Program
RAP	Relocation Assistance Program
RDE	Request for Determination of Effect
RE	Resident Engineer
RFP	Request For Proposal
RFQ	Request for Qualifications
RI/FS	Remedial Investigation/ Feasibility Study
ROC	Reactive Organic Compounds
ROD	Record of Decision
RTIP	Regional Transportation Improvement Program
RTPA	Regional Transportation Planning Agency
RTP	Regional Transportation Plan
R/W	Right of Way
RWQCB	Regional Water Quality Control Board
SAM	State Administrative Manual
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Mngmt. District
SCAT	South Coast Area Transit
SCCAB	South Central Coast Air Basin
SCAQMD	South Coast Air Quality Management District
SEIS	Supplemental EIS
SCH	State Clearinghouse
SCS	Soil Conservation Service (USDA)

LIST OF ACRONYMS

S&H	Streets and Highway Code
SHPO	State Historic Preservation Officer
SIP	State Implementation Plan
SO_2	Sulfur Dioxide
SOAR	Save Our Agricultural Resources
SPT	Standard Penetration Test
STIP	State Transportation Improvement Program
STLC	Soluble Threshold Limit Concentration
SWPPP	Storm Water Pollution Prevention Plan
TCP	Transportation Control Plan
TCS	Transportation Corridor Study
TIP	Transportation Improvement Plan (Federal)
TMP	Traffic Management Plan
TRB	Transportation Research Board
TRPH	Total Recoverable Petroleum Hydrocarbons
TSM	Transportation System Management
UMTA	Urban Mass Transit Agency
UPRR	Union Pacific Railroad
USC	United States Code
USCG	United States Coastal Guard
USDA	United States Dept. of Agriculture
USEPA	United States Environmental Protection Agency
USFS	United States Forest Service
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
VCFCD	Ventura County Flood Control District
VPH	Vehicles per Hour
VPHPL	Vehicles per Hour per Lane
VCMHA	Ventura County Museum of History and Art
VCTC	Ventura Transportation Commission
VISTA	Ventura Intercity Service Transit Authority
WET	Wet Extraction Test