Draft August 2007

Environmental Assessment / Draft Environmental Impact Report

U.S. 101/DEL NORTE BOULEVARD INTERCHANGE IMPROVEMENT PROJECT

CITY OF OXNARD

VENTURA COUNTY

Caltrans

"The City That Cares"

The environmental review, consultation, and any other action required in accordance with applicable Federal laws for this project is being, or has been, carried-out by the Department under its assumption of responsibility pursuant to 23 U.S.C. 327.

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07-VEN-101
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EA 07-249800 Local-20.10.400 (HE12) Program

U.S. 101/Del Norte Boulevard Interchange Improvement Project

Ventura County, California

DRAFT ENVIRONMENTAL IMPACT REPORT / ENVIRONMENTAL ASSESSMENT

Submitted Pursuant to: (State) Division 13, California Public Resources Code and (Federal) 42 USC 4332(2)(C) and 23 USC 327

THE STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

THE CITY OF OXNARD, CALIFORNIA

8/30/07
Date

Ken Ortega
Director of Public Works
City of Oxnard

Aug 30, 2007
Date

Ron Kosinski, Deputy District Director
District 7 Environmental Planning
California Department of Transportation

SUMMARY

The City of Oxnard (the City), in cooperation with the California Department of Transportation (Department), District 7, proposes to improve the Del Norte Boulevard interchange at United States Highway 101 (US 101) in Ventura County. U.S. 101 is the primary transportation link between the City and remainder of the County, and metropolitan Los Angeles.

S.1 Overview of the Project Area

The project site is located in a primarily agricultural area. Other land uses in the project area include a relatively small neighborhood, called Nyeland Acres, comprised of residential and commercial uses located to the northwest of the project site, and an industrial park with commercial and light industrial development, called the Camino Real Industrial Plaza, located to the southeast of the project site.

Del Norte Boulevard serves as a north/south connection, providing access to and from US 101; as well as connecting uses south of US 101 with uses north of US 101 via Ventura Boulevard. Ventura Boulevard begins at the US 101/Del Norte Boulevard overpass, and continues west providing access from US 101 to the Nyeland Acres neighborhood. The US 101/Del Norte Boulevard interchange is one of five interchanges on the US 101 that serve the City, and it serves as a gateway to the City's commercial and industrial communities south of US 101.

S.2 Purpose and Need

The purpose of the proposed project is to reduce existing and forecasted traffic congestion on the U.S. 101 and Del Norte Boulevard Interchange. This project would provide congestion relief by improving traffic operations while enhancing safety by eliminating geometric deficiencies at the interchange. The proposed project would provide additional capacity for existing and projected traffic increases. The completion of the U.S. 101/Del Norte Boulevard Interchange Project will meet the City's goals of accommodating future improvements along the U.S. 101.

- Reduce traffic congestion and delay to improve traffic flow
- Improve mobility and operation
- Eliminate geometric deficiencies to enhance safety
- Help achieve the City's goals for the "Destination 2030: 2004 Regional Transportation Plan"

S.3 Joint CEQA/NEPA Document

The proposed project is a joint project by the Department and the FHWA and is subject to state and federal environmental review requirements. Project documentation, therefore, has been prepared in compliance with both the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). The Department, in cooperation with the City, serve jointly as the lead agency under CEQA. Ventura County serves as a Responsible Agency under CEQA. Effective July 1, 2007 the Federal Highway Administration (FHWA) has delegated its responsibilities under NEPA to the Department for environmental review and consultation responsibilities under NEPA pursuant to 23 U.S.C. 327.

Some impacts determined to be significant under CEQA may not lead to a determination of significance under NEPA. Because NEPA is concerned with the significance of the project as a whole, it is quite often the case that a "lower level" document is prepared for NEPA. One of the most commonly seen joint document types is an Environmental Assessment / Environmental Impact Report (EA/EIR).

S.4 Areas of Controversy

The only area of controversy that has arisen with regard to the proposed project thus far is the degree to which agricultural land is needed for the project and how that acquisition is to be viewed within the local planning context. Resolution of this issue will occur as part of agency consultation betweenVentura County, City of Oxnard, Ventura Local Agency Formation Commission and the Ventura County Agricultural Commissioner's Office.

S.5 Unresolved Issues

The agricultural land acquisition issue and its accomodation in terms of local planning officials, remain to be resolved. Resolution is expected as part of the NEPA/CEQA process.

S.6 Comments and Coordination

S.6.1 Agency Coordination

An early agency consultation meeting for the proposed project was held on April 17, 2006 with representatives from the following stakeholder organizations: City of Oxnard Planning Deparment, County of Ventura Planning Division, County of Ventura Public Works Transportation Department, and County of Ventura Agricultural Commissioner's Office, and Parsons. This meeting was held with the intent to namely discuss potential impacts to agricultural land, associated jurisdictional involvement, and applicable significance thresholds and project approval requirements.

S.6.2 Public Comments

A Public Scoping period was conducted beginning on February 13, 2007 and concluded on March 15, 2005. A public open house was held on February 22, 2007. A summary of comments received during the scoping period is provided in Appendix F.

A *Notice of Availability/Notice of Initiation of Studies* was published and copies were distributed to a list of responsible and trustee agencies, as well as parties known to have an interest in the project, as shown in Chapter 6.

A public hearing/open house has been scheduled for Thursday, October 4, 2007. The public comment period officially began on September 4, 2007 and will end on October 15, 2007.

Locations for public review of the EA/DEIR are as follows:

Caltrans
District 7 Office
100 So. Main Street
Los Angeles, CA
Contact: Carlos Montez
(213) 897-9116

City of Oxnard
305 West Third Street
Oxnard, CA 93030
Contact: Ralph Alamillo
(805) 385-8341

City of Oxnard
Main Library
251 South A Street
Oxnard, CA 93030

S.7 Summary of Project Impacts and Mitigation

Under NEPA, the degree of magnitude (i.e., context and intensity) of the project's impacts is determined as follows. NEPA requires that an EIS be prepared if the proposed action has the potential to "significantly affect the quality of the human environment." To determine that potential, one must consider both the context in which the action takes place and the intensity of effects per section 1508.27 of the Council on Environmental Quality (CEQ) regulations. Also, under NEPA, there must be evidence in the document that avoidance, minimization of impacts has been considered.

Tables S-1 provides a summary of the impacts that have been determined for the proposed project, broken down by project alternative. Table S-2 provides a listing of the proposed mitigation measures intended to mitigate or reduce impacts where possible. Several of the project elements have been modified to avoid or minimize potential environmental impacts. Proposed mitigation measures are listed, where avoidance and minimization attempts could not fully resolve the impacts.

For purposes of this combined NEPA/CEQA document, NEPA and CEQA findings are shown separately. The term "beneficial effect" means a change producing a beneficial consequence and applies to both NEPA and CEQA. The term "no effect" means essentially no change from either existing conditions or the No Build Alternative and applies to both NEPA and CEQA. Where no entry is provided in the table for a given alternative, it should be presumed by the reader that the effect would be essentially the same as the No Build condition.

Table S-1: Summary of Major Potential Impacts from Alternatives

Potential Impact	Alternative 2 Tight Diamond	Alternative 3 Loop On Ramp	Alternative 4 Modified Loop On Ramp	Alternative 1: No Build
Land Use and Planning (Consistency with City General Plan)	Property Acquisition required for project Right of Way.	Property Acquisition required for project Right of Way.	Property Acquisition required for project Right of Way.	No Impact
Farmlands	Farmland of Statewide Importance would be converted to transportation use in amounts exceeding Ventura County Initial Study Assessment thresholds. Approximately 5.83 acres of farmland would be acquired.	Farmland of Statewide Importance would be converted to transportation use in amounts exceeding Ventura County Initial Study Assessment thresholds. Approximately 13.58 acres of farmland would be required.	Farmland of Statewide Importance would be converted to transportation use in amounts exceeding Ventura County Initial Study Assessment thresholds. Approximately 13.32 acres of farmland would be required.	No Impact
Growth	Interchange improvements would accommodate expected future traffic associated with regional background growth and would be consistent with locally approved projects.	Interchange improvements would accommodate expected future traffic associated with regional background growth and would be consistent with locally approved projects.	Interchange improvements would accommodate expected future traffic associated with regional background growth and would be consistent with locally approved projects.	No Impact
Community/Economic Impacts	Partial Acquisitions required for project right of way.	Partial Acquisitions required for project right of way.	Partial Acquisitions required for project right of way.	No Impact
Environmental Justice	Environmental justice population not affected by project; noise abatement to be provided.	Environmental justice population not affected by project; noise abatement to be provided.	Environmental justice population not affected by project; noise abatement to be provided.	No Impact
Utilities and Emergency Services	Once operational, project would not affect utilities. Emergency service providers would have improved access and reduced response times.	Once operational, project would not affect utilities. Emergency service providers would have improved access and reduced response times.	Once operational, project would not affect utilities. Emergency service providers would have improved access and reduced response times.	Continued Congestion and delays at the interchange could impair accessibility and response times.

Potential Impact	Alternative 2 Tight Diamond	Alternative 3 Loop On Ramp	Alternative 4 Modified Loop On Ramp	Alternative 1: No Build
Traffic/ Parking/ Pedestrian Safety	Freeway main line acts as constraint to ideal performance. Interchange traffic operations improved.	Freeway main line acts as constraint to ideal performance. Interchange traffic operations improved.	Freeway main line acts as constraint to ideal performance. Interchange traffic operations improved. Eliminates conflict with heavy traffic on the interchange. Provides better LOS on northbound ramps.	Continued deterioration of level of service at the interchange and connecting local streets would occur, thereby increasing congestion and delay.
Visual Quality	Removal of Eucalyptus trees reduces elements of visual interest. Views from nearby residences and businesses essentially unchanged. Existing landscaped areas would be removed. Potential for stray light and glare into nearby areas.	Removal of Eucalyptus trees reduces elements of visual interest. Views from nearby residences and businesses essentially unchanged. Existing landscaped areas would be removed. Potential for stray light and glare into nearby areas.	Removal of Eucalyptus trees reduces elements of visual interest. Views from nearby residences and businesses essentially unchanged. Existing landscaped areas would be removed. Potential for stray light and glare into nearby areas.	No Impact
Historical Cultural Resources	No Impact	No Impact	No Impact	No Impact
Archaeological Resources	No Impact	No Impact	No Impact	No Impact
Flood Control, Hydrology, Water Quality, and Stormwater Runoff	Project would not encroach into flood control channels. Small increase in surface flow would have insignificant effect on flood control channels. Permanent effects to water quality via runoff not expected to be significant. Amounts expected to be small and BMP's to be implemented.	Project would not encroach into flood control channels. Small increase in surface flow would have insignificant effect on flood control channels. Permanent effects to water quality via runoff not expected to be significant. Amounts expected to be small and BMP's to be implemented.	Project would not encroach into flood control channels. Small increase in surface flow would have insignificant effect on flood control channels. Permanent effects to water quality via runoff not expected to be significant. Amounts expected to be small and BMP's to be implemented.	No Impact
Geology/Soils/ Seismicity	No effect on or from geological conditions. Design to accommodate for site conditions.	No effect on or from geological conditions. Design to accommodate for site conditions.	No effect on or from geological conditions. Design to accommodate for site conditions.	No Impact
Hazardous Waste/Materials	No effect on hazardous waste. Hazardous materials transported on freeway and controlled via Motor Vehicle Code.	No effect on hazardous waste. Hazardous materials transported on freeway and controlled via Motor Vehicle Code.	No effect on hazardous waste. Hazardous materials transported on freeway and controlled via Motor Vehicle Code.	No Impact

Potential Impact	Alternative 2 Tight Diamond	Alternative 3 Loop On Ramp	Alternative 4 Modified Loop On Ramp	Alternative 1: No Build
Paleontology	No impact on paleontological resources.	No impact on paleontological resources.	No impact on paleontological resources.	No Impact
Air Quality	Project would have no effect on traffic volumes or vehicle mix and therefore also no effect on local or regional air quality. Project does not require CO or PM 2.5, 10 hot spot analysis. Project is exempt from MSAT analysis due to no meaningful effect on traffic volumes. Project is listed in 2004 SCSG and will be listed in 2006 RTP. Project is not a project of Air Quality Concern.	Project would have no effect on traffic volumes or vehicle mix and therefore also no effect on local or regional air quality. Project does not require CO or PM 2.5, 10 hot spot analysis. Project is exempt from MSAT analysis due to no meaningful effect on traffic volumes. Project is listed in 2004 SCSG and will be listed in 2006 RTP. Project is not a project of Air Quality Concern.	Project would have no effect on traffic volumes or vehicle mix and therefore also no effect on local or regional air quality. Project does not require CO or PM 2.5, 10 hot spot analysis. Project is exempt from MSAT analysis due to no meaningful effect on traffic volumes. Project is listed in 2004 SCSG and will be listed in 2006 RTP. Project is not a project of Air Quality Concern.	No Impact
Noise	Project analysis indicates freeway main line produces noise exceeding abatement thresholds at Nyeland Acres properties. Soundwalls would be constructed along the property line of affected properties.	Project analysis indicates freeway main line produces noise exceeding abatement thresholds at Nyeland Acres properties. Soundwalls would be constructed along the property line of affected properties.	Project analysis indicates freeway main line produces noise exceeding abatement thresholds at Nyeland Acres properties. Soundwalls would be constructed along the property line of affected properties.	No Impact
Energy	Interchange would not affect traffic volumes and therefore also not energy consumption.	Interchange would not affect traffic volumes and therefore also not energy consumption.	Interchange would not affect traffic volumes and therefore also not energy consumption.	No Impact

Potential Impact	Alternative 2 Tight Diamond	Alternative 3 Loop On Ramp	Alternative 4 Modified Loop On Ramp	Alternative 1: No Build
Biological Resources	Project would have no effect on natural communities. Project would have no effect on wetlands or waters of the U.S. Project would have no effect on plant species. Project would have no effect on animal species. Project would have no effect on T & E species. Project would have little effect on invasive species; may help to retard growth if construction mitigation measures followed.	Project would have no effect on natural communities. Project would have no effect on wetlands or waters of the U.S. Project would have no effect on plant species. Project would have no effect on animal species. Project would have no effect on T & E species. Project would have little effect on invasive species; may help to retard growth if construction mitigation measures followed.	Project would have no effect on natural communities. Project would have no effect on wetlands or waters of the U.S. Project would have no effect on plant species. Project would have no effect on animal species. Project would have no effect on T & E species. Project would have little effect on invasive species; may help to retard growth if construction mitigation measures followed.	No Impact
Section 4(f) properties	No Impact	No Impact	No Impact	No Impact
Cumulative and Secondary Impacts	Project would not have cumulative impacts in any category.	Project would not have cumulative impacts in any category.	Project would not have cumulative impacts in any category.	No Impact

Table S-2: Summary of Avoidance, Minimization, and Mitigation Measures

Environmental Factor	Mitigation Measures		
	Alternative 2	**Alternative 3**	**Alternative 4**
Land Use	None Required	None Required	None Required
Farmlands	The project proponents would fund and implement a farmland protection program such as transfer or purchase of development rights or conservation easements, e.g. impact fees, farmland trust.	The project proponents would fund and implement a farmland protection program such as transfer or purchase of development rights or conservation easements, e.g. impact fees, farmland trust.	The project proponents would fund and implement a farmland protection program such as transfer or purchase of development rights or conservation easements, e.g. impact fees, farmland trust.
Growth	None Required	None Required	None Required
Community/ Economic Impacts	Compensation will be provided in accordance with the Uniform Relocation and real Properties Assistance Act and local regulations, if applicable.	Compensation will be provided in accordance with the Uniform Relocation and real Properties Assistance Act and local regulations, if applicable.	Compensation will be provided in accordance with the Uniform Relocation and real Properties Assistance Act and local regulations, if applicable.
Environmental Justice	None Required	None Required	None Required
Utilities and Emergency Services	None Required	None Required	None Required
Traffic/Parking/ Pedestrian Safety	None Required	None Required	None Required

Table S-2: Summary of Avoidance, Minimization, and Mitigation Measures

Environmental Factor	Mitigation Measures		
Visual Quality	Arborist's Tree Report will be prepared. Replacement trees will be planted at a ratio to be determined by the city. City of Oxnard Parks and Recreation Department or City Council to approve removal of mature trees. Landscaping to be provided in keeping with City and County landscaping standards. Replacement planting will consist of standard Caltrans highway planting, and all removal and replacement of trees within the Caltrans right-of-way will be approved by the Caltrans District Landscape Architect. "The City Scenic Highway" design guidelines will be incorporated into project design. Roadway and lighting design will minimize the light and glare at Nyeland Acres.	Arborist's Tree Report will be prepared. Replacement trees will be planted at a ratio to be determined by the city. City of Oxnard Parks and Recreation Department or City Council to approve removal of mature trees. Landscaping to be provided in keeping with City and County landscaping standards. Replacement planting will consist of standard Caltrans highway planting, and all removal and replacement of trees within the Caltrans right-of-way will be approved by the Caltrans District Landscape Architect. "The City Scenic Highway" design guidelines will be incorporated into project design. Roadway and lighting design will minimize the light and glare at Nyeland Acres.	Arborist's Tree Report will be prepared. Replacement trees will be planted at a ratio to be determined by the city. City of Oxnard Parks and Recreation Department or City Council to approve removal of mature trees. Landscaping to be provided in keeping with City and County landscaping standards. Replacement planting will consist of standard Caltrans highway planting, and all removal and replacement of trees within the Caltrans right-of-way will be approved by the Caltrans District Landscape Architect. "The City Scenic Highway" design guidelines will be incorporated into project design. Roadway and lighting design will minimize the light and glare at Nyeland Acres.
Historical Cultural Resources	None Required	None Required	None Required
Archaeological Resources	None Required	None Required	None Required
Flood Control, Hydrology, Water Quality and Stormwater Runoff	During project design, location hydraulic studies will be performed and hydraulic modeling will be conducted. A hydraulic report summarizing the results of this analysis will be submitted for review by the local agencies listed in the Flood Insurance Rate Maps (FIRMs) BMP's to be implemented to reduce pollutant discharge. Examples include infiltration and detention devices, biofilitration, and/or gross solids removal. Hydroseeding and landscaping will minimize erosion and reduce runoff.	During project design, location hydraulic studies will be performed and hydraulic modeling will be conducted. A hydraulic report summarizing the results of this analysis will be submitted for review by the local agencies listed in the Flood Insurance Rate Maps (FIRMs) BMP's to be implemented to reduce pollutant discharge. Examples include infiltration and detention devices, biofilitration, and/or gross solids removal. Hydroseeding and landscaping will minimize erosion and reduce runoff.	During project design, location hydraulic studies will be performed and hydraulic modeling will be conducted. A hydraulic report summarizing the results of this analysis will be submitted for review by the local agencies listed in the Flood Insurance Rate Maps (FIRMs) BMP's to be implemented to reduce pollutant discharge. Examples include infiltration and detention devices, biofilitration, and/or gross solids removal. Hydroseeding and landscaping will minimize erosion and reduce runoff.
Geology/ Soils/ Seismicity	None required	None required	None required

Table S-2: Summary of Avoidance, Minimization, and Mitigation Measures

Environmental Factor	Mitigation Measures		
Hazardous Waste/ Materials	None required	None required	None required
Paleontology	None required	None required	None required
Air Quality	None required	None required	None required
Noise	Soundwalls to be constructed along the property lines of affected properties.	Soundwalls to be constructed along the property lines of affected properties.	Soundwalls to be constructed along the property lines of affected properties.
Energy	None Required	None Required	None Required
Biological Resources	None Required	None Required	None Required
Section 4(f) Properties	None Required	None Required	None Required
Cumulative and Secondary Impacts	None Required	None Required	None Required

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LIST OF SUPPORTING TECHNICAL STUDIES

(all bound separately)

- Natural Environment Study (Parsons, 2006).
- Noise Study Report (Parsons, 2006)
- Air Quality Technical Study (Parsons, 2006)
- Water Quality, Hydrology & Floodplain Technical Memorandum (Parsons, 2005)
- Initial Site Assessment (Parsons, 2005)
- Preliminary Foundation Report (Diaz•Yourman & Associates, 2006)
- Community Impact Assessment Report (Parsons, 2006)
- Historic Preservation Survey Report (including Archaeological Survey Report) (Parsons, 2006)
- Preliminary Environmental Assessment Report (Parsons, 2005)

CHAPTER 1 – PROPOSED PROJECT

1.1 Introduction

The project site is located in the County of Ventura (County), at the Del Norte Boulevard Interchange on U.S. 101. Figure 1-1 shows the project site location. Figure 1-2 shows the City and County jurisdictional boundaries in the project vicinity. The U.S. 101 is nominally a north-south principal arterial on the United States Highway System, that runs east-west through the project area and connects Ventura County with Los Angeles County. The U.S. 101 is classified as an urban principal arterial freeway whose purpose is to provide international, interstate, interregional, and intraregional travel (commute and noncommute) and goods movement. It is also part of the Surface Transportation Assistance Act (STAA) route network for oversized trucks, the Interregional Road System (IRRS), a designated Lifeline route; and the National Highway System (NHS).

The project site consists of the U.S. 101/Del Norte Boulevard Interchange Improvement Project and an area of approximately 8.7 acres to the north of the interchange located within unincorporated Ventura County, in addition to an approximately 4.8-acre area south of the interchange located within the City. The portions of the project site located north and south of the interchange are currently active agricultural lands. Developments are proposed for the area south of the interchange that would convert agriculture land to industrial and commercial uses.

The U.S. 101/Del Norte Boulevard Interchange Improvement Project is the last of five interchanges located on U.S. 101 within the City to be improved to eliminate geometric deficiencies. Improvements along the corridor have been a priority for the City for many years, and completion of the U.S. 101/Del Norte Boulevard Interchange Improvement Project will meet the City's goal of accommodating future improvements along U.S. 101 and enhancing safety by eliminating existing geometric deficiencies. Also, the proposed project is expected to bring economic benefits to the area, including reduced traffic congestion, reduced traffic delay, and improved mobility. Public support is anticipated for this project since it is expected to improve safety and make it more convenient for the traveling public.

Figure 1-1 – Project Location Map

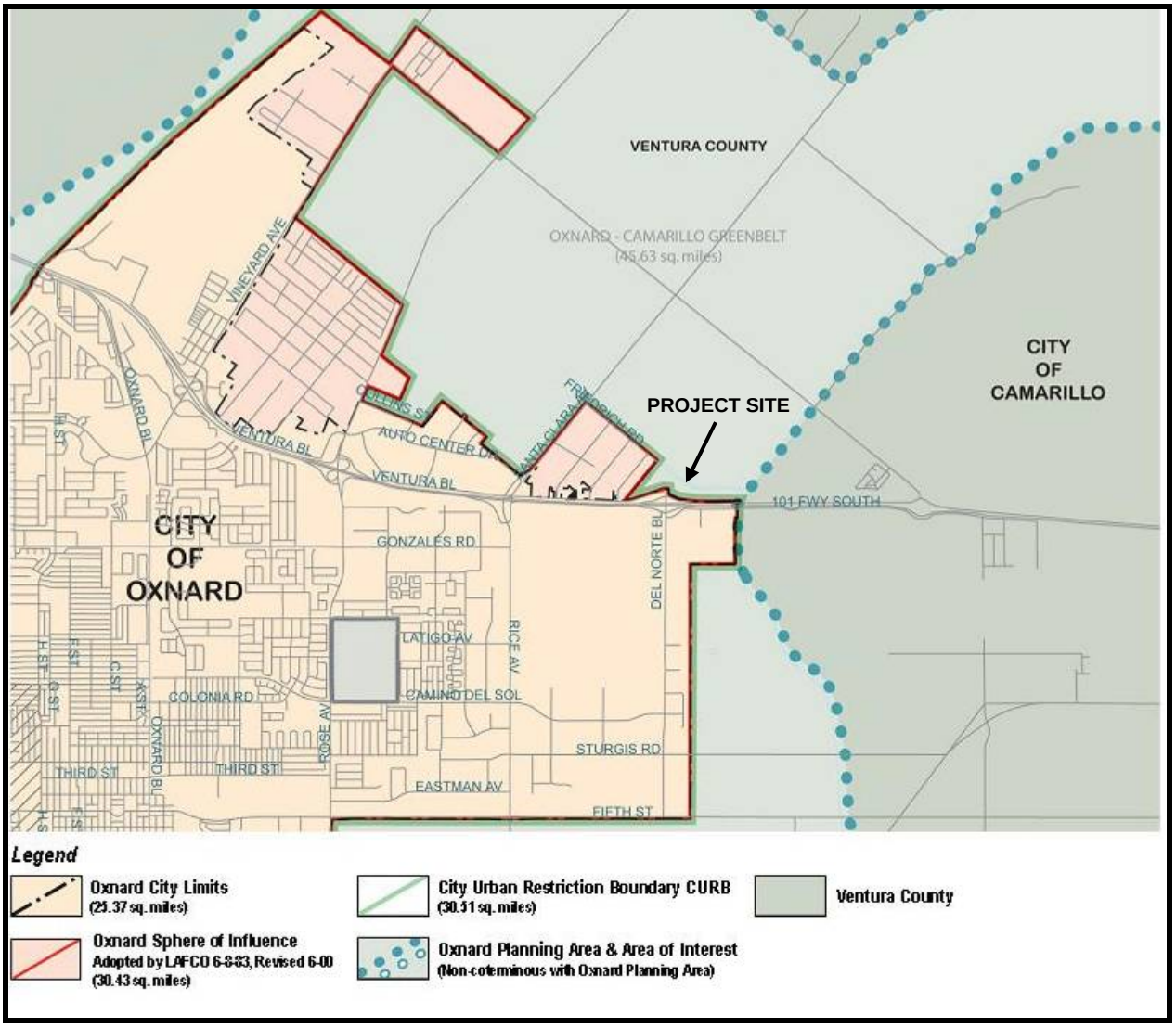


Figure 1-2 – City and County Jurisdictional Boundaries

The proposed project is identified as *Plan Project 5M0405* in Appendix I of "Destination 2030: 2004 Regional Transportation Plan", a federally approved regional transportation plan (RTP) for six counties in southern California (including Ventura County) that is prepared by the Southern California Association of Governments (SCAG). The RTP provides a long-term vision of regional transportation goals, policies, objectives, and strategies; assesses current and projected demand for travel and goods movement; and identifies necessary actions to meet the region's mobility and accessibility needs. Transportation investments in the SCAG region that receive federal or state transportation funds must be consistent with the RTP and must be included in the SCAG Regional Transportation Improvement Program (RTIP) when ready for funding. The 2006 RTIP for the project region implements the 2004 RTP and includes a list of all transportation projects proposed over a six-year period, Fiscal Years (FY) 2006/7 – 2011/12. The proposed project is listed as the *US-101/ Del Norte Interchange/Ramps Reconstruction Project* in the Draft 2006 RTIP – Ventura County State Highway Projects list. It is listed under

the conformity category "non-exempt" with the Project ID "VEN051006." Upon approval by federal agencies, the 2006 RTIP will replace the current operating RTIP.

1.2 Purpose

The purpose of the proposed project is to reduce existing and forecasted traffic congestion on the U.S. 101 and Del Norte Boulevard Interchange. This project would provide congestion relief by improving traffic operations while enhancing safety by eliminating geometric deficiencies at the interchange. The proposed project would provide additional capacity for existing and projected traffic increases. The completion of the U.S. 101/Del Norte Boulevard Interchange Project will meet the City's goals of accommodating future improvements along the U.S. 101 Freeway. It will accomplish the following objectives:

- Reduce traffic congestion and delay to improve traffic flow
- Improve mobility and operation
- Eliminate geometric deficiencies to enhance safety
- Help achieve the City's goals for the "Destination 2030: 2004 Regional Transportation Plan"

1.3 Need

Traffic Capacity

The configuration of the existing U.S. 101/Del Norte Boulevard over-crossing has insufficient capacity for existing and forecasted traffic. Long queues and delays occur at the ramp intersections, which are controlled by stop signs. The current configuration of the interchange does not have the capacity to carry the projected traffic volumes. Traffic analysis for the existing U.S. 101/Del Norte Boulevard Interchange was performed on January 27, 2005. The existing traffic data were analyzed and Year 2005 traffic volumes were generated. Year 2030 traffic forecasts were developed by reviewing existing and future traffic demand forecasts. Table 2-1 shows the existing and forecasted traffic volumes.

Table 2-1 – Existing and Forecasted Traffic Volumes

Facility Name	Average Daily Traffic		AM Peak Hour		PM Peak Hour	
Year	2005	2030	2005	2030	2005	2030
Northbound US-101 south of Del Norte Boulevard off-ramp	66,700	90,700	4,400	5,360	5,100	7,300
Northbound Del Norte Boulevard off-ramp	5,800	14,600	570	1,460	560	1,300
Northbound US-101 between off & on-ramps	60,900	76,100	3,830	4,200	4,540	6,000
Northbound Del Norte Boulevard on-ramp	2,300	6,100	160	370	360	780
Northbound US 101 north of Del Norte boulevard on-ramp	63,200	82,300	3,990	4,570	4,900	6,780
Southbound US 101 north of Del Norte Boulevard off-ramp	65,000	83,900	5,400	6,540	4,800	6,180

Facility Name	Average Daily Traffic		AM Peak Hour		PM Peak Hour	
Southbound Del Norte Boulevard off-ramp	2,200	5,700	250	480	160	590
Southbound US 101 between off & on-ramps	62,800	78,100	5,150	5,900	4,640	5,600
Southbound Del Norte Boulevard on-ramp	5,500	14,600	470	1,190	680	1,580
Southbound US 101 south of Del Norte Boulevard on-ramp	68,300	92,500	5,620	7,090	5,320	7,100
Ventura Boulevard north of US 101	3,900	5,600	220	300	380	600
Del Norte Boulevard between off & off ramps	10,600	26,300	810	2,010	990	2,240
Del Norte Boulevard south of Camino Avenue	11,800	38,700	1,310	3,440	1,650	4,080

Source: Parsons, 2006.

Substantial land use development, including commercial warehouse and office developments in the areas south of U.S. 101 and the extension of Del Norte Boulevard to the south have caused an increase in the traffic volume at the interchange. Table 2-2 shows the Level of Service (LOS) for the existing intersections within the project area based on existing 2005 and forecasted 2030 traffic volumes, which indicates that several of the intersections at the proposed project are currently operating at level of service less than rating "C". As shown in the table, there are presently congestion and delays at the southbound ramps intersection during the AM and PM peak hours and at the northbound ramps intersection during the PM peak hour. Traffic analysis shows by the Year 2030, if no improvements are made, the existing interchanges at U.S 101/Del Norte Boulevard will operate at severely congested Levels of Service (LOS) E and F.

Table 1-2 – Existing and Projected LOS for the Existing Interchange

Period	Intersection	MOE	Year 2005 (Existing) sec/veh	Year 2030 (Projected) sec/veh
AM	Del Norte Blvd/Northbound Ramps	Delay	22.2	549.5
		LOS	C	F
	Del Norte Blvd/Southbound Ramps	Delay	48.8	821.6
		LOS	E	F
	Del Norte Blvd/Camino Avenue	Delay	12.2	39.4
		LOS	B	E
PM	Del Norte Blvd/Northbound Ramps	Delay	37.0	518.9
		LOS	E	F
	Del Norte Blvd/Southbound Ramps	Delay	165.0	662.6
		LOS	F	F
	Del Norte Blvd/Camino Avenue	Delay	23.5	1865.0
		LOS	C	F

Source: Parsons, 2006.

Geometric Deficiencies

There is a need to accommodate safety enhancements at the U.S. 101/Del Norte Boulevard interchange. The existing over-crossing provides a roadway that is too narrow to accommodate the turning radius prescribed by the Surface Transportation Assistance Act (STAA) for trucks and does not have sufficient capacity to accommodate the projected traffic volumes. The left-turn movement from westbound Camino Avenue to Del Norte Boulevard is currently prohibited due to the proximity of the southbound on-/off ramps and the poor stopping sight distance at the intersection. Commercial and industrial areas 0.25-mile south of the freeway generate high volumes of truck traffic. It is difficult for large semi-trailers to maneuver left turns from the U.S. 101 northbound off-ramp to the existing Del Norte Boulevard because of the narrow roadway and large ramp skew angles.

The City defines Del Norte Boulevard as a pedestrian-accessible route. The interchange does not have a continuous sidewalk on either side of Del Norte Boulevard. A sidewalk exists only on the West Side of the over-crossing. The Americans with Disabilities Act (ADA) requires that the maximum longitudinal slope of an accessible route shall not be greater than 5 percent unless landings are provided at every 2.5 ft rise. The existing roadway has a 6 percent maximum longitudinal slope without the landings, which does not comply with ADA requirements.

There are several geometric elements and roadway deficiencies of the interchange that do not meet the present design standards of Caltrans, including the following:

- Existing Del Norte Boulevard over the U.S. 101 provides a non-standard stopping sight distance of 290 ft, while the Caltrans HDM Index 201.1 requires a stopping sight distance of 385 ft.
- The existing interchange provides corner sight distance of 250 ft at the northbound off- ramp and 225 ft southbound off-ramp, while Caltrans HDM Index 405.1 advises that corner sight distance of 525 ft should be provided.
- The Caltrans HDM 504.3(3) Mandatory Standard requires that the minimum distance between ramp intersections and local road intersections shall be 410 ft. The existing distance of 33 ft between the curb-return of the southbound on-/off ramps and Camino Avenue does not meet the requirements.
- The minimum clearance on U.S. 101 between the bents at the Del Norte Boulevard over-crossing is 67 ft for northbound traffic and 63 ft for southbound traffic. The minimum clearance required for the future widening is 68 ft. The existing over-crossing will not accommodate the future widening with standard lane and shoulder widths.
- Caltrans HDM 309.2 mandates that 16.7 ft shall be the minimum vertical clearance over the roadbed of the state facility, while the structure inventory and appraisal report show that the minimum existing vertical clearance of the Del Norte Boulevard over-crossing is 15.6 ft.
- The existing shoulders along the Del Norte Boulevard over U.S. 101 are 2.3 ft wide with curb and gutter. The Caltrans HDM Index 302.1 requires that the outside shoulder width

match the approach roadway, but not less than 4 ft where a local facility crosses over and connects to the State facility.

Analysis of Accident Data

The Traffic Accident Surveillance and Analysis Systems accident data for the recent 3-year period (January 1, 2003 to December 5, 2005) were compared to the statewide average accident rates for similar facilities. There were 49 accidents in the northbound direction and 58 accidents in the southbound direction of the freeway mainline at the U.S. 101/Del Norte Boulevard interchange. Most of the accidents in both directions were "rear-end" and "hit object" type accidents. Accident rates in both directions of the mainline at the interchange are slightly lower than the statewide average accident rates for similar facilities.

Also there were a total of 15 accidents that occurred at the northbound and southbound ramps of the U.S. 101/Del Norte Boulevard intersection. Most of these accidents occurred in the area where the freeway ramps intersect with the local street and on the ramp. This data was compared to the statewide average accident rate for similar facilities. The actual accident rates for the ramps are lower than the statewide average accident rate, with the exception of the southbound off-ramp.

It is anticipated that the proposed improvements at the U.S. 101/Del Norte Boulevard interchange will reduce the potential for accidents. The proposed improvements will eliminate many existing nonstandard features, employ traffic signals at the ramp intersections, improve traffic operations and increase the capacity of the interchange, thereby reducing the potential for accidents.

1.4 Project Description

The existing Del Norte Boulevard interchange at U.S. 101 is a diamond interchange. The overcrossing crossing currently provides two 11.8-foot (ft)-wide (3.6-meter [m]) lanes of traffic, a 4.3-ft-wide (1.3-m) shoulder in each direction, and a 5.6-ft-wide (1.7-m) sidewalk on the west side. Del Norte Boulevard is located to the south of U.S. 101, and terminates at the interchange. Del Norte Boulevard provides four (12-ft) lanes of traffic, 8.0-ft-wide (2.4-m) shoulders, and a raised median. Del Norte Boulevard is a two-lane roadway and has stop-controlled intersections with U.S. 101 northbound ramps, U.S. 101 southbound ramps, and Camino Avenue. The interchange overcrossing crossing connects Del Norte Boulevard with Ventura Boulevard, which is located north of the interchange. Ventura Boulevard begins at a location approximately 69.0 ft (21 m) from the beginning of the curb return to the existing interchange northbound on-ramp, curves westerly, and parallels U.S. 101 to the north. Ventura Boulevard is a two-lane arterial road in the project area, and provides access to U.S. 101 from uses north of the freeway.

At a location approximately 33.0 ft (10 m) from the beginning of the curb return of the southbound Del Norte Boulevard interchange on-ramp, Del Norte Boulevard connects with Camino Avenue, a collector street that serves as a frontage road paralleling the south side of U.S. 101 to the east of the interchange. Camino Avenue provides access to a commercial/light manufacturing development called Camino Real Industrial Plaza, located just south of U.S. 101.

To the north and south sides of U.S. 101, there is a narrow strip of sloped, open land located between U.S. 101 and the existing on- and off-ramps, and beneath the overcrossing. The slopes are landscaped with shrubbery and immature ornamental trees.

Proposed improvements to the U.S. 101/Del Norte Boulevard Interchange Improvement Project include reconfiguration of the on/off-ramps, replacement of the Del Norte Boulevard overcrossing, widening of Del Norte Boulevard, realignment of adjoining collector streets Ventura Boulevard and Camino Avenue, and construction of a noise abatement wall.

1.5 Alternatives

Four project alternatives have been identified. Alternative 1 (No Build) proposes no physical improvements to the interchange. Alternatives 2, 3 and 4 (Tight Diamond, Loop On-Ramp and Modified Loop On-Ramp, respectively) include the safety enhancements described above, in addition to reconfiguration of the interchange. Alternative 2 (Tight Diamond) proposes the reconstruction of the U.S. 101/Del Norte Boulevard Interchange Improvement Project, including replacement of the overcrossing, in a tight diamond configuration. Alternative 3 (Loop On-Ramp) proposes the reconfiguration and reconstruction of the U.S. 101/Del Norte Boulevard Interchange Improvement Project, including replacement of the overcrossing to the U.S. 101 northbound direction in a loop on-ramp configuration. Alternative 4 (Modified Loop On-Ramp) proposes the same improvements as Alternative 3 to the Del Norte Boulevard and Camino Avenue southbound on- and off-ramps, and would include a northbound loop on-ramp as proposed in Alternative 3. However, in comparison to Alternative 3, Alternative 4 would eliminate the direct northbound on-ramp at the northwest quadrant of the interchange. Proposed site plans for Alternatives 2, 3 and 4, are provided as Attachments 3, 4 and 5, respectively.

Figures 1-3, 1-4 and 1-5 show the proposed site plans for Alternatives 2, 3, and 4, respectively, over an aerial photo.

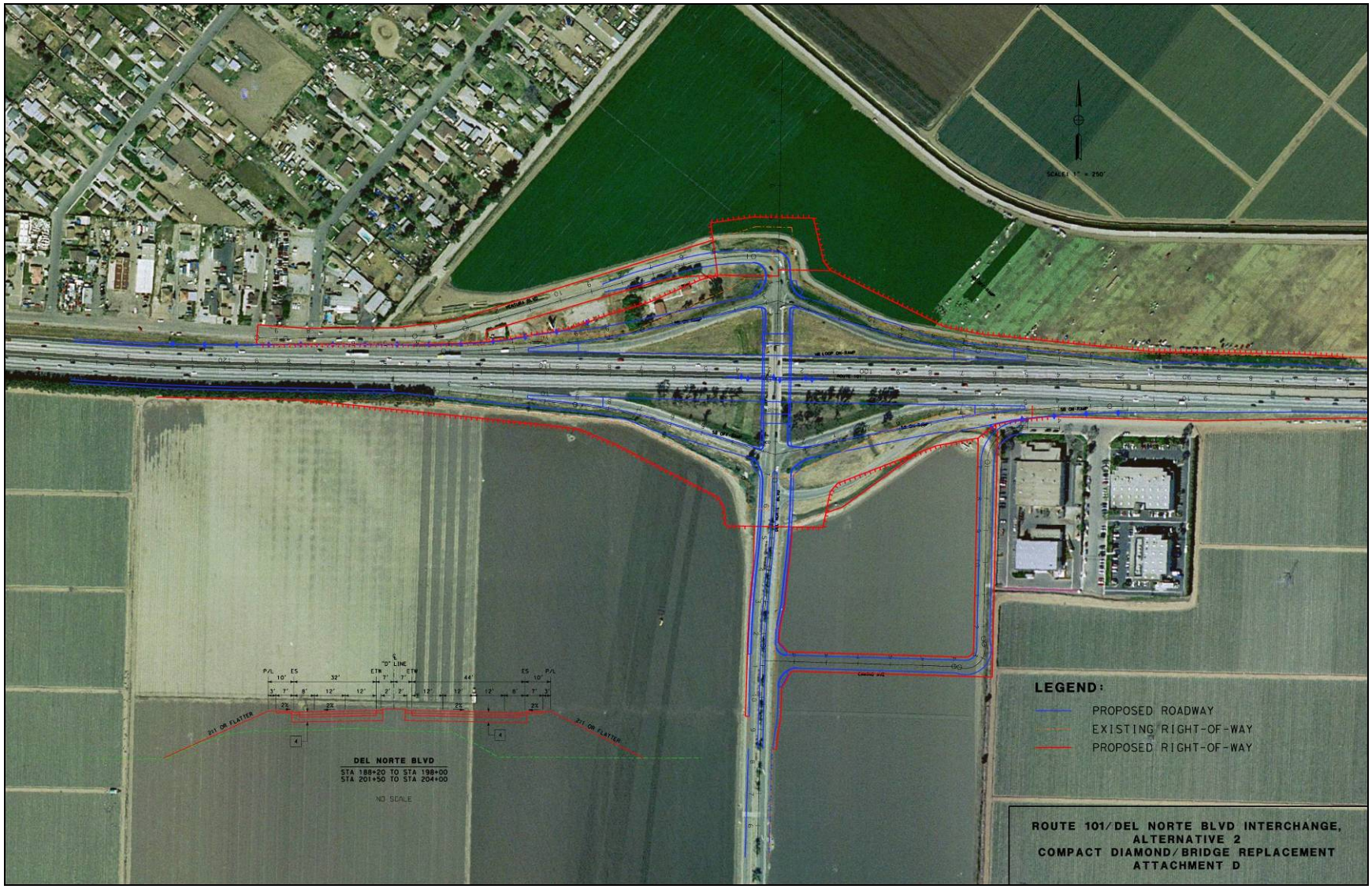


Figure 1-3 – Alternative 2 Site Plan

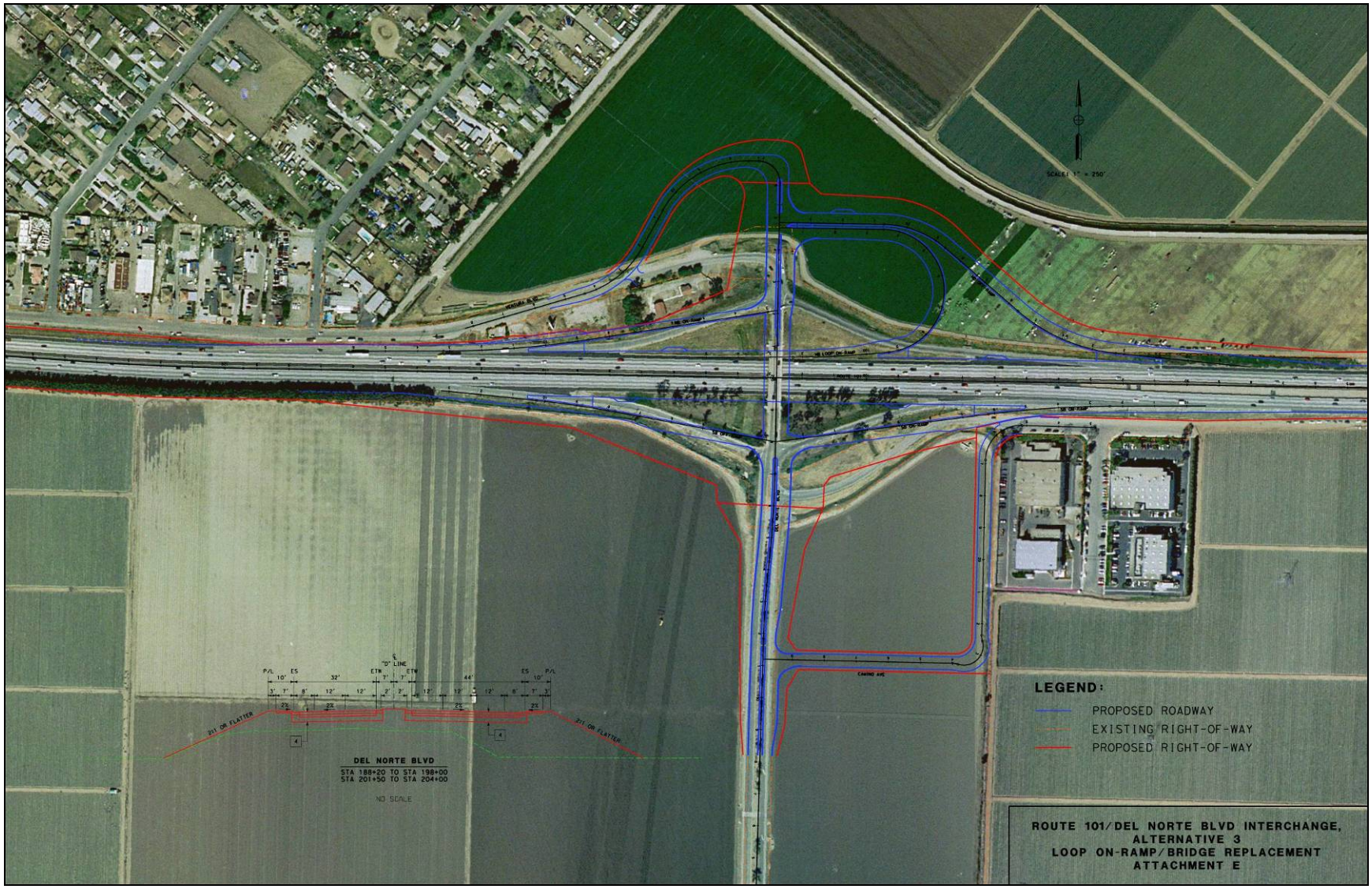


Figure 1-4 – Alternative 3 Site Plan

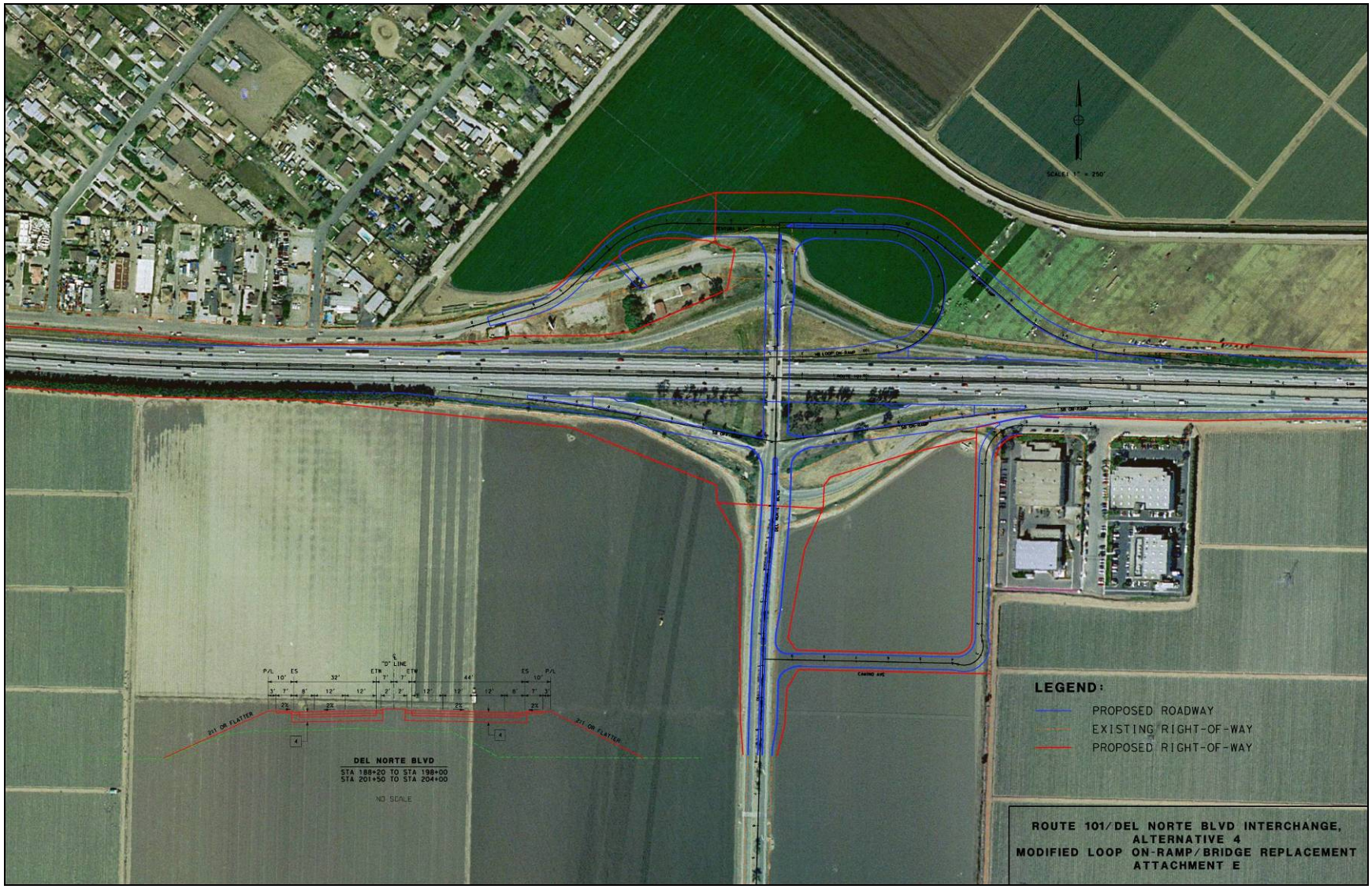


Figure 1-5 – Alternative 4 Site Plan

1.5.1 Alternative 1 (No Build Alternative)

Alternative 1 would maintain the current configuration of the interchange. The existing overcrossing would remain as two lanes and would not accommodate the future traffic demand and freeway widening. In addition, the nonstandard features (lanes on the Del Norte Boulevard overcrossing, corner sight distances, horizontal and vertical sight distances, and sidewalk and curb ramps) would not be corrected. The congestion currently experienced at this location would not be alleviated and would deteriorate with time. There are no construction or right-of-way (ROW) costs associated with this alternative.

1.5.2 Alternative 2 (Tight Diamond Build Alternative)

This alternative would replace the existing overcrossing and reconstruct all of the ramps. The tight diamond configuration of the interchange would remain. The new overcrossing would provide 5 lanes of traffic (two 12-ft wide through lanes in each direction and one 14-ft wide back to back left turn lane), 8ft-wide shoulders, and 5-ft-wide sidewalks on both sides of the bridge. The new ramp alignments would improve sight distances and accommodate truck movements. The alternative would maintain the auxiliary lanes and approximately 2, 267 ft of weaving section in the northbound direction and 2,044 ft of weaving section in the southbound direction between the Del Norte Boulevard interchange and the Rice Avenue interchange. There is approximately 5,660 ft of weaving section between the Del Norte Boulevard interchange and the Central Avenue interchange. Camino Avenue would be realigned further south from U.S. 101 to provide standard distance between the intersection of Camino Avenue at Del Norte Boulevard and the intersection of the southbound ramps at Del Norte Boulevard Ventura Boulevard would be realigned slightly to the north to meet vertical and horizontal alignment standards. The estimated total project cost for this alternative is $27.9 million, including $6.0 million for additional right-of-way (ROW). See Figure 1-3.

1.5.3 Alternative 3 (Loop On-Ramp Build Alternative)

This alternative would add a northbound loop on-ramp in the northeast quadrant of the interchange. The northbound off-ramp and Ventura Boulevard would be realigned to accommodate the loop on-ramp with a “free” right turn at Del Norte Boulevard while the northbound on-ramp and southbound on/off-ramps would maintain a tight diamond configuration. The northbound loop on-ramp would tie into the auxiliary lane discussed in Alternative 2 with a weaving section of 3,182 ft between it and the northbound off-ramp at the Rice Avene interchange. Camino Avenue would be the same as Alternative 2. The estimated total project cost (including construction, ROW and support costs) for this alternative is $40.8 million, including $7.4 million for ROW. See Figure 1-4.

1.5.4 Alternative 4 (Modified Loop On-Ramp Build)

Provides the same improvements as Alternative 3, but eliminates the direct northbound on-ramp in the northwest quadrant of the interchange. It also improves the connection of Ventura Boulevard with Del Norte Boulevard by eliminating the differential design speed at the intersection. The estimated total project cost (including construction, ROW and support costs) for this alternative is $39.4 million, including $6.7 million for additional ROW. See Figure 1-5.

Design options considered for all Build Alternatives

The following design options would eliminate several of the geometric deficiencies of the existing interchange:

- The existing Del Norte Boulevard overcrossing would be replaced with additional standard lane widths, standard shoulders, and standard bridge clearance to match the approach south of the overcrossing.
- The existing nonstandard corner sight distance at the northbound and southbound off-ramp intersection would be made standard.
- The design speed of Del Norte Boulevard would be increased from 39 MPH to 47 MPH
- The existing nonstandard stopping sight distance at the overcrossing would be eliminated.
- The proposed overcrossing would provide standard minimum vertical clearance of 16.7ft.
- The proposed project would provide sidewalks on both sides of the overcrossing and meet ADA requirements.
- The proposed project would provide a standard Type 26 concrete barrier at the overcrossing.
- The new overcrossing would have a span length of 113ft over the southbound lanes and 123ft northbound lanes of the freeway.
- The proposed improvements would accommodate semi-truck trailer.
- The nonstandard distance from the U.S. 101 southbound on/off-ramp intersection to the Camino Avenue intersection would be eliminated.
- Traffic signals would be provided at the Del Norte Boulevard/U.S. 101 ramp intersections.
- Street lighting improvements would be provided at the freeway ramps, Del Norte Boulevard and the overcrossing.

1.6 Permits and Approvals Needed

Table 1-3 lists the permits, reviews, and approvals would be required for project construction.

Table 1-3 – Permits and Approvals Needed

Agency	Permit/Approval	Authority
Ventura County Board of Supervisors Ventura County Planning Division	Land use consistency and acquisition approval	Ventura County General Plan[1]
City of Oxnard Department of Parks and Recreation	City of Oxnard – Tree removal written approval	City of Oxnard Landscape Standards Resolution 9301
California Department of Fish and Game (CDFG)	Migratory Bird Treaty Act	16 U.S.C. 703-712
State Water Resources Control Board (SWRCB) Los Angeles Regional Water Quality Control Board (RWQCB)	National Pollutant Discharge Elimination System (NPDES) Storm Water Pollution Prevention Plan	Federal Clean Water Act; Section 401

[1]A General Plan Determination of Consistency from the County Planning Division, and subsequent granting of approval for the City to acquire property within the County may be required from the County Board of Supervisors.
Source: Parsons, 2007

1.7 Planned Projects

Table 1-4 lists projects planned within a 2-mile radius of the project.

Table 1-4 – Planned Projects

Planned Projects	Description	Type
City of Oxnard[1]		
Sakioka Farms Specific Plan	three-million square feet (sq ft) of industrial business-research uses, five-million sq ft of industrial uses, and 900 sq ft of housing uses between Rice Avenue and Del Norte Boulevard, located southwest of the U.S. 101/Del Norte Boulevard interchange.	Industrial/ Commercial
Camino Real Business Park (Power Machinery) Specific Plan	40 acres of industrial and commercial uses for the area southeast of the 101/Del Norte Boulevard interchange.	Industrial/ Commercial
Unnamed	Industrial concrete tilt-up building	Industrial
Unnamed	Industrial concrete tilt-up building	Industrial
Lansco	3 limited industrial buildings and retail building	Industrial
Quinn Equipment Rental Facility	12,012 ft^2 office show room and repair shop with associated outdoor storage	Industrial
Alcaraz Catering	13,700 ft^2 catering truck operations facility	Industrial
Associated Ready Mix	SEC of Sturgis Road & Del Norte Blvd. concrete batch plant subdivision of 28.09 acre site	Industrial

Planned Projects	Description	Type
Unnamed	2 new industrial buildings for condominium purposes	Industrial
Unnamed	Redevelopment of existing industrial 12.64 acre site	Industrial
John Hall	Addition to existing building	Industrial
Haas Automation	Industrial building	Industrial
Seagate	3 office/industrial warehouse buildings	Industrial
Unnamed	2 spec industrial buildings	Industrial
Sunbelt Professional Center	2 office buildings	Industrial
Cal Coast Machinery Phase II	Multi-tenant industrial building	Industrial
Gibbs Truck Service	Industrial building on 2.72 acre site	Industrial
Unnamed	Industrial building	Industrial
Unnamed	2 industrial buildings	Industrial
Ventura Orthopedic	20,000 ft^2 medical office building on 1.5 acre site	Commercial
Homewood Suites	4 story hotel, with 125 guest suites	Commercial
Green Material Recycling	Addition of a mobile construction & demolition waste, and green material recycling line.	Commercial
Trinity Baptist Church	400-seat church	Commercial
Unnamed	Adding 8 new buildings self storage	Commercial
Golden State Self Storage	Add 11 new self storage buildings to existing self storage facility – Phase II	Commercial
U.S. 101/Springville Drive Interchange Project	New freeway interchange project located between Central Avenue and Las Posas interchanges, intended to enhance circulation.	Transportation
U.S. 101/Rice Avenue Interchange Project	Reconfiguration of the existing freeway interchange to an improved design that enhances safety and circulation.	Transportation
City of Camarillo[2]		
Project Number IPD-379	19,876 ft^2 building on 1.18 acre site	Industrial
Project Number T-4227	156 unit residential development	Residential

[1]City of Oxnard Planning website.
[2]City of Camarillo Planning website.

CHAPTER 2 – AFFECTED ENVIRONMENT/ENVIRONMENTAL CONSEQUENCES/AVOIDANCE, MINIMIZATION AND/OR MEASURES TO MINIMIZE HARM

This chapter provides a description of the affected environment, environmental consequences and measures to minimize harm for the range of environmental categories that affect the human, physical and biological environments.

In the sections that follow, impacts are assessed primarily for the three Build Alternatives described in Chapter 1. For all but a small minority of factors, the No Build Alternative would not result in permanent impacts and, in all cases, would not result in construction impacts, since no construction is proposed under this alternative. Therefore, unless a distinct impact would accrue to the No Build Alternative, that alternative is not discussed.

It should also be noted that nearly all of the impacts discussed in this chapter, which focuses on the requirements of the National Environmental Policy Act (NEPA), would have the same consequences when viewed in the context of the California Environmental Quality Act (CEQA; Chapter 3). Therefore, when reading the contents of Chapter 3, the reader is generally referred to the analysis presented in Chapter 2, except in those instances in which the requirements of CEQA differ from NEPA, with regard to regulatory guidance, impact thresholds or prescribed mitigation.

2.1 Human Environment

2.1.1 Land Use

The project site is located within the Oxnard agricultural plain, a predominately agricultural area located in the southern portion of the County. The project site is located at the County/City boundary. In the project vicinity, Ventura Boulevard serves as the boundary between the City and unincorporatedVentura County. The existing U.S. 101/Del Norte Boulevard interchange is located entirely within the City, however; the proposed project would involve the realignment of Ventura Boulevard north into unincorporated Ventura County land. Figure 1-2 provides a map of jurisdictional boundaries in the project area. Figure 2-1 provides land use designations of the project site and vicinity.

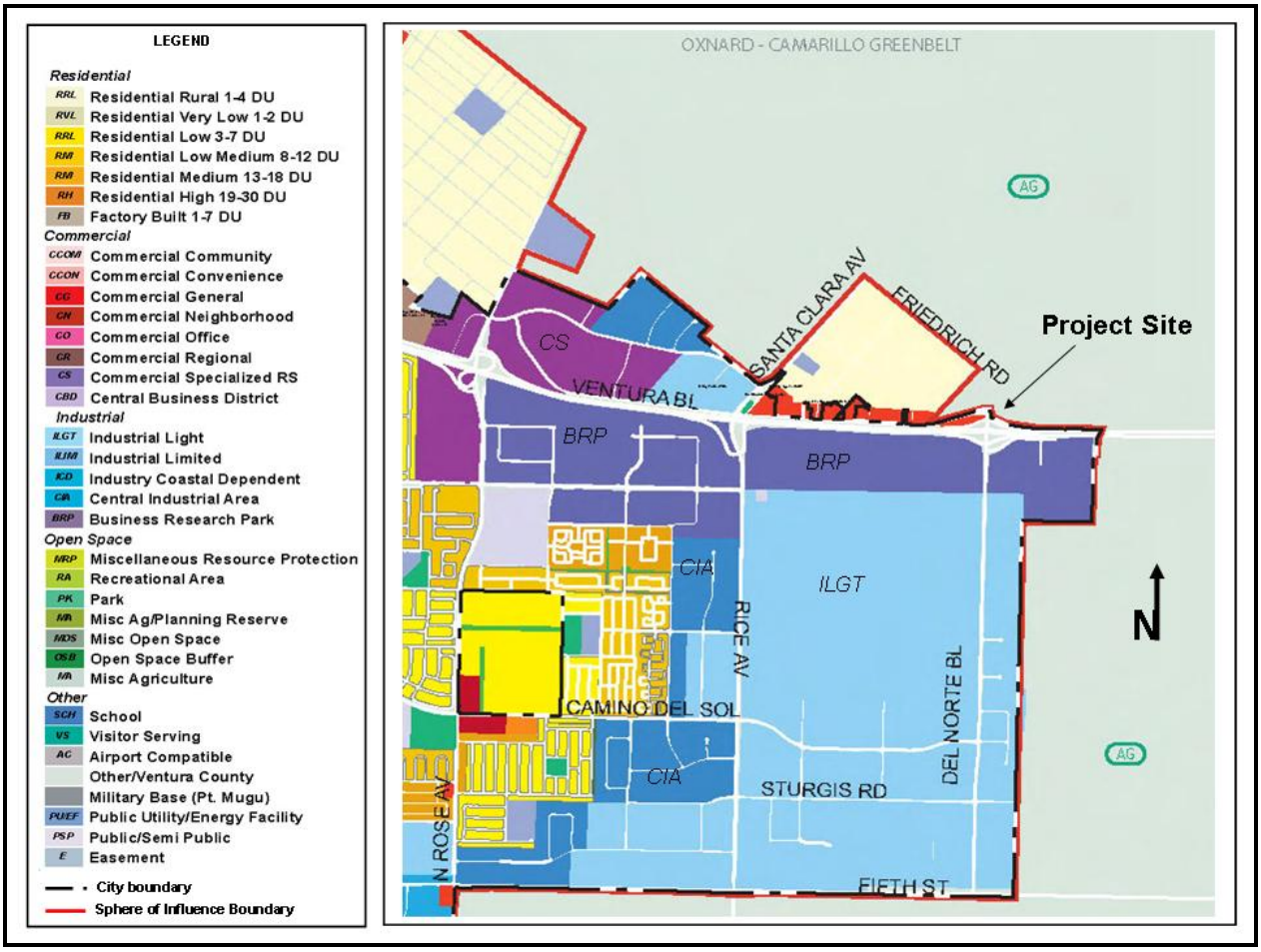


Figure 2-1 – Designated Land Use and Zoning

2.1.1.1 Existing Land Use

The project site is located in a primarily agricultural area.. Additional uses in the project area include residential, commercial, public works, and industrial. Active agricultural land borders the project site to the north and south. Residential and commercial uses most near the project site include the Nyeland Acres residential community, located approximately one-eighth mile northwest of the project alignment (see Figure 2-2). Industrial uses most near the project site include the Camino Real Industrial Plaza, a business park located adjacent to the southeast end of the project alignment. Other than these uses, the remaining project area is comprised of active agricultural land. The Nyeland Acres community is the only cohesive residential community located within the project area. Nyeland Acres is comprised of predominately single-family residences, and supports some multi-family residential properties, and two family mobile home parks. Other than the mobile home parks, commercial uses front Ventura Boulevard throughout the Nyeland Acres community. Many of the commercial properties along Ventura Boulevard are part of the City, while the remaining commercial properties and all the residential properties are part of unincorporated Ventura County. Detailed information about existing land use is provided in Table 2-1.

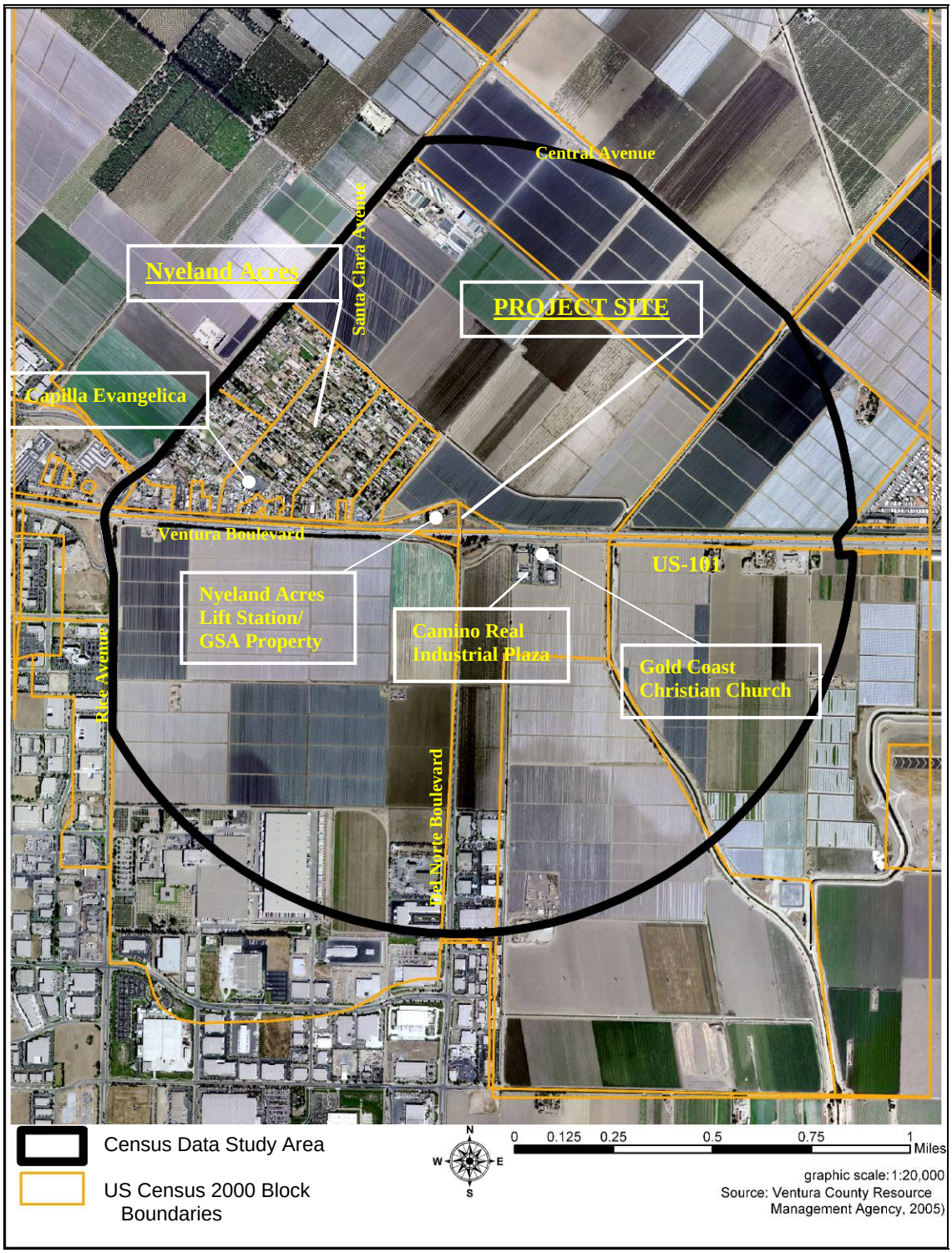


Figure 2-2 – Major Uses

Table 2-1 – Major Uses

Direction from Project Site	Major Uses and Land Use Description
North	Active agricultural land is located north of the project site, and is designated *Agricultural (40-acre minimum)* and zoned *Agricultural Exclusive (AE)* by the County. Most of this land is in active strawberry production. Along the north side of U.S. 101, Ventura Boulevard begins as a freeway frontage road where the Del Norte Boulevard overcrossing crosses U.S. 101, and continues west. The Nyeland Acres Lift Station, a County owned wastewater lift station, is located on a County-owned parcel within the City limits, between Ventura Boulevard and U.S. 101, shown in Figure 2-2. This property is designated *Commercial General (CG)* and zoned *General Commercial (C2)* by the City. Further east of the lift station on the same parcel is a facility operated by the County General Services Agency (GSA) that was once associated with the lift station and now serves as a storage facility (Hearne, 2005). This facility includes two storage buildings and a vehicle parking area, and it is enclosed with a chain-link fence. The County currently rents this property to a tree-trimming business.
South	Active agricultural land is located south of the project limits, and is designated and zoned *Business and Research Park (BRP)* by the City. Agricultural uses in the southernmost portion of the project area are designated *Industrial Light (ILGT)* and zoned *Light Manufacturing (M1)* by the City. Del Norte Boulevard runs perpendicular to the project corridor in a north-south direction and terminates at the U.S. 101/Del Norte Boulevard interchange. Camino Avenue begins at Del Norte Boulevard and runs east alongside the south side of U.S. 101, serving as a freeway frontage road. Active farmland stretches south from Camino Avenue to the south. A cluster of approximately 236 acres of industrial, commercial, research and professional uses are located to the far southwest of the project site, west of Del Norte Boulevard and south of the agricultural land that stretches north to the U.S. 101/Del Norte Boulevard interchange.
East	U.S. 101 continues east of the project limits, eventually southeast towards Los Angeles. Agricultural land located along the north side of U.S. 101 and east of the project limits is designated *Agricultural (40-acre minimum)* and zoned *Agricultural Exclusive (AE)* by the County. Camino Real Industrial Plaza, an industrial business park shown in Figure 2-2, is located along Camino Avenue south of U.S. 101 and east of the project limits. This property is designated and zoned *Business and Research Park (BRP)* by the City. A church, the Gold Coast Christian Church, is located within the Camino Real Industrial Plaza.
West	U.S. 101 continues west and north of the project limits, eventually towards Santa Barbara. Agricultural land, designated and zoned *Business and Research Park (BRP)* by the City, is located along the south side of U.S. 101 to the west of the project site. The Capilla Evangelica Church is centrally located within Nyeland Acres. The Nyeland Acres residential community, shown in Figure 2-2, is located northwest of the project site. There are two family mobile home parks that front Ventura Boulevard located within Nyeland Acres, Country Squire Mobile Home Park and Sunshine Manor. Most commercial uses along Ventura Boulevard in the Nyeland Acres community are designated *Commercial General (CG)* and zoned *General Commercial (C2)* and *General Commercial – Planned Development* (C2PD) by the City. The residential properties north of Ventura Boulevard in Nyeland Acres are part of unincorporatedVentura County, and are designated *Existing Community-Urban Reserve* and zoned *Urban Residential 2-4 D.U./acre (UR 2-4)*.[1]
Sources: Ventura County General Plan Land Use Map, 2003; Ventura County General Plan - El Rio/ Del Norte Area Plan, 1996; City of Oxnard 2020 General Plan, 2005; and site reconnaissance by Parsons staff on February 28, 2005.	

[1] County of Ventura, 2003. Ventura County General Plan Land Use Map, Figure 3.1 South Half. Ventura County Resource Management Agency. September

2.1.1.2 Future Land Use

City of Oxnard

The portion of the project site and adjacent lands located south of U.S. 101 is located within the City limits of Oxnard. Development trends in this portion of the City include the conversion of agricultural land to developed commercial, industrial and limited residential uses. All the agricultural land in the project area and within City limits is designated for urban development, including the land currently in agricultural use adjacent to U.S. 101. The City of Oxnard 2020 General Plan designates these properties for *Business and Research Park* and *Light Industrial* use. Two major development plans for this area are proposed at this time, 1) the Sakioka Farms Specific Plan and 2) the Camino Real Business Park (Power Machinery) Specific Plan. The Sakioka Farms Specific Plan proposes 300 acres of industrial uses and 100 acres of business and research uses between Rice Avenue and Del Norte Boulevard, located south of the U.S. 101/Del Norte Boulevard interchange. The Camino Real Business Park Specific Plan proposes 40 acres of similar uses for the area east of Del Norte Boulevard and south of U.S. 101. Both specific plans are currently undergoing environmental review prior to being considered for adoption.

Ventura County

The portion of the project area north of U.S. 101 is predominately unincorporated Ventura County that includes small businesses along Ventura Boulevard fronting U.S. 101, Nyeland Acres residential community, and active agriculture. There is no major development proposed in this portion of the project area, and this area is not an area of high growth or development (Smith, 2006). The majority of land in this area is agricultural, and is protected under County land use and zoning designations, and is subject to the Save Open Space and Agricultural Resources (SOAR) Ordinance that requires a public vote for any future urban uses.

2.1.1.3 Applicable Land Use Plans and Programs

The project site includes land within both the City and County, and approximately one-half of the project area lies within each jurisdiction. Therefore, both City and County local land use plans and policies apply to the proposed project.

The project site is not subject to a Coastal Zone Management Plan, and there are no designated wild and scenic rivers.[2] There are no parks or recreational facilities in the project vicinity, and the project site is not part of a local, regional, or state park program. The project site is not located within a habitat conservation plan (Parsons, 2005).

City of Oxnard 2020 General Plan

The City of Oxnard 2020 General Plan was adopted in 1990, and last amended in July of 2004. The general plan serves as a long-range planning document to provide the framework for future development and resource conservation. The City of Oxnard 2020 General Plan contains the following twelve elements: Land Use, Housing, Circulation (Traffic/Transportation), Safety, Open Space, Conservation, Noise, Growth Management, Parks and Recreation, Economic Development, Community Design, Public Facilities. Each element includes broad policies and

[2] National Wild and Scenic Rivers online database (http://www.nps.gov/rivers/wildriverslist.html#ca); accessed by Parsons, October, 2006.

goals to guide development and local decision-making. The elements also include implementation strategies for achieving stated policies and goals.

For example, some established land use policies in the City of Oxnard 2020 General Plan relevant to the proposed project include:

- Develop incentives for the land use transition from residential to commercial land use along the Ventura Freeway Corridor in the El Rio and Nyeland Acres area.
- Reduce congestion at major intersections in the City of Oxnard.
- Achieve level of service "C" on all roadways where feasible, subject to environmental review.
- Freeway corridors should be improved aesthetically through the use of landscaping and adjacent architectural treatment.
- Major new community facilities and public works structures represent a unique opportunity to create community pride through the design and construction of significantly attractive buildings, bridges, and other public structures. New public works structures should represent the high degree of quality and innovative design that is expected of private development and which contributes to a sense of pride.

The City of Oxnard 2020 General Plan contains adopted specific plans which establish guidelines for areas in which more detailed specific plans will be developed. The project area overlaps with one Specific Plan Area, the McInnes Ranch Business Park, Ordinance No. 2184. The McInnes Ranch Business Park covers 236 acres of industrial, commercial, research and professional uses.

Ventura County General Plan

The Ventura County General Plan, as amended in January of 2004, is the fundamental land use planning document for the County. The Ventura County General Plan consists of (a) Countywide Goals, Policies and Programs containing four chapters (Resources, Hazards, Land Use, and Public Facilities and Services); (b) four Appendices (Resources, Hazards, Land Use, and Public Facilities and Services) which contain background information and data in support of the Countywide Goals, Policies and Programs; and (c) several Area Plans which contain specific goals, policies and programs for specific geographical areas of the County. The project area falls within the Ventura County El Rio/Del Norte Area Plan, which includes approximately 6,984 acres of unincorporated land adjacent to the City, and within the City of Oxnard Sphere of Influence.

Pertinent goals, policies, and programs of the El Rio/Del Norte Area Plan relevant to the proposed project include:

Goal 1.5.1:	Protect, and if possible, improve the viewshed from U.S. 101 within the El Rio/Del Norte Area Plan boundary.
Program 2.2.3:	The Public Works Agency will prepare a proposal for consideration by the Board of Supervisors to study the feasibility of constructing noise

	barriers to protect existing noise sensitive uses which are or will be significantly impacted by traffic noise along the U.S. 101…from Rice/Santa Clara to Del Norte Boulevard.
Goal 3.1.1:	Preserve the character of the El Rio/Del Norte area. The character of the El Rio/Del Norte Area is defined by its small town, semi-rural qualities, consisting of several separate and distinct neighborhoods situated within the Oxnard agricultural plain, and comprising one community of common social and political interest.
Goal 3.2.1.1:	Preserve irrigated agricultural lands in the El Rio/Del Norte area.
Goal 3.2.1.1:	Minimize incompatibilities between agricultural operations and other land uses.
Goal 3.6.1.1:	Ensure that existing and future urban residential land use patterns result in cohesive and consolidated neighborhoods which preserve the community character of the El Rio/Del Norte area.
Goal 4.1.1.1:	Ensure an adequate circulation and transportation system to serve the needs of the existing and future residents of the El Rio/Del Norte area.
Goal 4.1.1.2:	Plan for safe pedestrian and bicycle pathways throughout the El Rio/Del Norte area.

2.1.1.4 Environmental Consequences

A. Temporary

There would be no adverse land use impacts associated with the project during construction. Project construction BMPs would be employed to minimize dust and manage stormwater runoff, as discussed in Sections 2.2.6 and 2.2.2, respectively. Construction staging would not occur on agricultural land outside the project footprint, and adjacent agricultural parcels would not be otherwise adversely affected during project construction.

B. Permanent

Acquisition of property south of U.S. 101, within the jurisdiction of the City of Oxnard, to provide right-of-way for the proposed transportation project would not be in conflict with existing City land use and zoning designations, or planned land use for this property. This land is designated *Business and Research Park* and zoned *Business and Research Park (BRP*), and along with adjacent farmland areas are planned for development into a business park as part of the City of Oxnard Draft Sakioka Farms Specific Plan and Camino Real Business Park (Power Machinery) Specific Plan (City of Oxnard, 2004b). The proposed project would not disrupt planned development and would, in fact, better accommodate the traffic flow associated with it. The proposed project would not disrupt or cause any changes to existing community plans, specific plans, or other planned development within the City of Oxnard.

Also, the proposed project would not conflict with any County community plans, specific plans or planned development. However, the project poses a conflict with Ventura County General

Plan goals and policies to preserve agricultural land. The Build Alternatives would require the acquisition and conversion of County agricultural land zoned and designated for preservation as agricultural use in the County General Plan. Impacts to farmland are analyzed in Section 2.1.2 Farmlands.

Additionally, the proposed project has the potential to affect existing jurisdictional boundaries in the project vicinity due to the proposed realignment of Ventura Boulevard north of the existing City/County boundary. Approval by the County Board of Supervisors and potentially also the Local Agency Formation Commission (LAFCO) may be required to grant the City permission to acquire land within County jurisdiction for purposes of the proposed project. It may be necessary to obtain a General Plan Determination of Consistency from the County Planning Division in support of this effort. A Ventura County General Plan Amendment (GPA) may be required as a result of the proposed conversion of County designated agricultural land to transportation use. Also, to be determined through this process is whether the City may be required to annex a portion or all of the identified County agricultural parcels. If annexation is required, the City will need to file an application for reorganization and a sphere of influence amendment with LAFCO. Additionally, the proposed project must be evaluated for consistency with farmland policies in the LAFCO Commissioner's Handbook. Jurisdictional boundaries would be adjusted accordingly.

2.1.1.5 Mitigation Measures

A. Temporary

See Sections 2.2.2 and 2.2.6 for Water Quality and dust suppression mitigation. Additional mitigation is not required.B. Permanent

Mitigation is not required.

2.1.2 Farmlands

The project site is located within the Oxnard agricultural plain, a predominately agricultural area located in the southern portion of the County, as shown in Figures 2-1 and 2-2. The portion of the project site located south of U.S. 101, within the City of Oxnard, is in active agricultural production. However, the City of Oxnard designates and zones this land for urban development, and two specific plans are proposed at this time for this area, as discussed in Section 2.1.1.2. The portion of the project site located north of U.S. 101, within unincorporated Ventura County, is also in agricultural production and is zoned and designated for such continued land use. Moreover, it is part of the Oxnard-Camarillo-Ventura Greenbelt, which is a joint resolution to protect open space and agricultural land in the area between the north and south of these two cities. Section 2.1.1 provides an overview of the project setting, and Figure 2-1 provides an aerial view of the project site and adjacent farmland.

Figure 2-3 – Aerial Photo of U.S. 101/Del Norte Boulevard Interchange and Adjacent Farmland

2.1.2.1 Farmland Regulatory Setting

Local planning policies for farmland in the project area are discussed in Section 2.1.1.3, and include policies from the City of Oxnard General Plan, Ventura County General Plan, Oxnard-Camarillo-Ventura Greenbelt, and City and County SOAR Ordinances. Consistency of the proposed project with the farmland policies in these land use plans are discussed in Section 2.1.1.3 and 2.1.1.4. Other farmland policies that comprise the farmland regulatory setting include:

Farmland Protection Policy Act

NEPA and the Farmland Protection Policy Act (FPPA, 7 USC 4201-4209; and its regulations, 7 CFR Part 658) require federal agencies, such as FHWA, to coordinate with the U.S. Department of Agriculture Natural Resources Conservation Service (USDA-NRCS) if their activities may irreversibly convert farmland (directly or indirectly) to nonagricultural use.

The entire project site fooprint is identified in the *Farmland of Statewide Importance* by the USDA-NRCS, or NRCS. The NRCS maintains Important Farmland Series Maps through the Land Inventory and Monitoring (LIM) system, which indicate areas that are identified as Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance, and Urban Built-up Land (USDA-NRCS, 2003). The California Department of Conservation has

adopted and modified farmland definitions developed by the NRCS, and monitors farmland through the Farmland Mapping and Monitoring Program (FMMP). The entire project site, both south and north of U.S. 101 is identified in the FMMP as Farmland of Statewide Importance. The California Department of Conservation defines Farmland of Statewide Importance as:

> "Land similar to Prime Farmland that has a good combination of physical and chemical characteristics for the production of agricultural crops. This land has minor shortcomings, such as greater slopes or less ability to store soil moisture than Prime Farmland. Land must have been used for production of irrigated crops at some time during the two update cycles prior to the mapping date (California Department of Conservation, 2003)."

Projects where farmland may be adversely affected require close coordination with the NRCS and completion of a Farmland Conversion Impact Rating Form AD 1006. The rating form provides a basis for assessing the extent of farmland impacts relative to federally established criteria. The NRCA administers the following categories of agricultural land:

- Prime
- Unique
- Other than prime or unique that is of statewide importance
- Other than prime or unique that is of local importance

Prime farmland which is already in or committed to urban development is by definition farmland not subject to the FPPA. Unique farmlands and farmlands of statewide or local importance are, however, subject to the FPPA (even in areas already in or committed to urban development).

Williamson Act Contract

Enacted in 1965, the California Land Conservation Act, better known as the Willamson Act, is an agricultural land protection program intended to preserve agricultural and open space lands by discouraging premature and unnecessary conversion to urban uses. The Act creates an arragement whereby private landowners contract with counties and cities to voluntarily restrict land to agricultural and open space uses for 10-year contract periods. The lands under a Williamson Act Contract are assessed for property tax purposes at a rate consistent with their actual use, rather than potential market value.

No portion of the project site is under a Williamson Act Contract, as established in the Williamson Land Conservation Act, Farmland Security Zone, or any other local agricultural land conservation act (LCA) (Bulla, 2005).

City of Oxnard Save Open-Space and Agricultural Resources (SOAR) Ordinance

The City of Oxnard SOAR Ordinance established a City Urban Restriction Boundary (CURB) line, a City Buffer Boundary (CBB) line, and redesignated "Agricultural Planning Reserve" to "Agriculture." The City of Oxnard SOAR Ordinance is intended to promote preservation of ongoing agricultural and other open space uses while encouraging efficient growth patterns that concentrate future development largely within existing developed areas. The portion of the project area south of U.S. 101 is within the City's CURB boundary.

Section 6 of the City of Oxnard SOAR Ordinance "Exemptions for Certain Projects" specifies that the provisions of this ordinance do not affect the authority and discretion of the City Council with respect to any roadways designated in the circulation element of the City of Oxnard General Plan as of January 1, 1998. Del Norte Boulevard is designated in this element, and therefore the proposed project is exempt from the City of Oxnard SOAR Ordinance.

Ventura County SOAR Ordinance

The Ventura County SOAR Ordinance puts limitations on general plan amendments relating to agricultural, open space, or rural land use designations. Such land use designations within the County may not be changed unless an amendment is approved by a vote of the people or County Board of Supervisors, under certain specified conditions. However, because public roads are not a land use governed by the County Non-Coastal Zoning Ordinance, a roadway improvement action such as the proposed project is not subject to the County SOAR Ordinance (Parsons, 2005c).

Oxnard-Camarillo-Ventura Greenbelt

The Oxnard-Camarillo-Ventura Greenbelt is a joint resolution between the Cities of Oxnard and Camarillo, and Ventura County, to protect open space and agricultural lands in the area between and north and south of the two cities. The greenbelt is additionally intended to reassure property owners located within these areas that lands will not be permanently converted to agriculturally incompatible uses. The agricultural lands north of U.S. 101 within the project area are all part of the Oxnard-Camarillo-Ventura Greenbelt.

2.1.2.2 Environmental Consequences

A. Temporary

There would be no substantial, adverse impacts to farmland associated with the project during construction. Project construction BMPs would be employed to minimize dust and manage stormwater runoff, as discussed in Sections 2.2.6 and 2.2.2, respectively. Construction staging would not occur on agricultural land outside the project footprint, although temporary easments may be required along adjacent farmland parcels to accommodate construction activities. Any temporary easements would be obtained in communication with property owners to minimize affects on farmland operations.

B. Permanent

The proposed Build Alternatives would require the acquisition and conversion of agricultural land designated of *Statewide Importance,* in addition to land zoned and designated for preservation as agricultural use in the County General Plan and the Oxnard-Camarillo-Ventura Greenbelt, resulting in adverse impacts to farmlands. The Oxnard-Camarillo-Ventura Greenbelt is intended to protect open space and agricultural lands, and to reassure property owners located within these areas that these lands will not be converted to agriculturally incompatible uses.

Alternative 2 would result in the acquisition of approximately 5.83 acres of farmland, including approximately 4.17 acres of agricultural land south of U.S. 101 (located within the City) and approximately 1.66 acres of agricultural land north of U.S. 101 (located within Ventura County). The proposed farmland acquisition is shown in Figure 2-4.

Alternative 3 would result in similar farmland and land use impacts as Alternative 2; however Alternative 3 would require the acquisition of 8.4 acres of farmland located within the County north of U.S. 101, an additional 7.08 acres in comparison to Alternative 2.. Alternative 3 would require the same acquisition of 4.84 acres of agricultural land south of U.S. 101 as proposed under Alternative 2. A total of 13.58 acres of farmland would be aquired to accommodate Alternative 3. The proposed farmland acquisition is shown in Figure 2-5.

The permanent impacts associated with Alternative 4 would be similar to Alternative 3; however, Alternative 4 would involve the total conversion of 13.32 acres of farmland, which is 0.26 fewer acres in comparison with Alternative 3. Alternative 4 would result in approximately 8.48 acres of agricultural land north of U.S. 101, which includes partial acquisitions from the same three individual agricultural parcels as Alternative 3. Alternative 3 would require the same acquisition of 4.84 acres of agricultural land south of U.S. 101. A total of 8.48 acres of farmland north of U.S. 101 would be acquired. Table 2-2 provides a comparison of proposed agricultural land acquisitions for each build alternative. The proposed farmland acquisition is shown in Figure 2-6.

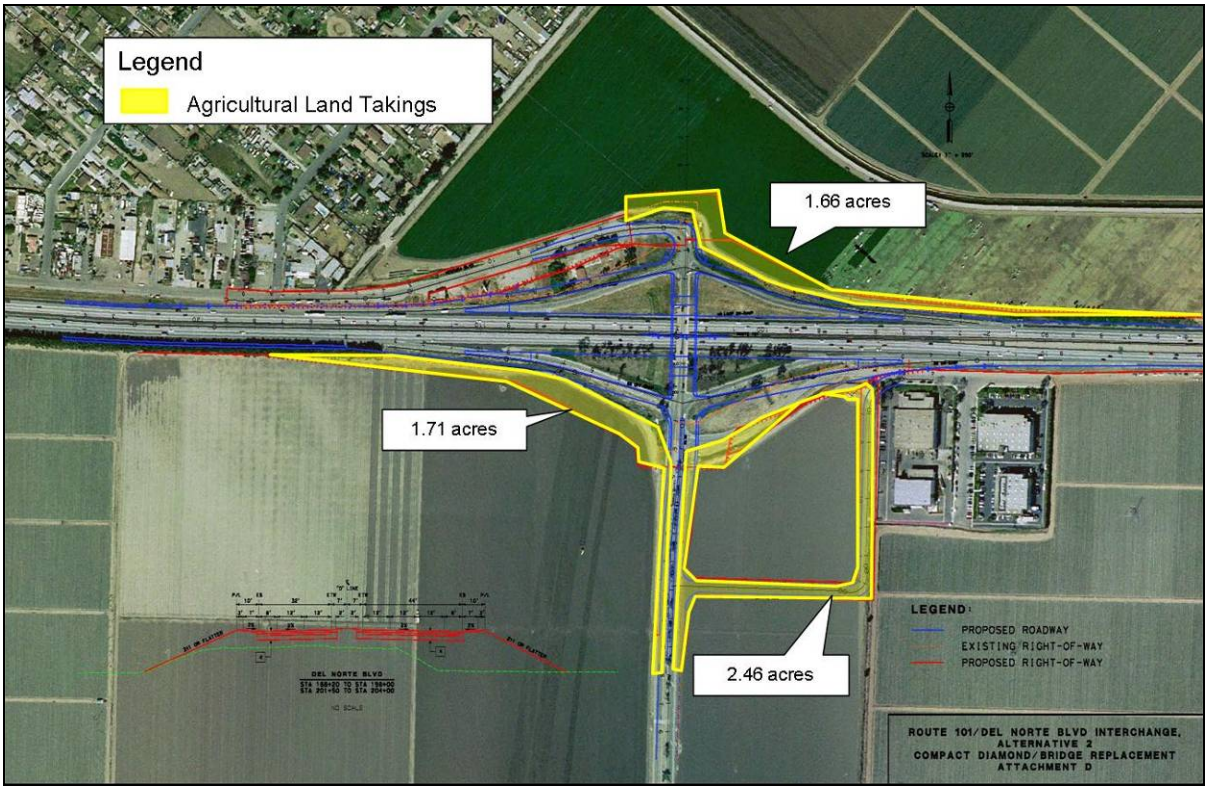


Figure 2-4 – Alternative 2 Proposed Project Farmland Acquisition

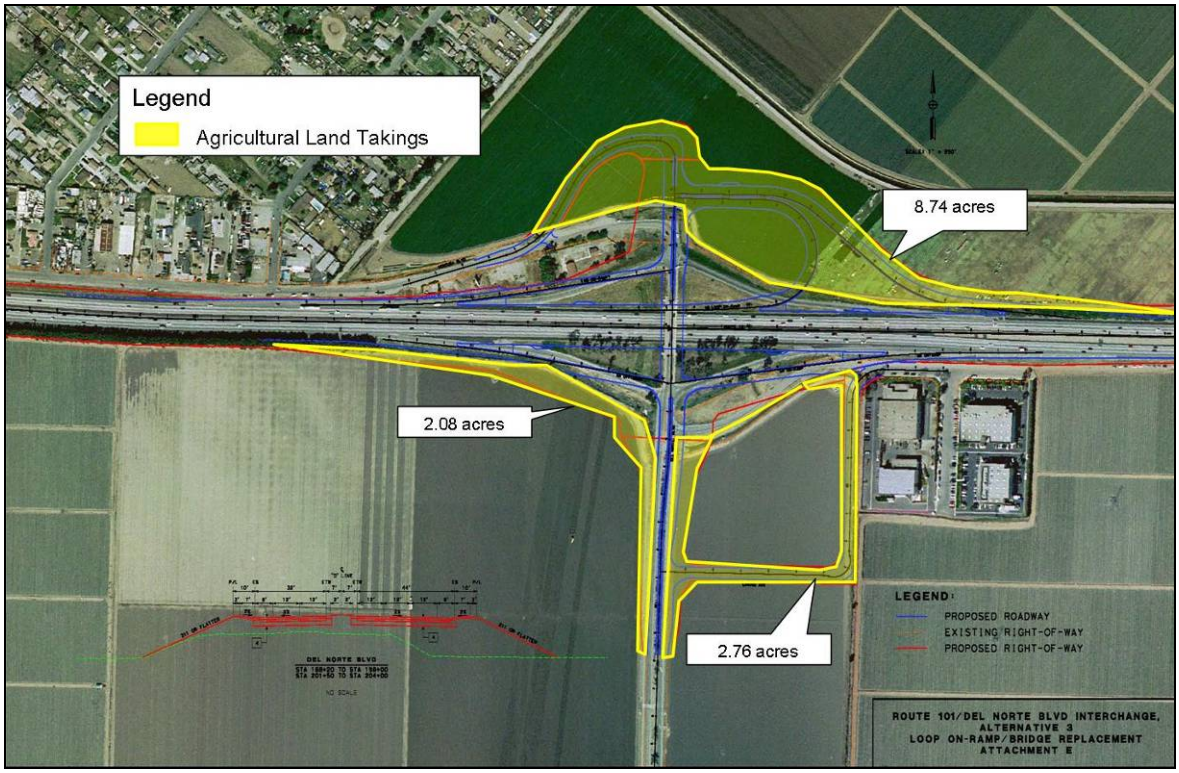


Figure 2-5 – Alternative 3 Proposed Project Farmland Acquisition

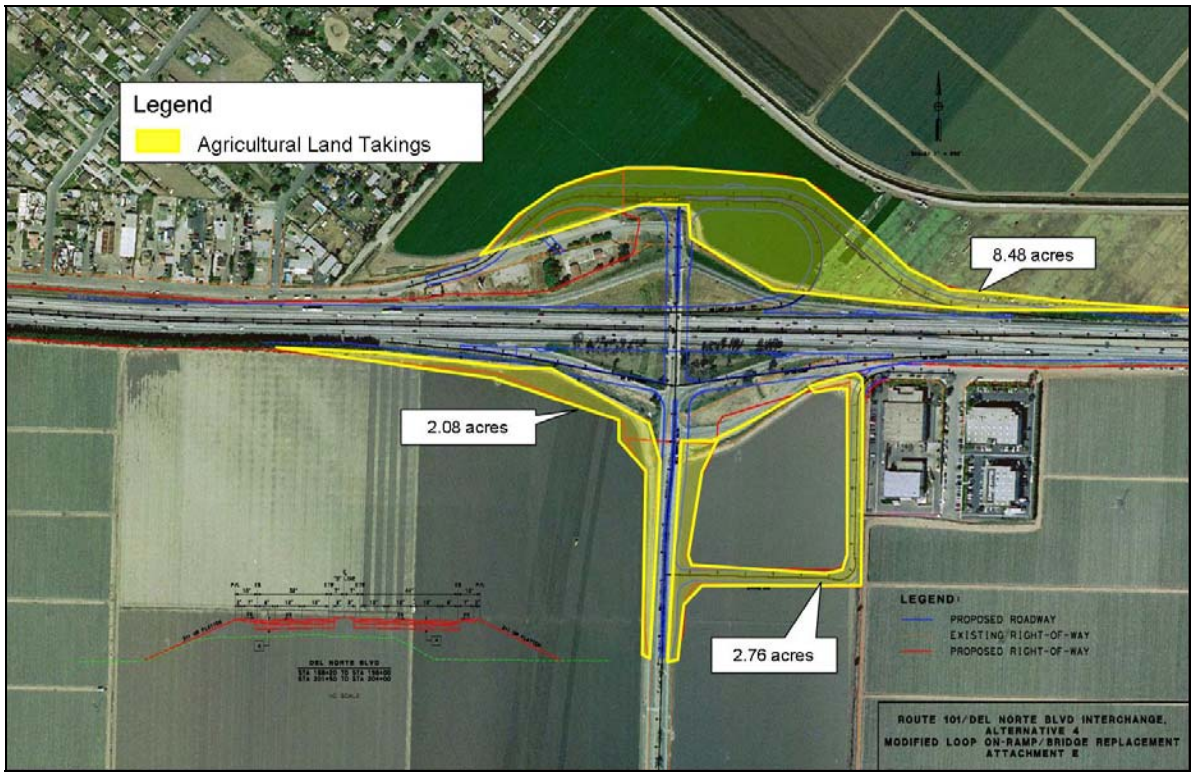


Figure 2-6 – Alternative 4 Proposed Project Farmland Acquisition

Table 2-2 – Proposed Project Farmland Acquisition

Alternative	City Farmland Acquisition (acres)	County Farmland Acquisition (acres)	Total Farmland Acquisition (acres)
Alternative 1 (No Build)	0.00	0.00	0.00
Alternative 2 (Compact Diamond)	4.17	1.66	5.83
Alternative 3 (Loop On-Ramp)	4.84	8.74	13.58
Alternative 4 (Modified Loop On-Ramp)	4.84	8.48	13.32

Note: All acreage in Table 2-2 represents direct acquisition..
Source: Parsons, 2007.

In terms of farmland conversion in the context of existing farmland in Ventura County, Table 2-3 shows the acreage of proposed agricultural land conversion for each build alternative, and provides a comparison to existing land within Ventura County designated as *Land of Statewide Importance*. As shown in Table 2-3, all three build alternatives would affect a minimal amount of such designated farmland within Ventura County. For additional information, see Farmland Conversion Impact Rating form AD 1006, provided as Appendix B.

Table 2-3 – Farmland Conversion by Alternative

Build Alternatives	Agricultural Land of Statewide Importance Converted (acres)[3]	Agricultural Land of Statewide Importance in Ventura County (acres)[4]	Percent Agricultural Land of Statewide Importance in Ventura County	Farmland Conversion Impact Rating[5]
Alternative 2 (Compact Diamond)	5.83	34,797	Negligible	TBD
Alternative 3 (Loop On-Ramp)	13.58	34,797	0.0450%	TBD
Alternative 4 (Modified Loop On-Ramp)	13.32	34,797	0.0412%	TBD

Note: All acreage in Table 2-3 represents direct acquisition..
Source: Form NRCS-CPA-106 (Farmland Conversion Impact Rating for Corridor-Type Projects)

[3] Note: This column provides a conservative estimate, as the acreage of *Land Committed to Nonagricultural Use* is included in the total acreage provided for land designated *Farmland of Statewide Importance.*

[4] Ventura County 2002-2004 Land Use Conversion Report. California Department of Conservation Division of Land Resource Protection Farmland Mapping and Monitoring Program. Found online at: http://www.consrv.ca.gov/DLRP/fmmp/product_page.asp

[5] Form NRCS-CPA-106 (Farmland Conversion Impact Rating for Corridor-Type Projects) has been submitted to the Natural Resources Conservation Service; results pending.

The land south of U.S. 101 is located within the City, and it is designated *Business and Research Park* and zoned *Business and Research Park (BRP*) (City of Oxnard, 2004). This farmland and adjacent areas are planned for development into a business park as part of the City of Oxnard Draft Sakioka Farms Specific Plan (City of Oxnard, 2004b). Acquisition of this land to support the proposed transportation project would not be in conflict with existing land use and zoning designations, or planned land use for this property. The local planning designations of this land indicate that despite its FMMP designation as *Farmland of Statewide Importance*, this land is committed to nonagricultural use. The FMMP maintains a category called *Land Committed to Nonagricultural Use* that consists of land permanently committed by local elected officials to nonagricultural development by virtue of decisions which cannot be reversed simply by a majority vote of a city council or county board of supervisors.[6] County boards of supervisors and city councils have final authority to designate lands in this category, and the FMMP maps these lands as local governments notify the NRCS. Because the agricultural land located with the City and south of U.S. 101 is designated as nonagricultural use in an adopted general plan, this land is considered Land Committed to Nonagricultural Use in the NRCS FMMP. Therefore, conversion of this land to nonagricultural use would not be an adverse effect.

However, proposed acquisition of County agricultural land north of U.S. 101 constitutes an adverse impact because this land is protected for agricultural use. The farmland located north of U.S. 101 is designated *Agricultural (40-acre minimum)* and zoned *Agricultural Exclusive (AE)* by the County, and is part of the Oxnard-Camarillo-Ventura Greenbelt.

As shown in the project site plans, Figures 1-3 through 1-5, the proposed acquisition of agricultural land north of U.S. 101 involves a partial acquisition of the protected agricultural parcels. The proposed partial acquisition is not anticipated to render any parcel unviable for continued agricultural use. Substantial acquisition of 8.74-acres of one parcel (25 percent of a 35.26-acre parcel), and minor acquisitions of three other parcels would be required to accommodate the proposed project. The proposed minor acquistions would not affect access to these parcels, nor would substantialy affect crop yields. The proposed worst-case 8.74-acre acquisition from the 35.26-acre subject parcel would also not affect access to this parcel and is not anticipated to affect agricultural operations on the remainder parcel. Nonetheless, conversion of protected agricultural land to nonagricultural use would create a conflict with existing land use and agricultural preservation policies and plans, resulting in adverse affects.

2.1.2.3 Measures to Minimize Harm

A. Temporary

F-C1: ***Temporary construction easements obtained in communication with property owners may be required for adjacent farmlands to accommodate project construction activities along the project site perimeter. Compensation for such temporary easements would be provided. Also, see Sections 2.2.1.4 and 3.2.1.4 for water quality and dust suppression mitigation.*** **B. Permanent**

The following minimization measure is proposed to lessen the impacts associated with the permanent conversion of farmland:

[6] California Department of Conservation, 1994. A Guide to the Farmland Mapping and Monitoring Program. Pages 4, 15-16.

F-1: The project proponents would fund and implement a farmland protection program such as a transfer or purchase of development rights or conservation easements, and land banking will be explored with the Ventura County Agricultural Commissioner's Office. Replacement land, if available, will be determined in consultation with the City of Oxnard, Ventura County, and the theVentura County Agricultural Commissioner's Office.

2.1.3 Growth

2.1.3.1 Affected Environment

City of Oxnard

The portion of the project site and adjacent lands located south of U.S. 101 is located within the City of Oxnard jurisdiction. Population projections for the City are provided in Table 2-4. All the agricultural land in the project area and within City limits is designated for urban development in the City of Oxnard 2020 General Plan, including the land currently in agricultural use adjacent to U.S. 101. Two major development plans for this area are proposed at this time, 1) the Sakioka Farms Specific Plan and 2) the Camino Real Business Park (Power Machinery) Specific Plan. The Sakioka Farms Specific Plan proposes three-million square feet (sq ft) of industrial business-research uses, five-million sq ft of industrial uses, and 900 sq ft of housing between Rice Avenue and Del Norte Boulevard, located southwest of the U.S. 101/Del Norte Boulevard interchange. The Camino Real Business Park Specific Plan proposes 40 acres of similar uses for the area located southeast of the U.S. 101/Del Norte Boulevard interchange. These aforementioned projects are the major projects planned in the proposed project area. Other planned projects within the City are listed in Table 1-4, which are primarily smaller-scale commercial and industrial developments or redevelopments.

Table 2-4 – City and Unincorporated County Population Growth Projections

Build Alternatives	2007	Forecast 2010	Forecast 2030
City of Oxnard	192,997	199,200	242,500
Unincorporated Ventura County	96,102	101,600	114,600
Source: Southern California Association of Governments Regional Transportation Plan Projections, 2004.			

Ventura County

The portion of the project area north of U.S. 101 is predominately unincorporated Ventura County that includes small businesses along Ventura Boulevard fronting U.S. 101, the Nyeland Acres residential community, and active agriculture. There is no major development proposed in this portion of the project area, and this area is not an area of high growth or development (Smith, 2006). Population growth over the last decade has been relatively slow as Nyeland Acres is the only residential community within the project area, and it is an older community that has not experienced substantial growth during this time as evidenced in historic aerial photographs (EDR, 2005c). Population projections for the entire unincorporated County are provided in Table 2-4. The remaining project area is agricultural, and is protected under County land use and zoning designations, the Oxnard-Camarillo Greenbelt, and is subject to the Save

Open Space and Agricultural Resources (SOAR) Ordinance that requires a public vote for any future urban uses.

Regional Transportation and the U.S. 101/Del Norte Boulevard Interchange

U.S. 101 is the most important transportation link between the City and the rest of the County, and metropolitan Los Angeles. U.S. 101 is nominally a north-south principal arterial on the United States Highway System, that runs east-west through the project area and connects Ventura County with Los Angeles County. The U.S. 101/Del Norte Boulevard interchange is one of five interchanges on the U.S. 101 that serve the City. The existing U.S. 101/Del Norte Boulevard interchange serves as a gateway to the City's commercial and industrial communities south of U.S. 101. It also serves as one of two access points between Nyeland Acres and U.S. 101, and the Camino Real Industrial Plaza and U.S. 101. The bulk of vehicle traffic in the City is carried on arterial roadways (City of Oxnard, 2004). The existing U.S. 101/Del Norte Boulevard interchange has been identified by the City as having substandard geometrics and not providing adequate capacity. Growth in the surrounding communities south of U.S. 101 is projected to continue to increase traffic volumes in the area, increasing the impacts of these deficiencies.

2.1.3.2 Environmental Consequences

A. Temporary Impacts

The Build Alternatives would not result in temporary growth impacts. Construction activities would have no effect on growth as construction employees from the existing labor pool would be utilized and therefore would not encourage additional population or housing in the area. Project construction would not impede planned growth in the project area, and implementation of a Transportation Management Plan (discussed in Section 2.1.5) would ensure continued access and circulation in the project area throughout project construction. No adverse, temporary growth affects would result from Alternative 1.

B. Permanent Impacts

The Build Alternatives for the proposed project are designed to improve traffic operations and provide capacity for existing and projected traffic using the U.S. 101/Del Norte Boulevard interchange. The configuration of the existing U.S. 101/Del Norte Boulevard overcrossing has insufficient capacity for existing and forecasted traffic. Del Norte Boulevard south of the interchange has four lanes of traffic for through movements, but at the overcrossing, it has only two nonstandard width lanes. Long queues and delays occur at the U.S. 101 /Del Norte Boulevard ramp intersections, which are controlled by stop signs. The proposed project would accommodate anticipated planned growth in traffic by providing sufficient capacity on both the overcrossing and ramp terminals to maintain adequate levels of service. The proposed project would not increase vehicle trips or the volume-to-capacity ratio on roads (Parsons, 2005a).

The project would not induce change in the location, distribution, or rate of growth of local or regional population and housing. The proposed project would not induce development in areas that are not otherwise expected to occur under currently adopted development plans, and no adverse effect on population and housing growth would result.

The proposed project is not part of a large commercial or residential development, nor would it impede any such future development. The City has no plans to develop or annex land north of U.S. 101 in the project area. The City would annex any property only at the direction of the local agency formation commission (LAFCO), and intends to acquire property in Unincorporated Ventura County only for the purpose of improving the interchange and realigning Ventura Boulevard to the north of the existing alignment.

2.1.3.3 Measures to Minimize Harm

A. Temporary

Mitigation is not required.

B. Permanent

Mitigation is not required.

2.1.4 Community Impacts

The following section discusses potential impacts affecting communities, property acquisitions and Environmental Justice. In each section is discussed the affected environment, environmental consequences and proposed measures to minimize harm, if needed.

2.1.4.1 Communities

A. Affected Environment

The project site is located along the City of Oxnard/Ventura County border in a predominantly agricultural area that is experiencing conversion of agricultural use to developed urban uses within the City, and preservation of continued agricultural use within the County. The study area located north of U.S. 101 is predominately unincorporated Ventura County, and it includes active agriculture and a cohesive, mixed residential/commercial neighborhood called Nyeland Acres. To the south of U.S. 101 in the study area are lands currently in agricultural use, but designated by the City of Oxnard 2020 General Plan for *Business and Research Park* and *Light Industrial* use. Two major development plans for this area are proposed at this time, the Sakioka Farms Specific Plan and the Camino Real Business Park (Power Machinery) Specific Plan. Two places of worship are located in the study area. Capilla Evangelica is located centrally in Nyeland Acres, approximately 0.75-mile west of the project site. The Gold Coast Church is located off Camino Avenue and occupies space in one of the commercial buildings in the Camino Real Industrial Plaza, approximately 0.125-mile southeast of the project site.

Within the Nyeland Acres community there are two mobile home communities, which are often home to elderly, disabled, and low-income people. Furthermore, a review of census tract data in the study area (see Figure 2-6) and communities of comparison City and County, indicate that the study area is considered a minority and low-income community.

B. Environmental Consequences

All of the Build Alternatives would have essentially the same effects, with exceptions as noted below.

Temporary Impacts

Temporary circulation and access impairment would occur during the construction phase of the proposed project; however, these impacts (see Section 2.1.5) would not affect lifestyles or neighborhood character and stability. Nyeland Acres would continue to be served by an adjacent U.S. 101 interchange in the vicinity throughout project construction.

Permanent Impacts

The proposed project would not conflict with a habitat conservation plan or natural community conservation plan, since none exist that pertain to the project vicinity. The project would be constructed in essentially the same location as the existing interchange; therefore, it would not physically divide an established community, degrade the cohesion of that community, displace people, businesses or farms, or result in employment effects or substantial tax and property value losses.

The proposed project would, however, be expected to benefit the study area with reduced traffic congestion, reduced traffic delay and improved mobility and safety. Access to and from U.S. 101 and to uses south of U.S. 101 would improve for Nyeland Acres community members as a result of the proposed project. The proposed project is expected to increase noise affecting the Nyeland Acres community, but required abatement, in the form of soundwalls, is proposed for that impact. The length of soundwalls to be installed vary somewhat by Build Alternative

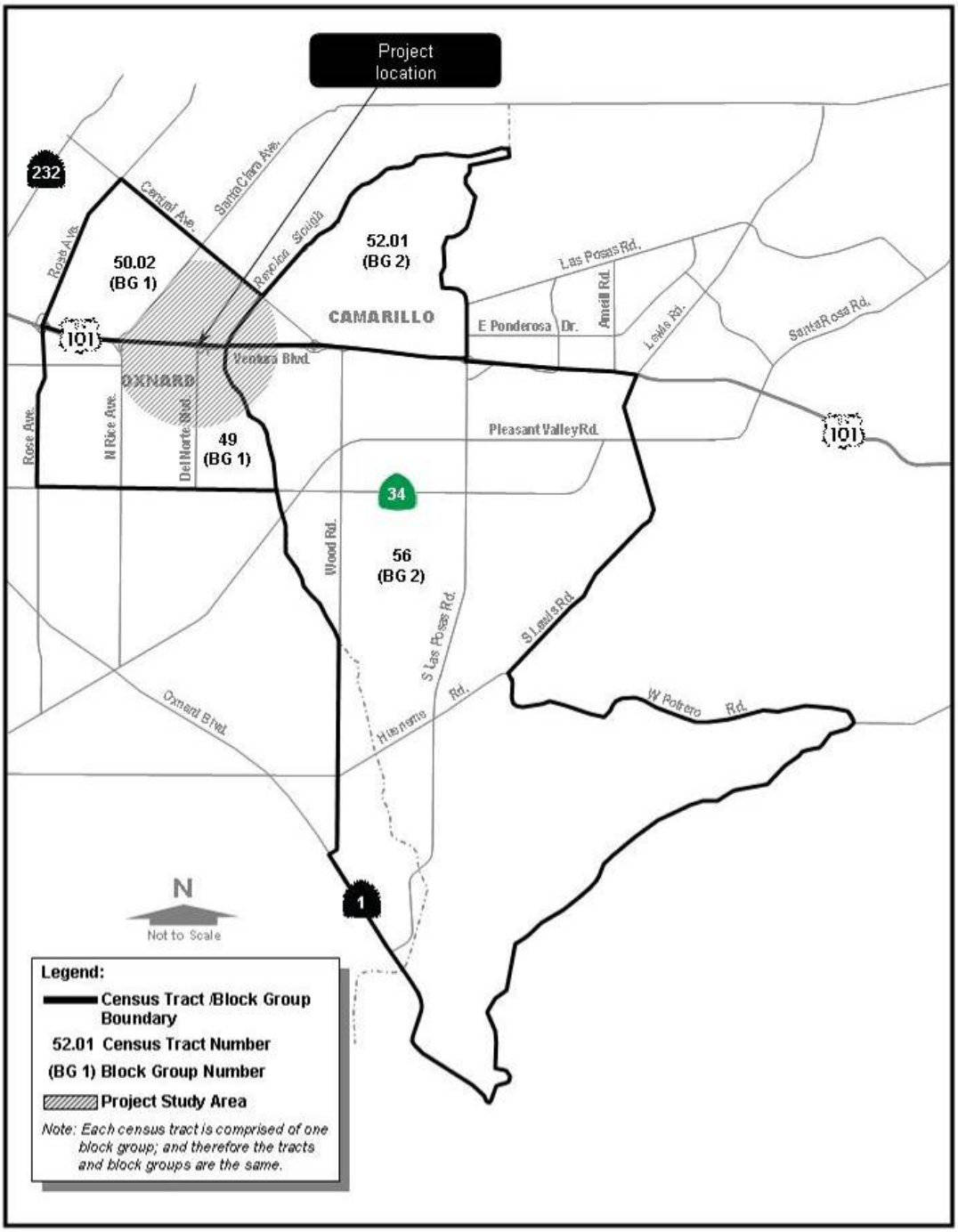


Figure 2-7 – Project Area U.S. Census 2000 Tracts and Block Groups

(see Section 2.2.6). Local air quality (discussed in Section 2.2.5) would be unchanged from the No Build condition and therefore would not affect the Nyeland Acres neighborhood. The proposed project would not result in unacceptable impacts to lifestyles or neighborhood character and stability.

The proposed project would not disrupt planned development and would, in fact, better accommodate the traffic flow associated with it. Also, the proposed project would not disrupt or cause any changes to an existing community plan, specific plan, or other planned development. The proposed project is intended to provide capacity for existing and projected traffic with consideration of proposed urban development in the study area, namely within the City. The proposed project is not part of a large commercial or residential development, nor would it impede any such future development.

C. Measures to Minimize Harm

Temporary

The following measure to minimize harm is recommended to reduce adverse impacts:

COM-C1: The City will conduct public outreach with affected area residents and businesses regarding construction schedules and potential inconveniences, and will develop a construction staging plan and Traffic Management Plan (TMP) that will identify alternate traffic detour routes, bus terminals, transit routes and operation hours, pedestrian routes, and residential and commercial access routes to be used during the construction period. See also the Utilities/Emergency Services (2.1.4), Traffic & Transportation (2.1.5), and Cumulative Impacts (2.4) sections.

Permanent

No measures to minimize harm are required.

2.1.4.2 Relocations and Acquisitions

A. Affected Environment

The affected environment for this discussion is the same as under Communities, above.

B. Environmental Consequences

Temporary Impacts

Access to the Nyeland Acres Lift Station and adjacent tree-trimming properties would remain open during project construction (see also the discussion below). Access to adjacent farmlands would also remain open during and following project construction. These access issues will be addressed in the aforementioned TMP. Acquisitions are discussed below.

Permanent Impacts

A small right-of-way acquisition may be required along the perimeter of a County-owned parcel within City limits, located in between U.S. 101 and Ventura Boulevard, immediately adjacent and northwest of the freeway. The Nyeland Acres Lift Station, a County-owned wastewater lift station, is located on this parcel. Adjacent to the lift station on the same parcel is a facility

operated by the County General Services Agency (GSA) that was once associated with the lift station and now serves as a storage facility (Hearne, 2005). This facility includes two storage buildings and a vehicle parking area, and it is enclosed with a chain-link fence. The County currently rents this property to a tree-trimming business. Access to the Nyeland Acres Lift Station and adjacent tree-trimming properties would remain open following construction. Proposed acquisition of a portion of this property is not anticipated to adversely affect the public services provided by this facility (Parsons, 2006).

No businesses would be displaced by the proposed project. The proposed project would involve acquisition of active farmland. Due to the amount of land to be acquired and the size of the affected agricultural properties, the proposed land acquisition needed to support the proposed project would not result in the displacement of a farm or entire agricultural parcel, as discussed in Section 2.1.1.

An approximate 0.1 acre right-of-way acquisition from the Camino Real Industrial Plaza is required to accommodate the proposed realignment of Camino Avenue proposed as part of the project. This acquisition would occur at the northwest corner of the property, at the location of a parking lot serving the current business. Sufficient off-site parking is available taking into account the proposed project. This acquisition would be minor, and would not displace any operations at the property, eliminate parking or otherwise substantially affect operations on the property.

The Build Alternatives would also result in the acquisition of farmland, which is discussed in more detail in Section 2.1.1. No relocations of entire properties would be required, and therefore the proposed project is not anticipated to result in adverse relocation or acquisition affects.

C. Measures to Minimize Harm

Temporary

There are no measures to minimize harm, other than maintaining access. See the Farmland (2.1.3), (Communities (2.2.4.1), Utilities/Emergency Services (2.1.4), Traffic & Transportation (2.1.5), and Cumulative Impacts (2.4) sections.

Permanent

No measures to minimize harm would be necessary for relocations since no relocations are required. For the partial acquisitions, the following mitigation would apply:

COM-1: Federal, state and local government property acquisition programs would be followed for the acquisition of portions of privately-owned properties. Compensation would be provided in accordance with the Uniform Relocation Assistance and Real Properties Acquisition Policies act of 1970 as Amended (42 U.S.C. secs. 4601-4655) (Uniform Act), as well as Federal Highway Administration (FHWA) regulations implementing the Uniform Act. Additional Caltrans and/or City of Oxnard assistance would be provided, if applicable.

2.1.4.3 Environmental Justice

A. Regulatory Environment

All projects involving a federal action (funding, permit, or land) must comply with Executive Order (EO) 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, signed by President Clinton on February 11, 1994. This Executive Order directs federal agencies to take the appropriate and necessary steps to identify and address disproportionately high and adverse effects of federal projects on the health or environment of minority and low-income populations to the greatest extent practicable and permitted by law. According to the Federal Highway Administration (FHWA) Order 6640.23 on Environmental Justice (1998), a "minority" is an individual classified any of the following:

- Black (a person having origins in any of the black racial groups of Africa)
- Hispanic (a person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race)
- Asian American (a person having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands)
- American Indian and Alaskan Native (a person having origins in any of the original people of North America and who maintains cultural identification through tribal affiliation or community recognition)

Further, a "minority population" is defined as any readily identifiable group of minority persons who lives in geographic proximity and, if circumstances warrant, who will be similarly affected by a proposed federal program, policy, or activity. Low income is defined based on the Department of Health and Human Services poverty guidelines. For 2007, this was $20,650 for a family of four.[7]

All considerations under Title VI of the Civil Rights Act of 1964 and related statutes have also been included in this project. The Department's commitment to upholding the mandates of Title VI is evidenced by its Title VI Policy Statement, signed by the Director, which can be found in Appendix D of this document.

B. Affected Environment

The Nyeland Acres community contains two mobile home communities, which are often home to elderly, disabled, and low-income people. Furthermore, review of census tracts in the study area demonstrate that the study area is a minority and low-income community. For these reasons, the potential presence of and environmental justice community and the potential impacts on such community must be analyzed for `the proposed project.

The project study area was delineated appropriate to the project site and to consider and analyze socioeconomic data for the proposed project; this area encompassed an approximate one mile radius from the Del Norte Boulevard interchange and it was drawn to reflect the boundaries of

[7] http://aspe.hhs.gov/poverty/07poverty/shtml; U.S. Department of Health and Human Services Poverty Guidelines; accessed July 13, 2007.

U.S. Census 2000 blocks.[8] This project study area is provided as 2-2. U.S. Census 2000 data indicates the presence of both minority and low-income populations in the project study area. As shown in Table 2-5, the population of the study area is 2,791 persons, in comparison to the City with a population of 170,358 persons and the County with a population of 753,197 persons. Population growth over the last decade is assumed to be relatively low as Nyeland Acres is the only residential community within the study area, and it is an older community that has not experienced substantial development during this time as evidenced in historic aerial photographs (EDR, 2005c).

The largest individual racial group in the study area, City and County is *White*, at these percentages respectively: 55 percent, 42 percent, and 70 percent. The second largest individual racial group in the study area is *American Indian and Alaskan Native* (2.5 percent), followed by *Asian* (0.6 percent) and *Black or African American* (0.6 percent). Approximately 36 percent of the study area population describes themselves as of *Two or More Races*, compared to 4 percent for both the City and County. A large majority of the study area population (86.7 percent) describes itself as *Hispanic or Latino*. This represents a significantly larger proportion of Hispanic or Latino people than either the City (66.2 percent) or County (33.4 percent).

Table 2-5 – Total Population and Racial Composition
U.S. 101/Del Norte Interchange Improvement Study area

Census Category	Study area*		City of Oxnard		County of Ventura	
	Number	%	Number	%	Number	%
Total Population	2,791	100	170,358	100	753,197	100
White	1,544	55.3	71,688	42.1	526,721	69.9
Black or African American	17	0.6	6,446	3.8	14,664	1.9
American Indian and Alaska Native	69	2.5	2,143	1.3	7,106	0.9
Asian	18	0.6	12,581	7.4	40,284	5.3
Native Hawaiian and Other Pacific Islander	0	0	698	0.4	1,671	0.2
Two or More Races	1,017	36.4	8,049	4.7	29,573	3.9
Hispanic or Latino (of any race)	2,419	86.7	112,807	66.2	251,734	33.4

Source: U.S. Census, 2000
*Data are provided at census block-level for study area.

Table 2-6 presents household and family characteristics for the study area, City and County, analyzed at the tract/block group-level. The study area has a larger proportion of family households (84.5 percent) than either the City (77.4 percent) or County (72.7 percent). Conversely, the study area has a lower proportion of non-family households (13.2%) than either the City (19.1 percent) or County (24.8 percent). Moreover, the average size of households in

[8] US Census block level data was obtained to characterize the study area population, as explained in Section 3 of this document.

the study area is smaller (2.37 persons) than both the City (3.85 persons) and County (3.04 persons). Similarly, the average family size in the study area is smaller (2.42 persons) than both the City (4.16 persons) and County (3.46 persons).

Table 2-6 – Household and Family Characteristics
U.S. 101/Del Norte Interchange Improvement Project Study Area

Household & Family Characteristics	Study Area*		City of Oxnard		County of Ventura	
	Number	%	Number	%	Number	%
Total Housing Units	619	100	45,166	100	251,712	100
Total Households	597	96.4	43,576	96.5	243,234	96.6
Average Household Size	2.37	---	3.85	---	3.04	---
Family Households	523	84.5	34,959	77.4	182,959	72.7
Non-family Households	82	13.2	8,617	19.1	60,245	24.8
Average Family Size	2.42	---	4.16	---	3.46	---

Source: U.S. Census, 2000

*Data are provided at census block-level for study area.

As presented in Table 2-5, the percentage of the population in racial groups classified as "minority" is larger in the study area than in either community of comparison, the City and County. The median family income in the study area is substantially less than the City ($26,007) and the County ($26,007), as shown in Table 2-7. There are a higher proportion of families living below the poverty level in the study area than in both communities of comparison (Table 4). The large proportion of low income and Hispanic or Latino people in the study area constitutes a definable low-income, minority population per FHWA Order 6640.23.

Table 2-7 – 1999 Household, Income and Poverty Data
U.S. 101/Del Norte Interchange Improvement Project Study Area

Income and Poverty Characteristics	Expanded Study Area*	City of Oxnard	County of Ventura
Total Number of Families	1,766	35,257	184,378
Families below Poverty Level	310	4,006	11,716
Percent of Families below Poverty Level	19.9	11.4	6.4
Median Family Income	$39,278	$49,150	$65,285
Individuals below Poverty Level in 1999	2,016	25,505	68,540
Percent of Individuals below Poverty Level	24.5	15.1	9.2
Total Number of Households	1,971	43,577	243,503
Median Household Income	$40,474	$48,603	$59,666

Source: U.S. Census, 2000. (Census tracts: 49.00, Block Group 1 and 50.02, Block Group 1)

*Data are provided at census tract/block group-level, involving an expanded study area depicted in Figure 2-2.

Based on the data presented in the above tables, it can be concluded that an Environmental Justice population exists in the project study area, within the meaning of Executive 12898. However, the project is not expected to have an impact on this population.

C. Environmental Consequences

Temporary Impacts

Temporary adverse affects may result from increased traffic congestion and associated delays to the study area and Nyeland Acres community during project construction. However, these effects would not be substantial and would be temporary. Access will be maintained to the community throughout the construction period and an adjacent freeway interchange will be remain open during times of closure of the U.S. 101/Del Norte interchange. The construction effects would affect equally all those normally using the U.S. 101/Del Norte interchange. A disproportionate high and adverse effect on an Environmental Justice population would therefore not occur during the construction period.

Permanent Impacts

Once operational, the project would provide improve accessibility to and from the freeway to points within the community, as a result of improved traffic flow in and around the ramps. This would be a beneficial effect.

The project would result in increased noise exposure, for all Build Alternatives, which would be mitigated through the use of soundwall attenuation (see Section 2.2.6). The Nyeland Acres community is sufficiently distant from the proposed project that other proximity effects (e.g., construction period noise) would not be experienced by residents of that community. None of the proposed right-of-way acquisitions would result in displacements affecting the community, nor would partial acquisitions be required in this area.

For the reasons stated above, the proposed project would not result in disproportionately high and adverse human health and environmental effects on minority and/or low income populations, within the meaning of Executive Order 12898.

D. Measures to Minimize Harm

Temporary

No mitigation is specifically required for this impact category. See also the following sections: Utilities/Emergency Services (2.1.4), Traffic & Transportation (2.1.5), Air Quality (2.2.5), Noise (2.2.6) and Cumulative Impacts (2.4)..

Permanent

No mitigation is required as the net effect would be beneficial.

2.1.5 Utilities/Emergency Services

This section summarizes information found in the Project Report (Vs.2), the Community Impact Report (7/06) and the Initial Study Checklist (9/06).

2.1.5.1 Affected Environment

The City of Oxnard Public Works Wastewater Division provides wastewater collection to the portion of the project area within the City, and treatment through the Oxnard Wastewater Treatment Plant. The portion of the project area within unincorporated Ventura County, including Nyeland Acres, is served by the Ventura County Water and Sanitation Services Division Service Area No. 30. The Nyeland Acres Lift Station, a County-owned wastewater lift station, is located on the County-owned parcel between Ventura Boulevard and U.S. 101 in the northwest quadrant of the proposed project. Adjacent to the lift station on the same parcel is a facility operated by the County General Services Agency (GSA) that was once associated with the lift station and now serves as a storage facility. The Ventura County Water and Sanitation Services Division has contracted with the City of Oxnard Public Works Wastewater Division for treatment of collected wastewater since 1999.

The City of Oxnard Public Works Water Division provides water service to the project area. Water is purchased from the Calleguas Municipal Water District, which in turn purchases the water from the Metropolitan Water District of Southern California. This water is supplemented by water pumped from United Water District wells and City-owned wells located outside the project area.

The project area's solid waste disposal needs are provided by several landfills. In compliance with Assembly Bill (AB) 939, the County has developed a Countywide Solid Waste Disposal Plan called the Countywide Integrated Waste Management Plan, which was adopted in 2000.

The project area and larger City and County are located within the service area of Southern California Edison Company (SCE). SCE operates two generating plants within the City.

Natural gas for the project area and the entire County is provided by the Southern California Gas Company's North Coastal Division.

Many utilities have been identified within the project limits: the City of Oxnard 10" ACP Sewer Line , 45" Water Main, 16" DIP Water Line, and 12" PVC Water Line; the County of Ventura 12" Sewer Main, 6" Sewer Force Main, and 6" Water Service; a 6" STL Garden Acres Municipal Water Line, Southern California Edison (SCE) Overhead Power Lines, Gas Company 4" and 8" Gas Mains, a 12" Water Line for the United Water Conservation District, and three Verizon Duct Banks with six 4", eight 4", and nine 4" PVC Telephone Conduits respectively.

The Del Norte Boulevard overcrossing currently has two light poles in each travel direction. Both southbound and northbound on- and off- ramps currently have three and two light poles, respectively.

The City of Oxnard Fire Department provides fire protection for the portion of the project area located within the City limits. City of Oxnard Fire Station #5, located approximately two miles southwest of the project site, serves this portion of the project area. Additional fire protection for the remaining unincorporated areas of the County is provided by the Ventura County Fire Protection District. The Ventura County Fire Protection District El Rio Station #51 is located approximately three and one-half miles northwest of the project site.

Police protection services for the portion of the project area are provided jointly by the City of Oxnard Police Department and Ventura County Sheriff's West County Patrol Division. The City of Oxnard Police Department is headquartered at 251 South "C" Street in the City downtown, approximately three miles southwest of the project area. The Ventura County Sheriff's West County Patrol Division is headquartered at 800 South Victoria Avenue in the City of Ventura, approximately nine miles west of the project area.

U.S. 101 is used by these emergency services providers as well as the California Highway Patrol as necessary.

2.1.5.2 Environmental Consequences

The No Build Alternative would not change utilities or emergency services from the existing configurations. Traffic delays in emergency response situations may increase.

Impacts for all build alternatives are similar and are described below.

A. Temporary Impacts

Several of the public utility lines would be affected by construction of the proposed project, including water, gas, sewer, electric, and telephone. The utilities would either be protected in place or relocated, as necessary, to accommodate the proposed improvements. Overhead lighting would be relocated, as necessary.

Access to the Nyeland Acres Lift Station and adjacent tree-trimming properties would not be affected.

Construction and demolition activities for the proposed project would generate a substantial amount of solid waste (asphalt and other inert wastes from the demolition of roadways, removal of bridge structures, and potential demolition of other structures associated with ROW acquisitions). Construction waste from the project would be brought to the Del Norte Regional Recycling and Transfer Station (located at 111 S. Del Norte Boulevard). Non-recyclable solid waste would be taken from the transfer station to the Tolland Road or Simi Valley Landfill. The Tolland Road Landfill, located off of Highway 126 between Santa Paula and Fillmore, is permitted to receive waste through year 2027 (Haden, 2006). The Simi Valley landfill, located at 2801 Madera Road, is permitted to receive waste through year 2034 (Tignack, 2006). These facilities would accommodate solid waste generated from construction of the proposed project with no adverse effects.

The proposed project could potentially result in short-term impacts on emergency response times during construction. Coordination with emergency services providers and the development of a Traffic Management Plan (TMP) would minimize circulation and access impacts during project construction. It is anticipated that detour routes specified in the TMP would divert southbound vehicles to the U.S. 101/Rice Avenue interchange, located approximately 0.5-mile west of the proposed project at times when the U.S. 101/Del Norte interchange must be closed to traffic. Closure of the interchange would be required at different times during the construction period, ranging from two to 6 days in length. The U.S. 101/Rice Avenue interchange provides direct access between U.S. 101 and the Nyeland Acres community. Increased congestion at the U.S. 101/Rice Avenue interchange may occur during this time; however, the congestion would be

temporary and would not substantially impair circulation or emergency response times in Nyeland Acres or the larger project area. It is presumed that construction of the Rice Avenue interchange improvements will be completed before its use is required for the Del Norte interchange detour.

Proposed project construction would occur in stages so that the U.S. 101/Del Norte Boulevard interchange would not be closed at any time during construction, with staggered closure of the southbound on- and off-ramps expected to last approximately 1 month.

B. Permanent Impacts

The proposed project involves the reconfiguration of an existing freeway interchange, which does not include wastewater treatment or related facilities. The Nyeland Acres Lift Station would remain operational and accessible. The proposed project would not result in a long-term increase in the demand for water or wastewater facilities as no new development is being proposed as part of the project.

The proposed project would not affect water supplies. The proposed project would not generate any solid waste on a long-term basis as no development is proposed as part of the project.

The project will provide adequate lighting on the new overcrossing and at the ramps, improving driver visibility.

Operation of the proposed project would result in improved access for emergency response services and would not impair implementation of or physically interfere with any adopted emergency response plan or emergency evacuation plan.

2.1.5.3 Measures to Minimize Harm

A. Temporary

The following construction measures to minimize harm are proposed:

U-C1: Utility and power line relocation will be coordinated with the respective utility providers and would occur in the first stages of construction to avoid affecting power service.

U-C2: To comply with AB 939, the contractor will develop and implement a demolition waste recycling program to reduce the amount of waste to be disposed of in landfills.

U-C3: Caltrans and the City of Oxnard will develop and implement a TMP in coordination with emergency personnel specifying detour routes, and coordinate prior to and during construction with emergency service providers.

B. Permanent

No permanent measures to minimize harm are required.

2.1.6 Traffic & Transportation / Pedestrian and Bicycle Facilities

This section summarizes the information in the Traffic Impact Study (11/05), the Project Report (2/07), and the PEAR (1/06).

2.1.6.1 Regulatory Setting

The U.S. 101 interchange at Del Norte Boulevard in the City of Oxnard (City) is located in Ventura County at the City/County border, and, as a U.S. highway, is under state and federal jurisdiction. U.S. 101 is classified as an urban principal arterial freeway whose purpose is to provide international, interstate, interregional, and intraregional travel (i.e., commute and non-commute) and goods movement. It is also part of the Surface Transportation Assistance Act (STAA) route network for oversized trucks, the Interregional Road System (IRRS), a designated Lifeline route; and the National Highway System (NHS).

The Federal Highway Administration (FHWA), in addition to funding and overseeing the interstate highway system, directs that full consideration should be given to the safe accommodation of pedestrians and bicyclists during the development of federal-aid highway projects (see 23 CFR 652). It further directs that the special needs of the elderly and the disabled must be considered in all federal-aid projects that include pedestrian facilities. When current or anticipated pedestrian and/or bicycle traffic presents a potential conflict with motor vehicle traffic, every effort must be made to minimize the detrimental effects on all highway users who share the facility. Caltrans and FHWA are committed to carrying out the 1990 Americans with Disabilities Act (ADA) by building transportation facilities that provide equal access for all persons. The same degree of convenience, accessibility, and safety available to the general public will be provided to persons with disabilities.

Caltrans provides design standards, project oversight, and acts as liaison to FHWA. Of the 5 interchanges located on U.S. 101 within Oxnard, the U.S. 101/Del Norte Boulevard interchange is the last one to be improved to accommodate future freeway widening and eliminate geometric deficiencies.

The proposed project is listed in the Southern California Association of Governments (SCAG) 2005 Regional Transportation Plan (RTP) and its 2005 Regional Transportation Improvement Program (RTIP). Del Norte Boulevard is also listed in the Ventura County Congestion Management Plan street network. The City defines Del Norte Boulevard as a pedestrian-accessible route. The VCTC has not adopted any short- or long-term plans to incorporate a high-occupancy vehicle (HOV) facility within this area. Caltrans does not have any plans to incorporate an HOV facility within this area of the County.

2.1.6.2 Affected Environment

The Del Norte Boulevard interchange at U.S. 101 is between Post Mile (PM) 18.8 and PM 19.7 in Ventura County (County). A location map is shown in Chapter 1. The proposed project is located in the City of Oxnard between the U.S. 101/Central Avenue interchange, which is 1.42 miles to the east, and the U.S. 101/Rice Avenue interchange, which is 0.89-mile to the west. The U.S. 101 main line was upgraded to a four-lane freeway in 1956 and the current six-lane freeway (three lanes in each direction) in the early 1980s.

The existing U.S. 101/Del Norte Boulevard interchange and Del Norte Boulevard overcrossing were constructed in 1964. This diamond interchange was constructed prior to the extension of Del Norte Boulevard to the south and originally served two frontage roads that terminated at the overcrossing – Ventura Boulevard on the northwest and Camino Avenue on the southeast.

U.S. 101/Del Norte Boulevard Interchange Northbound Ramps Intersection

The U.S. 101 northbound off-ramps at Del Norte Boulevard provide one lane. This lane provides for shared left and right turn movements. The on-ramp provides one lane. The intersection of Del Norte Boulevard with the southbound ramps is controlled by all-way stop.

U.S. 101/Del Norte Boulevard Interchange Southbound Ramps Intersection

The U.S. 101 southbound off-ramps at Del Norte Boulevard provide one lane. This lane provides for shared left and right turn movements. The on-ramp provides one lane. The intersection of Del Norte Boulevard with the southbound ramps is controlled by all-way stop.

Del Norte Boulevard/Camino Avenue Intersection

Del Norte Boulevard at Camino Avenue stop controlled on the Camino Avenue approach. The Camino Avenue approach is restricted to right turn only. A left turn pocket is provided on the southbound Del Norte Boulevard, which provides access to Camino Avenue.

Significant land use development, including commercial warehouse and office developments in areas south of U.S. 101 and the extension of Del Norte Boulevard to the south, has caused an increase in the traffic volume at the existing interchange with additional development expected.

Traffic analysis of the existing facility, based on 2005 traffic volumes, indicates that several of the intersections at the proposed project are currently operating at levels of service ranging from B to F (see Figure 2-9). Preliminary traffic analysis based on projected 2030 traffic volumes indicates that the levels of service at all of the intersections will worsen to LOS “F” (Parsons, 2005a).

A complete discussion of the traffic analysis and forecasting methodology is available in the *February 2007 Traffic Impact Study for U.S. 101/Del Norte Boulevard Interchange Improvement Project*. Traffic analysis for the existing U.S. 101/Del Norte Boulevard interchange was performed. Existing traffic data were analyzed, and Year 2005 traffic volumes were generated. Year 2030 traffic forecasts were developed by reviewing existing and future traffic demand forecasts provided by the SCAG model and the City of Oxnard. Table 2-8 shows the existing and forecasted traffic volumes, which are expected to remain the same under the build alternatives.

Table 2-8 – Existing and Forecasted Traffic Volumes

Facility Name	Average Daily Traffic		AM Peak Hour		PM Peak Hour	
	Year 2005	Year 2030	Year 2005	Year 2030	Year 2005	Year 2030
Mainline						
Northbound U.S. 101 south of Del Norte Boulevard off-ramp	66,700	90,700	4,400	5,360	5,100	7,300
Northbound U.S. 101 between off- and on-ramps	60,900	76,100	3,830	4,200	4,540	6,000
Northbound U.S. 101 north of Del Norte Boulevard on-ramp	63,200	82,300	3,990	4,570	4,900	6,780
Southbound U.S. 101 north of Del Norte Boulevard off-ramp	65,000	83,900	5,400	6,540	4,800	6,180
Southbound U.S. 101 between off- and on-ramps	62,800	78,100	5,150	5,900	4,640	5,600
Southbound U.S. 101 south of Del Norte Boulevard on-ramp	68,300	92,500	5,620	7,090	5,320	7,100
On/Off Ramps						
Northbound Del Norte Boulevard off-ramp	5,800	14,600	570	1,460	560	1,300
Northbound Del Norte Boulevard on-ramp	2,300	6,100	160	370	360	780
Southbound Del Norte Boulevard off-ramp	2,200	5,700	250	590	160	480
Southbound Del Norte Boulevard on-ramp	5,500	14,600	470	1,190	680	1,580
Local Roads						
Ventura Boulevard north of U.S. 101	3,900	5,600	220	300	380	600
Del Norte Boulevard between off- and on-ramps	10,600	26,300	810	2,010	990	2,240
Del Norte Boulevard south of Camino Avenue	11,800	38,700	1,310	3,440	1,650	4,080
Source: Parsons, 2006.						

Table 2-9 shows the Level of Service (LOS) for the existing intersections within the project area based on existing 2005 and forecasted 2030 traffic volumes. As shown in the table, there are presently congestion and delays at the southbound ramps intersection during the AM and PM peak hours and at the northbound ramps intersection during the PM peak hour. The traffic analysis shows that, by the Year 2030, the existing intersections at the U.S. 101/Del Norte Boulevard interchange will operate at severely congested LOS E and F.

Table 2-9 – Existing and Projected LOS for the Existing Interchange

Period	Intersection	MOE[1]	Year 2005 (Existing)	Year 2030 (Projected)
AM	Del Norte Boulevard/Northbound Ramps	Delay[2]	22.2	549.5
		LOS	C	F
	Del Norte Boulevard/Southbound Ramps	Delay	48.8	821.6
		LOS	E	F
	Del Norte Boulevard/Camino Avenue	Delay	12.2	39.4
		LOS	B	E
PM	Del Norte Boulevard/Northbound Ramps	Delay	37.0	518.9
		LOS	E	F
	Del Norte Boulevard/Southbound Ramps	Delay	165.0	662.6
		LOS	F	F
	Del Norte Boulevard/Camino Avenue	Delay	23.5	1865.0
		LOS	C	F

[1]HCM (2000) Methodology
[2]Delay seconds per vehicle (sec/veh)
Source: Parsons, 2006.

Accident Data

The Traffic Accident Surveillance and Analysis Systems (TASAS) accident data for the recent 3-year period (January 1, 2003, to December 5, 2005) were compared to the statewide average accident rates for similar facilities. There were 49 accidents in the northbound direction and 58 accidents in the southbound direction of the freeway mainline at the U.S. 101/Del Norte Boulevard interchange; 25 of the accidents resulted in 40 injuries and 1 fatality. Most of the accidents in both directions were "rear-end" and "hit object" type accidents. As shown in Table 2-10 Accident Data, the total accident rate was 0.72 accidents per million vehicle miles (a/mvm) in the northbound direction and 0.86 a/mvm in the southbound direction compared to the statewide average of 1.06 a/mvm for similar facilities.

Table 2-10 – Mainline Accident Rates at the U.S. 101/Del Norte Boulevard Interchange

U.S. 101 Mainline	Number of Accidents			Person		Accident Rate (MVM)					
						Actual Rate			Average Rate		
	FAT	F+I	Total	Kill	Injured	FAT	F+I	Total	FAT	F+I	Total
Northbound (PM 18.600 to 19.500)	0	8	49	0	8	0	0.12	0.72	0.012	0.36	1.06
Southbound (PM 18.600 to 19.500)	1	17	58	1	16	0	0.25	0.86	0.012	0.36	1.06

FAT – fatalities
F+I – fatalities and injuries
MVM – million vehicle miles
Source: Parsons, 2006.

Fifteen accidents occurred at the northbound and southbound ramps of the U.S. 101/Del Norte Boulevard interchange. As noted in Table 2-11, most of these accidents occurred in the area where the freeway ramps intersect with the local street (33 percent) and on the ramp (33 percent). All of the southbound off-ramp accidents occurred at the local intersecting street. The data indicate that no R/W controls were present at the time of the accidents.

Table 2-11 – Ramp Accident Locations

Ramp	Total Number of Accidents	Ramp Accident Location							
		Exit		Ramp		Ramp Entry		Ramp Area, Intersect Street	
		NUM	%	NUM	%	NUM	%	NUM	%
Southbound On-ramp	2	0	0	1	50	1	50	0	0
Northbound Off-ramp	9	3	33.3	2	22.2	1	11.1	3	33.3
Southbound Off-ramp	2	0	0	0	0	0	0	2	100
Northbound On-ramp	2	0	0	2	100	0	0	0	0

Source: Parsons, 2006.

Table 2-12 summarizes the total accident rate for vehicles traversing the ramps compared to the statewide average accident rate for similar facilities. The actual accident rates for the ramps are lower than the statewide average accident rate, with the exception of the northbound on and off-ramps. The actual total accident rate for the northbound off-ramp is 8.2 accidents per million vehicles (a/mv) compared to the statewide average accident rate of 1.5 a/mv. The total accident rate for the northbound on-ramp is 1.01 a/mv compared to the statewide accident rate of 0.80.

Table 2-12 – Accident Rates for the U.S. 101/Del Norte Boulevard Interchange Ramps

RAMP	Number of Accidents			Person		Accident Rate (A/Mv)					
						Actual Rate			Average Rate		
	FAT	F+I	Total	Kill	Injured	FAT	F+I	Total	FAT	F+I	Total
Southbound On-ramp	0	0	2	0	0	0	0	0.43	0.002	0.32	0.80
Northbound Off-ramp	0	2	9	0	2	0	1.82	8.20	0.005	0.61	1.50
Southbound Off-ramp	0	1	2	0	1	0	0.52	1.04	0.005	0.61	1.50
Northbound On-ramp	0	0	2	0	0	0	0	1.01	0.002	0.32	0.80

FAT – fatalities

F+I – fatalities and injuries

Source: Parsons, 2006.

The City of Oxnard has designated approximately 15 miles of bike routes, lanes, and paths. Del Norte Boulevard is part of a bike lane, which begins just south of the intersection of Del Norte Boulevard and U.S. 101, and continues south to Sturgis Road. There are no other adopted policies, plans, or programs supporting alternative transportation within the project vicinity City of Oxnard. 2004c).All build alternatives would all facilitate the increased volume of traffic using the proposed project due to future land use development in the area and enhance safety for existing and future vehicles and pedestrians. The proposed project would improve sight distance, accommodate truck movements, and maintain over 2,000 ft of auxiliary lanes between the U.S. 101/Rice Avenue interchange and the Del Norte Boulevard interchange. Installation of ramp metering is not planned for this proposed project at this time, but in accordance with Caltrans policy, the proposed project interchange ramps would be configured as "meter ready" to accept ramp metering in the future. This includes providing right of way, California Highway Patrol (CHP) enforcement areas, ramp metering pads, ramp metering signal heads, and detector loops.

2.1.6.3 Environmental Consequences

A. Temporary Impacts

The proposed project's interchange reconstruction would involve, at various times, lane closures, detours, and other inconveniences. The main line of the freeway would remain open at all times although the number of lanes available may be reduced in the vicinity of the proposed project. There may be short term ramp closures needed for construction of the project. Traffic would be affected during reconfiguration of the proposed project, realignment and raising of the profile of Del Norte Boulevard, and realignment of Ventura Boulevard and Camino Avenue. Construction activities would need to be coordinated with the U.S. 101/Rice Avenue and Springville interchange projects.

Construction of the project is estimated to last 24 to 30 months. Over that period of time, construction staging would be used to maintain traffic during construction. During project construction, the project may result in additional congestion due to lane closures and temporary increases in traffic load on certain streets may result during project construction. Preparation of a Traffic Management Plan (TMP) would minimize such impacts. Access to U.S. 101 for northbound and southbound vehicles would remain available at all times, either via the U.S. 101/ Del Norte Boulevard or nearby U.S. 101/Rice Avenue interchanges. Therefore, although temporary congestion may occur along detour routes, these impacts would be temporary and would be anticipated to last approximately 1 month; therefore, they would not result in adverse impacts to street system capacity and traffic loads.

This project would have little or no permanent impact upon ongoing CHP enforcement activities; however, during construction, lane and shoulder widths may be reduced, which would restrict enforcement activities.

Use of the overcrossing during construction by bicycles and pedestrians may be curtailed and in any case would expose the user to dust, construction debris, and reduced mobility.

B. Permanent Impacts

None of the build alternatives would result in any conflict or preclude implementation of any adopted policies, plans, or programs supporting alternative transportation. Additionally, the

proposed project would be designed to comply with engineering design standards and would eliminate existing nonstandard roadway conditions. The proposed improvements would reduce traffic congestion, reduce traffic delay, and improved mobility. The proposed project would not affect parking capacity, nor would it affect traffic patterns. Operation of the proposed project would result in improved access for emergency response services. The proposed improvements would eliminate many existing nonstandard features, employ traffic signals at the ramp intersections, improve traffic operations, and increase the capacity of the U.S. 101/Del Norte interchange, thereby reducing the potential for accidents. None of the build alternatives would eliminate a bike lane or impede future plans to extend the bike lane from Del Norte Boulevard.

Table 2-13 presents the projected LOS for each project alternative, including the No Build Project Alternative. AM and PM peak-hour LOSs are calculated at the study intersections. The analysis of future Alternative 1 No-Build LOSs was based upon the existing lane configurations and year 2030 peak-hour traffic volumes. As shown in Table 2-13, the project area intersections are expected to operate at LOSs E and F in 2030 during both the AM and PM peak hours under the Alternative 1 No-Project condition.

Table 2-13 – Existing and Projected LOS for the Existing Interchange

PERIOD	INTERSECTION	MOE	YEAR 2005 EXISTING	YEAR 2030 ALTERNATIVE 3 NO-PROJECT	YEAR 2030 ALTERNATIVE 2	YEAR 2030 ALTERNATIVE 3	YEAR 2030 ALTERNATIVE 4
AM	Del Norte Blvd. at US 101 Northbound Ramps	Delay	22.2	549.5	18.7	17.9	19.9
		LOS	C	F	B	B	B
	Del Norte Blvd. at US 101 Southbound Ramps	Delay	48.8	821.6	11.5	11.5	11.5
		LOS	E	F	B	B	B
	Del Norte Blvd. at Camino Avenue	Delay	12.2	39.4	N/A (3)	N/A	N/A
		LOS	B	E	N/A	N/A	N/A
PM	Del Norte Blvd. at US 101 Northbound Ramps	Delay	37.0	518.9	55.6	17.5	23.7
		LOS	E	F	E	B	C
	Del Norte Blvd. at US 101 Southbound Ramps	Delay	165.0	662.6	10.7	10.6	10.6
		LOS	F	F	B	B	B
	Del Norte Blvd. at Camino Avenue	Delay	23.5	1865.0	N/A	N/A	N/A
		LOS	C	F	N/A	N/A	N/A

(1) HCM (2000) Methodology.

(2) Delay seconds per vehicle (sec/Veh).

(3) Level of service was calculated using Highway Capacity Manual (HCM 2000).

Alternative 2 would maintain the auxiliary lanes and approximately 2,267 ft of a weaving section in the northbound direction and 2,044 ft of weaving section in the southbound direction between the two interchanges. Ventura Boulevard would be realigned slightly to the north to meet vertical and horizontal alignment standards. The weaving sections would operate at LOS C or better in the year 2010 when the U.S. 101/Del Norte Boulevard interchange construction is expected to be completed, but they would operate at LOS E or F in the year 2030. The poor LOS results from the poor traffic condition of the freeway main line. The weaving analysis assumes that there is no freeway improvement in the year 2030, since no project has been identified for adding the Number 4 lane to the freeway.

Alternative 3 would add a northbound loop on-ramp in the northeast quadrant of the proposed project. The northbound off-ramp and Ventura Boulevard would be realigned to accommodate the loop on-ramp, while the northbound on-ramp and southbound on-/off-ramps would maintain a tight diamond configuration. The northbound loop on-ramp would tie into the auxiliary lane with a weaving section of 3,182 ft between it and the northbound off-ramp at the Rice Avenue interchange. The weaving sections would operate at LOS C in 2010 but decline to E or F in 2030 as in Alternative 2.

In Alternative 4 the northbound loop on-ramp would tie into the auxiliary lane with a weaving section of 3,182 ft as in Alternative 3, and with the same LOS due to the mainline. The northbound off-ramp and Ventura Boulevard would be realigned to accommodate the loop on-ramp, while the southbound on-/off-ramps would maintain a tight diamond configuration. However, the northbound on-ramp, which was a component of the tight diamond configuration, would be eliminated.

The proposed project is intended to reduce traffic congestion and delays, as well as eliminate existing geometric deficiencies at the existing interchange by accommodating the projected increase in traffic volumes. The proposed project would not increase vehicle trips or the volume-to-capacity ratio on roads (Parsons, 2005a). Thus, operation of the proposed project would ultimately have beneficial effects on existing and future traffic. The proposed project would also improve main line travel time and peak period performance (speeds) in the vicinity of the U.S. 101/Del Norte Boulevard interchange.

2.1.6.4 Measures to Minimize Harm

A. Temporary Measures

For all the build alternatives, a TMP would be prepared during the design phase, the objective of which is to mitigate the impact that construction activities would otherwise have on freeway and roadway users, and it may include the following strategies:

- A public awareness campaign prior to and throughout construction.
- Real-time communication with motorists, including changeable message signs and highway advisory radio announcements to alert motorists of upcoming construction impacts, detours, and travel conditions.
- Identification of park-and-ride and other public transit modes to encourage use of ridesharing and public transit.
- The CHP would be utilized on the mainline through the Construction Zone Enhanced Enforcement Program (COZEEP) contract to assist in lane closures and maintain the safety and integrity of the construction work zone.

The TMP would be closely coordinated with the City, County, and public to ensure that traffic along U.S. 101 and the surrounding streets remains at an acceptable level of operation during construction. The TMP would address the staging of construction, potential alternative routes, detour routes, and emergency access that may be used during construction. Coordination with

emergency service providers and the development of the TMP would substantially minimize circulation and access impacts during project construction.

Thus, the following measure would be applied during project construction:

T-C1: Preparation, coordination, and implementation of a Transportation Management Plan (TMP) in accordance with Caltrans requirements.

B. Permanent Measures

No permanent measures are required.

2.1.7 Visual/Aesthetics

This section uses information found in the Community Impact Report (7/06), the Noise Study Report (3/06), and the Initial Study Checklist (9/06).

2.1.7.1 Regulatory Setting

The National Environmental Policy Act of 1969 as amended (NEPA) requires the federal government to use all practicable means to ensure all Americans safe, healthful, productive, and *aesthetically* (emphasis added) and culturally pleasing surroundings [42 U.S.C. 4331(b)(2)]. To further emphasize this point, the Federal Highway administration in its implementation of NEPA [23 U.S.C. 109(h)] directs that final decisions regarding projects are to be made in the best overall public interest taking into account adverse environmental impacts, including among others, the destruction or disruption of aesthetic values.

The City of Oxnard General Plan includes a Community Design Element and an Open Space/ Conservation Element that address the visual and aesthetic concerns of the project area. The Ventura County General Plan Resource Appendix lists scenic resources and notes that whenever designated scenic routes are constructed or improved, design standards taken from the State publication, *The Scenic Route*, must be incorporated into project design. The project area lies within the jurisdiction of the Ventura County Non-Coastal Zoning Ordinance. See also Section 2.1.1 regarding Land Use.

Because local standards are necessary to understand the visual/aesthetic context for the project, they are addressed in this section and referred to in Chapter 3.

2.1.7.2 Affected Environment

There are no identified scenic vistas within the project area according to both the Ventura County General Plan Resource Appendix and the Open Space/Conservation Element of the City of Oxnard General Plan. There are scenic views of distant hills to the north and east of the project site. There are no views of the ocean from the project site.

The project site is not designated as part of the State or County Scenic Highway System. All of U.S. 101 within the City of Oxnard's Sphere of Influence has been designated as a County-eligible scenic highway according to both the County and City General Plans. The City has designated U.S. 101 as a scenic highway, as indicated in the Open Space and Conservation Element of the City's General Plan.

Project area land uses include homes northwest of the U.S. 101/Del Norte interchange in the Nyeland Acres community, and a commercial area to the southeast of the highway. The predominant near views seen by drivers on U.S. 101 are of agricultural land uses, often strawberries, lettuce, and other low crops. The highway and surrounding area is relatively flat. Northbound drivers see the Nyeland Acres community and commercial strip immediately after crossing Del Norte Boulevard

Eucalyptus trees and various shrubs are present within the project area and provide a vertical element to the landscape. There is a row of several hundred eucalyptus trees along the south side of the freeway for most of the 0.89-mile distance from the U.S. 101/Del Norte interchange to the U.S. 101/Rice Avenue interchange.

2.1.7.3 Environmental Consequences

The No Build Alternative would not change the aesthetic qualities of the area. Impacts of all build alternatives would be similar. Please see Sections 2.-1.1 and 2.1.3 for consequences relating to the greenbelt and agricultural land use issues.

A. Temporary Impacts

Only minor adverse impacts are anticipated due to project construction. There will be temporary views of machinery, scaffolding, and barriers associated with construction which would detract from an orderly environment, but such views are common in an urban environment.

B. Permanent Impacts

The proposed build alternatives would not affect existing views in the project area. The proposed project would not adversely affect a scenic vista. Views of the distant hills would not be degraded by the proposed project. The proposed project involves the reconfiguration of an existing freeway interchange, and it would not substantially alter or degrade the visual character or quality of the project site and surroundings. Although some agricultural land would be taken for the proposed project's construction. the predominant views of agricultural uses would remain essentially intact. The existing interchange is an integral part of the transportation corridor that currently defines U.S. 101 and the proposed project would continue this perception. Views of the freeway/proposed project from areas to the northwest and south would remain essentially unchanged.

The project would require the removal of up to 30 large eucalyptus trees located along the south side of U.S. 101, east and west of Del Norte Boulevard. These trees are located within the City limits, inside Caltrans ROW. Based on the nonlinear distribution of these trees and review of historic aerial photos, these eucalyptus trees do not represent a historic windrow (EDR, 2005a). The proposed project may also require the removal of some immature ornamental oak trees located in the northeast shoulder area within unincorporated Ventura County. These ornamental oaks were planted recently and do not meet the girth standard of 9.5 inches for protection under the Ventura County Non-Coastal Zoning Ordinance.

The City of Oxnard Landscape Standards, adopted by Resolution 9301, recognizes mature trees as significant visual resources and regulates the removal and planting of trees within City limits. Each of the trees that lie within the proposed clear recovery zone would be evaluated based on

safety to determine whether removal would be warranted or whether the tree could be protected in place with a guardrail. According to the City of Oxnard Landscape Standards, Section 4, Preservation of Existing Trees, trees in a healthy condition shall be protected and preserved, and removal of trees with a height of 6 ft or more shall not be removed unless authorized in writing by the City of Oxnard Parks and Recreation Department or City Council. An Arborist's Tree Report is required by the City to determine the health and economic appraised value of existing trees to be removed or displaced by a proposed project. The City requires that the appraised economic value, as determined by the Arborist's Tree Report, be restored in the form of new tree sizes for the project, in addition to meeting the City's minimum tree size of a 24-inch box.

With incorporation of mitigation, the proposed project would not adversely impact scenic resources (the mature trees) within a scenic highway.

The proposed project would reconfigure an interchange which is already subject to light and glare. Enhanced roadway lighting would be required for each build alternative, thus increasing nighttime lighting in the area. The increase in nighttime lighting would not be substantial enough, however, to affect homes northwest of the project area in the Nyeland Acres community, or any other uses in the project vicinity. Furthermore, light and glare would be managed through appropriate design and construction standards. No adverse light or glare impacts would result from the proposed project.

All build alternatives would include construction of a noise abatement wall for approximately 400 feet along the southeastern edge of the Nyeland Acres community. This wall would be located on the property line to abate noise impacts at the rear yards of several residences. The height would range between 8 and 10 feet. The wall would be visible to northbound drivers but would not substantially change the character of the view as the existing view in this direction is already of a built environment. This portion of U.S. 101 does not appear to be graffiti-prone. No special measures, other than the standard features, have been considered to prevent vandals from accessing bridges, signs, and walls.

2.1.7.4 Measures to Minimize Harm

A. Temporary Measures

No temporary measures to minimize harm are required.

B. Permanent Measures

The following permanent measures to minimize harm are proposed.

V/A-1: For each tree (with a height of 6 ft or more) to be removed, an Arborist's Tree Report will be prepared by a certified arborist approved by the City of Oxnard and submitted to the City of Oxnard Parks and Recreation Department or City Council. Based on the appraised value, replacements trees, of at least 24" box size would be planted at a ratio to be determined by the city. Authorization by the City of Oxnard Parks and Recreation Department or City Council would be obtained before removal of any mature tree.

V/A-2: Appropriate plant landscaping in keeping with City and County landscape standards would be incorporated to mitigate for the loss of existing landscaped areas within both the City and County. Replacement planting would consist of standard Caltrans highway planting,

which includes trees, noninvasive shrubs, and groundcover approved by the Caltrans District Landscape Architect. No new trees would be planted within the clear recovery zone. The replacement planting would be harmonious with the existing vegetation to remain and with the adjacent community. Irrigation work would consist of new systems. An allocation for landscaping is included in the preliminary cost estimate. "The Scenic Route" design guidelines will be incorporated into project design and compliance with City and County landscape standards.

V/A-3: Roadway and lighting design will minimize the light and glare at Nyeland Acres.

2.1.8 Cultural Resources

2.1.8.1 Regulatory Setting

The phrase "cultural resources," as used in this document, refers to all historical and archaeological resources, regardless of significance. Federal legislation dealing with cultural resources includes:

National Historic Preservation Act

The National Historic Preservation Act of 1966, as amended, (NHPA) declares a national policy of to protect, rehabilitate, restore, and reuse districts, sites, buildings, structures, and objects significant in American architecture, history, archaeology, and culture, and mandates under Section 106 that federal agencies consider the effects of undertakings on properties that are listed in, or determined eligible for inclusion in the National Register of Historic Places (National Register). Section 106 of NHPA requires that the Advisory Council on Historic Preservation be afforded the opportunity to comment on those undertakings, following regulations issued by the Advisory Council on Historic Preservation (36 *Code of Federal Regulations CFR* Part 800).

Under 36 CFR Part 800.4 it is first necessary to determine the scope of necessary identification efforts associated with a project, then to determine and document an Area of Potential Effects (APE, defined in Part 800.16(d)), to subsequently review existing information on historic properties within the area of potential effects, including data concerning possible historic properties not yet identified; and to seek information, as appropriate, from consulting parties, and other individuals and organizations likely to have knowledge of, or concerns with, historic properties in the area, and to identify issues relating to the undertaking's potential effects on historic properties.

National Register of Historic Places

Established in 1966, the National Register is the nation's official list of districts, sites, buildings, structures, and objects significant in American history, architecture, archeology, engineering and culture. The National Register recognizes "The quality of significance in American history, architecture, archeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

- That are associated with events that have made a significant contribution to the broad patterns of our history; or

- That are associated with the lives of persons significant in our past; or
- That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- That have yielded or may be likely to yield, information important in prehistory or history (36 *CFR* Part 60.4).

To be considered for National Register eligibility, properties must generally have been completed at least 50 years before the evaluation is made. Properties which do not meet that age criteria must be demonstrated to possess exceptional significance, in order to be considered for listing.

On January 1, 2004, a Section 106 Programmatic Agreement (PA) among the Advisory Council, FHWA, California Historic Preservation Officer (State Historic Preservation Officer or SHPO), and Caltrans went into effect for Caltrans projects, both state and local, with FHWA involvement. The PA takes the place of the Advisory Council's regulations, 36 *Code of Federal Regulations* (*CFR*) Part 800, streamlining the Section 106 process and delegating certain responsibilities to Caltrans.

Archaeological Resources Protection Act

The Archaeological Resources Protection Act (ARPA) applies when a project may involve archaeological resources located on federal or tribal land. ARPA requires that a permit be obtained before excavation of an archaeological resource on such land can take place.

Section 4 (f)

Historic properties may also be covered under Section 4 (f) of the U.S. Department of Transportation Act, which regulates the "use" of land from historic properties. See Appendix C for specific information regarding application of Section 4 (f).

2.1.8.2 Affected Environment – Area of Potential Effects

The proposed project was the subject of both a Historic Property Survey Report (HPSR) and Archaeological Survey Report (ASR). Preparation of the HPSR resulted in investigation of 15 properties within the defined Area of Potential Effects (APE).

The APE for the project was established on September 27, 2006, in consultation with the Caltrans PQS and Caltrans Project Manager. The purpose of the APE was to ensure identification of significant historical, architectural, and archaeological resources listed in or eligible for inclusion in the National and/or California registers that may be directly or indirectly affected by the proposed project. The proposed APE is: the project's right-of-way and/or areas of direct ground disturbance (direct APE), as well as approximately 10 feet (3.048 meters) beyond the right-of-way for staging and temporary building activities. The indirect APE includes the entire parcel, if there is a building or other improvement on the property, from which any partial or full acquisition or other effects (visual, audible, etc.) may result from the proposed project. The project involves construction of a new overcrossing as well as

reconstruction of ramps to serve the overcrossing. One sound wall is proposed to be constructed near a residential area. It would be 650 feet (198.12 meters) in length, and range from 10 to 14 feet (3.048 to 4.2672 meters) in height. Views of the proposed project will not significantly differ from current views because it is an existing overcrossing, an improved roadway and will continue to be such. Nearly all of the proposed project area is already improved by the existing U.S. 101 roadway.

The HPSR and ASR were reviewed by Caltrans District 7 staff and approved on December 6, 2006. The HPSR included consultation with local government agencies with responsibilities for the identification and protection of historic properties and historic preservation advocacy organizations. The ASR incorporated consultation with the Native American Heritage Commission, a sacred lands file search (which was negative) and coordination with Native American individuals and groups who may have knowledge of significant sites.

All the built environment properties within the APE were found to meet the criteria for Section 106 Programmatic Agreement Attachment 4, thus no properties required further evaluation. No properties within or nearby the project APE are listed in or have been determined eligible for listing in the National or California registers, none are designated California Points of Historical Interest or California Historical Landmarks.

The ASR found no surface evidence of historical or prehistoric archaeological resources within the APE. No further archaeological work should be necessary, unless project plans are modified to include areas that were not surveyed for this project. If buried cultural materials are encountered during construction, it is Caltrans policy that work in the area stop until a qualified archaeologist can evaluate the nature and significance of the find.

2.1.8.3 Environmental Consequences

A. Temporary Impacts

The proposed project would not result in any temporary effects to any historic or archaeological resources, as none were found or are known to be present in the APE.

B. Permanent Impacts

The proposed project would not result in any permanent effects to any historic or archaeological resources, as none were found or are known to be present in the APE. Under 36 *CFR* Part 800.3 (1) if a project has “no potential to cause effects” as is the case for the proposed project, then lead agency has no further obligations under section 106.

2.1.8.4 Measures to Minimize Harm

A. Temporary Measures

Because no cultural resources are expected to be affected by the proposed project, no measures to minimize harm are necessary. However, it is possible that subsurface resources could be discovered during the construction period. The following mitigation is recommended:

CUL-C1: If cultural resources are discovered during construction, all earth-moving activity within and around the immediate discovery area will be diverted until a qualified

archaeologist can assess the nature and significance of the find. If human remains are discovered, State Health and Safety Code Section 7050.5 states that further disturbances and activities shall cease in any area or nearby area suspected to overlie remains, and the County Coroner contacted. Pursuant to Public Resources Code Section 5097.98, if the remains are thought to be Native American, the coroner will notify the Native American Heritage Commission (NAHC) who will then notify the Most Likely Descendent (MLD). At this time, the person who discovered the remains will contact Caltrans District 7 Environmental Branch, so that they may coordinate on respectful treatment and disposition of the remains. Further provisions of PRC 5097.98 are to be followed as applicable.

B. Permanent Measures

No permanent measures are required.

2.2 Physical Environment

2.2.1 Water Resources

This section summarizes information found in the Hydrology and Water Quality Technical Memorandum (Parsons, 2005x)

2.2.1.1 Regulatory Setting

The following laws and agreements regulate water quality and are applicable to this project.

Federal laws

- Executive Order 11988 Flood Plain Management, signed on May 24, 1977, requires that federal agencies ". . . avoid to the extent possible the long- and short-term adverse impacts associated with the occupancy and modification of floodplains and to avoid direct and indirect support of floodplain development wherever there is a practicable alternative. . ." within the 100-year flood elevation. Federal agencies that propose to construct projects in floodplain areas must consider alternatives that will avoid adverse effects and incompatible development. If the proposed project is to be located in a floodplain, the federal agency shall take action to modify the project in a way that minimizes potential harm.

- Federal Water Pollution Control Act of 1972 (Clean Water Act) requires agencies to protect water quality. The objectives of the act are to "restore and maintain the chemical, physical and biological integrity of the Nations' Waters", and to make all waters of the United States "fishable and swimmable."

- Section 404 of the Clean Water Act establishes a permit program administered by the U.S. Army Corps of Engineers (USACE) to regulate the discharge of dredge or fill material into the waters of the United States. The U.S. Environmental Protection Agency (USEPA) develops regulations that the USACE must comply with and also reviews the permits issued by the USACE.

- Section 401 of the Clean Water Act requires a water quality certification when water is discharged into an existing waterway, which attests to the acceptability of the resultant

water quality in the affected waterway. The Los Angeles Regional Water Quality Control Board would administer the water quality certification for the U.S. 101 / Del Norte Boulevard Interchange Improvement Project. (See also the discussion under National Pollutant Discharge Elimination System, below).

- Planning Guidelines for Standard Approaches to Mitigation Site Monitoring and Maintenance—under November 1988 MOU with Sacramento Office FWS (November 1991). This MOU provides planning guidelines to improve the success of project mitigation within the jurisdiction of Caltrans and FWS.

State Laws

- The National Pollutant Discharge Elimination System (NPDES) is the portion of the Clean Water Act that applies to protection of existing waters from stormwater or sewage effluent. The NPDES permit would be issued by the Los Angeles Regional Water Quality Control Board. (See also the discussion under Section 401, above.)

The following Federal, State and Local Agencies regulate water resources.

Federal Regulatory Agencies

- U.S. Environmental Protection Agency (USEPA) is a signatory to the NEPA/404 MOU process.
- The U.S. Army Corps of Engineers (USACE) regulates the floodplain and is a signatory to the NEPA/404 MOU process.
- The U.S. Fish and Wildlife Service (USFWS) regulates actions pursuant to the Endangered Species Act and is a signatory to the NEPA/404 MOU process.

State Regulatory Agencies

- The Regional Water Quality Control Board (RWQCB) issues clean water certifications, pursuant to Section 401 of the federal Clean Water Act.
- The California Department of Fish and Game (CDFG) issues streambed alteration agreements pursuant to Section 1602 of the California Department of Fish and Game Code.
- The Los Angeles Regional Water Quality Control Board (LARWQCB) reviews Waste Discharge Requirements (WDR) to ensure that water treatment will be provided, as necessary, to meet applicable effluent limitations. The LARWQCB will also issue a National Pollution Discharge Elimination System (NPDES).

2.2.1.2 Affected Environment

A. Hydrology

The Los Angeles Regional Water Quality Control Board (RWQCB) has jurisdiction within the project limits. The proposed project is located with the Oxnard Plain Groundwater Basin, which lies within the Calleguas Creek Watershed. The project is located within the Santa Clara-

Calleguas Hydrologic Unit Sub-Area 403.11. Surface water from the project site and immediate project vicinity is collected by several large, man-made stormwater drainage channels. These channels eventually empty into the Pacific Ocean, approximately 8.5 miles (13.7 kilometers) south of the project site. Stormwater from the project site drains into natural earthen drainage channels. These flood control/storm drain channels, maintained by the Ventura County Flood Control Department, flow in a southerly direction south of U.S. 101 and eventually empty into Revolon Slough approximately 1.7 miles from the project site.

The very flat immediate surroundings of the U.S. 101/Del Norte interchange were most conducive in the past to both agricultural and transportation land uses. Historically, runoff flowed southeasterly from there as sheet flow toward Beardsley Channel which flows into Revolon Slough, a tributary to Calleguas Creek. Calleguas Creek runs to the ocean at Mugu Lagoon. The natural water course feeding Revolon Slough originates north of the Camarillo Hills, passes around their west side as Beardsley Wash, then turns southeasterly near where U.S. 101 crosses the drainage, about half a mile east of the project area. Both the wash (now Beardsley Channel) and Revolon Slough were fully lined decades ago. As tributaries, Beardsley Channel and Revolon Slough are hydrologic reaches of Calleguas Creek.

The Beardsley Channel is located approximately one-half mile east of the project site, routing storm flow and surface runoff southwesterly toward the Revolon Slough which is located approximately 1.7 miles south of the site. Flow from the Revolon Slough ends up in Calleguas Creek and ultimately in the Pacific Ocean. While the proposed improvements will not touch the flood control channels, they are still within the 100-year Zones B and C floodplain (areas exhibiting less than one foot of ponded flooding and areas outside the 100-year flood zone but within the 500-year flood zone, respectively) as dictated by FEMA. The Beardsley Channel has a relatively small watershed located north of U.S. 101 and east of the project site. Immediately north of the project site is a drainage lateral referred to as the Nyeland Drain which diverts flows to the Beardsley Channel just upstream of the U.S. 101/Del Norte interchange. The proposed project area is protected from offsite runoff by these channels.

B. Calleguas Creek Watershed

Calleguas Creek drains a watershed of about 340 square miles. Fluvial characteristics of Calleguas Creek differentiate it into twelve separate reaches, mainly located east of the project area. These reaches flow in a southwesterly direction toward Mugu Lagoon and the Pacific Ocean. The watershed includes an upper (eastern) portion located in the relatively hilly terrain of the Santa Monica Mountains and a lower (western) portion located in the flatter alluvial valley of the Oxnard Plain. The proposed project is located in the alluvial valley portion of the watershed, in an area that is mainly agricultural, with commercial development occuring to the south. The soil type is Camarillo Loam which falls within hydrologic soil group C, possessing moderate to slow infiltration when thoroughly wetted and consisting chiefly of poorly drained loamy sands and silty clay loams. Annual precipitation within the watershed at this location is approximately 15 inches, predominately occuring in the winter season. Elevation of the project area varies between approximately 60-ft and 70-ft above mean sea level.

C. Regional Water Quality

In accordance with the Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties (Basin Plan, 1995) set forth by the Los Angeles Regional Water Quality Control Board (RWQCB), the project area falls within Beardsley Wash Hydrologic Sub-Unit 403.61 of the Calleguas-Conejo Creek Watershed. The project site lies adjacent to Beardsley Wash (currently referred to as the Beardsley Channel). After crossing the U.S. 101, the Beardsley Channel conveys flow into the Revolon Slough. Beardsley Wash has potential for municipal use and is currently used for freshwater replenishment, recreation, warm freshwater habitat and wildlife habitat. Revolon Slough has potential for municipal and industrial use and is currently used for agricultural supply, groundwater replenishment, recreation, warm freshwater habitat and wildlife habitat. The ground water basin underlying the project area is referred to as the Oxnard Plain which has municipal, agricultural, and industrial service. No beneficial uses for wetland areas within the hydrologic units in the vicinity of the project were identified.

Currently, there are several pollutants of concern associated with the project area. In accordance with the 2002 Clean Water Act, Section 303(d) List of Water Quality Limited Segments (impaired water bodies), the Revolon Slough and Beardsley Channel have in common high TMDL priority levels of algae, nitrogen, and "toxicity". Beardsley Channel also exhibits high levels of chlorpyrifos, an organophosphate pesticide while the Revolon Slough exhibits only medium levels of this pollutant. Both of the waterbodies exhibit medium levels of ChemA, Chlordane, DDT, Dieldrin, Endosulfan, PCBs and Toxaphene and low levels of sedimentation/ siltation and trash. The Beardsley Channel also exhibits medium levels of Dacthal while the Revolon Slough exhibits medium levels of Boron, Selenium, Sulfates and TDS along with low levels of fecal coliform and nitrate. There are currently two TMDLs that have been issued for the area – the Calleguas Creek Chloride TMDL (though storm water is not considered a contributing factor for chloride impairment) and the Nitrogen Compounds and Related Effects TMDL.

2.2.1.3 Environmental Consequences

All build alternatives would have the following similar impacts.

A. Temporary Impacts

Hydrology and Floodplains

Since the build alternatives are located within the 100-year Zone B and C floodplain, a Floodplain Hydraulic Evaluation Report will be required. However, since the flood zones are located at the edge of the project area where the areas are designated as shallow and since no construction is anticipated within the offsite drainage/flood control channels, little impact to the flood plain water surface is expected as a result of Alternative 2's construction.

Construction will involve demolition of structures, cut and fill earthwork, asphalt paving, bridge construction, retaining wall construction, site clearing, and landscaping. Each of these construction activities can have deleterious effects on the surrounding watershed and streams if storm water and non-storm water pollution controls are not in place during the time of construction. Because the project will disturb more than 0.5 acre of land, a Storm Water Pollution Prevention Plan (SWPPP) will be required. The SWPPP will identify construction related best management practices (BMPs) for water pollution control.

Secondly, construction within the project area could disturb stocks of the pollutants in the soils adjacent to the proposed project (attributable to decades of accepted agricultural practices). Such pollutants could enter the water by way of the Beardsley Channel and/or the downstream Revolon Slough which ultimately flows into Calleguas Creek. However, considering the small amount of proposed acreage that would be converted from agricultural to transportation use, as a proportion of the entire watershed of Calleguas Creek, additional pollutants created from soil disturbance would constitute an immeasurably small increase above the TMDLs for Calleguas Creek. None of the stream reaches upstream would be affected. Furthermore, any such increases would be transitory, ending after construction completion.

Potential pollutants found on the city streets and freeway that could enter the channels that ultimately discharge into Calleguas Creek include heavy metals, organic compounds (including petroleum hydrocarbons), sediments, trash, debris, oil, and grease. Concentrations of such pollutants are generally highest during the "first flush" of an initial rain storm, after which concentration levels decrease rapidly.

The receiving water bodies are not considered high risk for municipal or domestic water supply. Total suspended solids (TSS) are of concern, however. Potential pollutant sources for TSS include runoff from cut and fill slopes and other areas where the ground is disturbed.

The only watercourses considered "Waters of the U.S." in the vicinity of the project are the Beardsley Channel and Revolon Slough which both lie outside of the proposed project area and are not anticipated to be affected by project construction. Therefore, neither a Section 401 Water Quality Certification (required to address how the project would avoid the release of pollutants into the federal waters), a Section 1602 Streambed Alteration Agreement (required if the project includes any alterations within the streambeds) nor a Section 404 Permit (required for any placement of fill within the federal waters) should be required for this project.

B. Permanent Impacts

Hydrology and Floodplains

The build alternatives would not encroach into existing flood control channels. Flood flows would not be impeded or redirected. A minor increase in impervious surface area would result in minor localized increases in urban runoff. However, due to the lag time between the peak runoff from Beardsley Wash and Revolon Slough and from the freeway runoff, the peak flow from the freeway will have substantially subsided by the time the watershed peak occurs. This would result in an insignificant increase in peak flow in the overall flood control channels due to Alternative 2. Since the flood zones located at the edge of the project area are designated shallow, little impact to the flood plain water surface is expected as a result of Alternative 2.

Water Quality

After construction, there will be no permanent impacts associated with the build alternatives.

2.2.1.4 Measures to Minimize Harm

A. Temporary Measures

Hydrology and Floodplains

No temporary measures area required.

Water Quality

The following standard practice measures to minimize harm will be followed:

WQ-C1: A SWPPP will be prepared and will identify construction-period BMPs to reduce water quality impacts. The SWPPP will be prepared in accordance with current city and county standards. The SWPPP will emphasize: 1) standard temporary erosion control measures to reduce sedimentation and turbidity of surface runoff from disturbed areas; 2) personnel training; 3) scheduling and implementation of BMPs throughout the various construction phases and during various seasons; 4) identification of BMPs for non-storm water discharge such as fuel spills; and 5) mitigation and monitoring throughout the construction period.

WQ-C2: In the event groundwater is encountered during construction, dewatering would be conducted locally. Dewatering effluent would be tested for contaminants as specified by the RWQCB. Contaminated effluent would be disposed of in accordance with applicable federal, state and local regulations.

WQ-C3: During construction, temporary erosion control procedures will be used, such as the placement of mulch on all disturbed areas, fiber rolls along slopes, silt fences at the boundaries of the construction site, stabilized construction entrances and exits equipped with tire washing capability, and check dams placed strategically to reduce flow velocity and to filter flows in defined drainage-ways.

B. Permanent Measures

Hydrology and Floodplains

The following standard practice to minimize harm will be conducted:

HYD–1: During project design, location hydraulic studies will be performed by the project designer. A hydraulic report summarizing the results of this analysis will be submitted for review by the local agencies listed in the Flood Insurance Rate Maps [FIRMs].

Water Quality

The following permanent measures to minimize harm will be implemented:

WQ-1: BMPs will be designed and implemented to reduce the discharge of pollutants from the storm drain system to the maximum extent practicable. Treatment BMPs that will be implemented for the project and would mainly consist of infiltration devices, detention devices biofiltration swales or strips, and/or gross solids removal devices. Incorporation of hydroseeding and appropriate landscaping will be proposed to minimize erosion and reduce total runoff. To minimize sedimentation, energy dissipation devices, channel lining, rounding

and flattening slopes and incorporation of retaining walls will be considered during design. A Long Form Storm Water Data Report has been prepared for this project. It provides detailed descriptions of proposed design pollution prevention BMPs, permanent treatment BMPs, temporary construction BMPs, and maintenance BMPs.

2.2.2 Geology / Soils / Seismic / Topography

2.2.2.1 Affected Environment

A. Topography and Soils

The site topography is relatively level with a gentle gradient to the southwest and is located near elevation 66 feet above mean sea level (MSL). The project site lies within the Oxnard Plain of the Transverse Ranges Physiographic and Geomorphic Province. The Transverse Ranges are characterized by an east trending structural grain (faulting and folding), as opposed to the predominant northwest trending structural of most of California. Earth materials consist of wash deposits. The wash deposits are deposits that were placed during sheet flow across the valley floor and generally consist of firm, moist, silty/clayey materials.

The subsurface soils in the project area consist primarily of fine-grained soils. Alternating silt and clay layers are found to a depth of 59 feet below existing ground surface (bgs). Below approximately 59 feet, a dense to very dense sand and gravelly sand layer was encountered.

The depth to groundwater during the preliminary foundation report study at the project site was approximately 5 feet bgs (elevation 64 feet MSL).

B. Geologic Hazards

The site is located within a seismically active region. The characteristics of nearby faults are summarized in Table 2-13. Based on the distance to faults and using Caltrans methodology (Sadigh, et al., 1997), the peak bedrock acceleration (PBA) calculated at the site will be approximately 0.81g. The estimated maximum credible earthquake (MCE) magnitude of the corresponding controlling fault, Simi-Santa Rosa-Northridge Hills, was 7.5. This fault was identified as a reverse-oblique fault.

Table 2-13 – Major Fault Characterization in the Project Vicinity

Fault	Approximate Distance (miles)	Type of Fault	Maximum Earthquake Magnitude (Mw)
Simi-Santa Rosa-Northridge Hills	0.43	Riverse-Oblique	7.5
Oakridge	3.7	Riverse-Oblique	7.5
Pitas Point-Ventura	7.5	Riverse-Oblique	7.25
Bailey	5.0	Not known	6.5
San Cayetano-Holser-Del Valle	15.0	Riverse	7.5
Malibu-Coast-Santa Monica-Hollywood-Raymond	16.2	Riverse-Oblique	7.5

Note: Fault characterization based on Caltrans California Seismic Hazard Map and Report 1996 (CSHM, 1996a).
Source: Group Delta, 2006.

The project site is located within a potential liquefaction zone as identified on State of California seismic hazard zone maps. The site-specific analysis indicated that the upper approximately 59 feet (excluding the top 5 feet) is susceptible to liquefaction during the design earthquake.

2.2.2.2 Environmental Consequences

All of the build alternatives would have the following similar impacts.

A. Temporary Impacts

Erosion

The project site is not within an earthquake-induced landslide zone. Construction of the build alternatives would result in ground surface disruption during excavation, grading, and trenching that would create the potential for soil erosion. The size of the proposed project is greater than one acre; therefore, it would be necessary to prepare and comply with a Storm Water Pollution Prevention Plan (SWPPP) and a National Pollutant Discharge Elimination System (NPDES) permit, which would include erosion control measures to mitigate the loss of topsoil. The build alternatives would involve reconfiguration of an existing freeway interchange and would not result in a substantial loss of topsoil. Compliance with the aforementioned plan and associated erosion control measures permit regulations would minimize impacts related to soil erosion.

Seismic Hazards

The project site is not located within the boundaries of an Alquist-Priolo Earthquake Fault Zone (Hart and Bryant, 1999), and no evidence of active faulting was observed during a preliminary investigation of the subject site. The Preliminary Foundation Report concluded that an additional field investigation to locate active fault traces was not deemed necessary for the project site. The project site is located in a seismically active area of southern California that is likely to be subjected to moderate to severe ground shaking (Diaz Yourman & Associates, 2006). Published earthquake fault zone maps pertaining to the project area indicate that the project site is located approximately 0.43-mile south of the Simi-Santa Rosa - Northridge Hills Fault. This fault is officially classified by the State of California as active, meaning that surface rupture has occurred along these faults within about the last 11,000 years (Hart and Bryant, 1999). A listing of historical earthquakes published by the National Earthquake Information Center (2004) indicates that the largest earthquake occurring within a radius of approximately 62 miles of the project site was a 7.7 magnitude, 1952 earthquake located approximately 52 miles to the northeast. More recently, the Magnitude 6.8 Northridge Earthquake in 1994 occurred approximately 33 miles southeast of the site. Build alternatives would incorporate seismic design requirements identified in a geotechnical study prepared for the proposed project. The build alternatives would not increase the risk from strong seismic ground shaking.

Liquefaction

The project site is located within the potential liquefaction zone on the State of California Geological Survey seismic hazard zone map. The Preliminary Foundation Report prepared for the proposed project found that the upper approximately 59 ft (excluding the top 5 ft) of soil at the project site are susceptible to liquefaction during an earthquake.

The proposed build alternatives involve reconfiguration of an existing freeway interchange that would incorporate seismic design requirements specific to the liquefaction potential identified in a geotechnical study prepared for the proposed project. The proposed build alternatives not increase the risk from liquefaction at the project site.

B. Permanent Impacts

There would be no permanent impacts associated with the proposed project.

2.2.2.3 Measures to Minimize Harm

A. Temporary Measures

GEO-C1: Caltrans will prepare and comply with a Storm Water Pollution Prevention Plan (SWPPP) and a National Pollutant Discharge Elimination System (NPDES) permit, which would include erosion control measures to mitigate the loss of topsoil. Disturbed slopes shall be re-vegetated per an Erosion Control Plan. Benches, rounded slopes and other measures will be considered to reduce concentrated flow. Some of the existing slopes may need to be stabilized and vegetated to control erosion.

B. Permanent Measures

No permanent measures are required.

2.2.3 Paleontology

2.2.3.1 Regulatory Setting

The following Acts pertain to the proposed project.

- Antiquities Act of 1906 [16 USC 431-433] addresses paleontological resources, their treatment, and funding for mitigation as a part of federally authorized or funded projects.
- Federal-Aid Highway Act of 1935 [20 USC 78] addresses paleontological resources, their treatment, and funding for mitigation as a part of federally authorized or funded projects.

2.2.3.2 Affected Environment

The project site lies within the Oxnard Plain of the Transverse Ranges Physiographic and Geomorphic Province. A wide variety of paleontological resources are known to exist in the south half of the County (Ventura County, 2005). The diverse geology of the Transverse Ranges encompasses many different kinds of fossil organisms. A records search conducted at the SCCIC of the California Historical Resources Information System located at California State University, Fullerton, revealed no paleontological sites within a 1-mile radius of the project site.

2.2.3.3 Environmental Consequences

The build alternatives would have the following similar impacts.

A. Temporary Impacts

Although the records search revealed no paleontological sites in the project vicinity, resources could be encountered during project construction earth-moving activities.

B. Permanent Impacts

Any paleontological finds would be fully investigated and appropriately treated during th construction period. No permanent impacts would result from the build alternatives.

2.2.3.4 Measures to Minimize Harm

A. Temporary Measures

The following temporary measure would be followed during the construction period:

PAL-C1. If paleontological resources are encountered during project construction, work would be stopped in the area of the find until a qualified paleontologist can evaluate the nature and significance of the find.

B. Permanent Measures

No permanent measures area not required.

2.2.4 Hazardous Waste/Materials

Hazardous materials are substances that, by their nature and reactivity, have the capacity for causing harm or health hazards during normal exposure or an accidental release or mishap. They are characterized as being toxic, corrosive, flammable, reactive, an irritant, or a strong sensitizer. The term "hazardous substances" encompasses chemicals regulated by DOT's "hazardous materials" regulations and the United States Environmental Protection Agency's (EPA) "hazardous waste" regulations, including emergency response. Hazardous wastes require special handling and disposal because of their potential to damage public health and the environment.

2.2.4.1 Regulatory Setting

The following federal laws pertain to the proposed project.

- Resource Conservation and Recovery Act of 1976 (RCRA) provides for "cradle to grave" regulation of hazardous wastes.
- Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA)'s purpose, which is often referred to as Superfund, is to clean up contaminated sites so that public health and welfare are not compromised.
- Executive Order 12088, Federal Compliance with Pollution Control, mandates that necessary actions be taken to prevent and control environmental pollution when federal activities or federal facilities are involved.

Other federal laws governing hazardous waste and materials include the: Community Environmental Response Facilitation Act (CERFA) of 1992, Clean Water Act, Clean Air Act, Safe Drinking Water Act, Occupational Safety & Health Act (OSHA), Atomic Energy Act,

Toxic Substances Control Act (TSCA), and the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)

2.2.4.2 Affected Environment

An Initial Site Assessment (ISA) prepared for this project documents all known hazardous waste and material sites within and at various distances from the project site in August 2005 (Parsons, 2005c). The ISA was performed using the guidelines of the American Society for Testing and Materials (ASTM) Designation E 1527, "Standard Practice for Environmental Project Site Assessments: Phase I Environmental Property Assessment Process", as well as the Caltrans *Project Development Procedures Manual*. The scope of the ISA included site reconnaissance; historical research related to use, storage, disposal, or release of hazardous materials or petroleum hydrocarbons; review of environmental databases; and report of findings.

The ISA investigations consisted of a records review (federal/state environmental databases, historic topographic maps and historic aerial photographs) and a site reconnaissance. The site investigation did not include detailed surveys of the project site, such as a radon gas survey; analysis of potable water; a wetlands study; or environmental sampling (e.g., soil and groundwater sampling and analysis).

Sixty-two (62) sites within American Society for Testing and Materials (ASTM) E 1527-00 Standard search distances from the project site are identified in environmental databases. No hazardous materials sites were identified within the project footprint. Identified sites within the immediate vicinity of the project site have been investigated and determined to not present a hazard or "recognized environmental concern" (REC), as defined by ASTM. There were no environmental concerns identified during the site reconnaissance conducted on February 28, 2005.

However, soils immediately adjacent to the roadway may contain aerially deposited lead (ADL) generated by historic motor vehicle exhaust. These soils may also contain pesticides given that the project site has been employed for agricultural purposes as far back as the 1930s. As a result, areas within the proposed project limits where soil may be disturbed during construction would be tested for ADL according to applicable standard hazardous material testing guidelines. Prior to the initiation of construction activities, surface and near-surfaces soil samples should be collected in excavation areas and analyzed for pesticides.

2.2.4.3 Environmental Consequences

A. Temporary Impacts

The following impacts would be similar for all build alternatives.

Construction of the build alternatives could involve limited excavation of exposed surface soil adjacent to paved areas within the project limits. These soils may contain aerially deposited lead (ADL) generated by historic motor vehicle exhaust. These soils may also contain pesticides given that the project site has been employed for agricultural purposes as far back as the 1930s.

Also, construction activities themselves could involve the use of hazardous materials. The use, storage and transport of such materials would be controlled through standard construction practices.

B. Permanent Impacts

No permanent impacts are expected.

2.2.4.4 Measures to Minimize Harm

A. Temporary Measures

The following temporary measures to minimize harm would be followed during project construction:

HAZ-C1: Prior to initiation of construction activities, areas within the proposed project limits where soil may be disturbed during construction shall be tested for ADL according to applicable standard hazardous material testing guidelines. In addition, the contractor will be required to manage all excavated soils in accordance with all pertinent laws and regulations. A Remedial Actions Options Report may be completed to address the proper handling, cleanup, and disposal of the hazardous material

HAZ-C2: Prior to the initiation of construction activities, surface and near-surfaces soil samples will be collected in excavation areas and analyzed for pesticides. If pesticides are detected, soil handling and disposal options will need to be evaluated. A Remedial Actions Options Report may be completed to address the proper handling, cleanup, and disposal of the hazardous material.

B. Permanent Measures

No permanent measures are not required.

2.2.5 Air Quality

2.2.5.1 Regulatory Setting

A number of statutes, regulations, plans, and policies have been adopted that address air quality issues. The proposed project site and vicinity are subject to air quality regulations developed and implemented at the federal, state, and local levels. State and local level regulations are discussed in Chapter 3. Plans, policies and regulations that are relevant to the proposed project are discussed in the following sections.

A. Federal Regulations/Standards

Federal Clean Air Act

The federal Clean Air Act (CAA) was originally enacted in 1970 and last amended in 1990. It forms the basis for the national air pollution control effort. Basic elements of the act include national ambient air quality standards (NAAQS) for criteria air pollutants, hazardous air pollutants emission standards, state attainment plans, motor vehicle emissions standards, stationary source emission standards and permits, acid rain control measures, stratospheric ozone protection and enforcement provisions. The NAAQS have two tiers: primary standards to protect

public health and secondary standards to prevent environmental degradation (e.g., damage to vegetation and property, visibility impairment). The CAA mandates that the state submit and implement a State Implementation Plan (SIP) for areas not meeting the NAAQS. These plans must include pollution control measures that demonstrate how the standards will be met. The sections of the CAA that are most applicable to the project include Title I (Nonattainment Provisions) and Title II (Mobile Source Provisions).

Title I of the CAA identifies attainment, nonattainment, and unclassifiable areas with regard to the criteria pollutants, and sets deadlines for all areas to reach attainment for the following criteria pollutants: ozone (O_3); nitrogen dioxide (NO_2); sulfur dioxide (SO_2); fine particulates (PM_{10} and $PM_{2.5}$); carbon monoxide (CO); and lead (Pb). The NAAQS were amended in July 1997 to include the 8-hour O_3 standard and a NAAQS for $PM_{2.5}$. Table 2-14 lists the federal and State of California (state) identified criteria pollutants and their corresponding ambient air quality standards (primary and secondary standards). Table 2-15 summarizes the health effects of criteria pollutants.

Title II of the CAA contains a number of provisions with regard to mobile sources, including motor vehicle emission standards (e.g., new tailpipe emissions standards for cars and trucks, nitrogen oxides [NO_x] standards for heavy-duty vehicles), fuel standards (e.g., requirements for reformulated gasoline), and a program for cleaner fleet vehicles.

Nonattainment designations are categorized by EPA into seven levels of severity: basic; marginal; moderate; serious; severe-15[9]; severe-17; and extreme.

[9] The "-15" and "-17" designations reflect the number of years within which attainment must be achieved.

Table 2-14 – Federal Ambient Air Quality Standards

Pollutant	Averaging Time	Federal Standards [a,b]	
		Primary	Secondary
Ozone (O_3)	1 Hour	—	—-
	8 Hour	0.08 ppm (157 µg/m^3)	—-
Respirable Particulate Matter (PM_{10})	24 Hour	150 µg/m^3	Same as Primary
	Annual Arithmetic Mean	---[c]	
Fine Particulate Matter ($PM_{2.5}$)	24 Hour	35 µg/m^3	Same as Primary
	Annual Arithmetic Mean	15 µg/m^3	
Carbon Monoxide (CO)	8 Hour	9 ppm (10 mg/m^3)	—
	1 Hour	35 ppm (40 mg/m^3)	
Nitrogen Dioxide (NO_2)	Annual Arithmetic Mean	0.053 ppm (100 µg/m^3)	Same as Primary
	1 Hour	—	
Sulfur Dioxide (SO_2)	Annual Arithmetic Mean	0.030 ppm (80 µg/m^3)	—
	24 Hour	0.14 ppm (365 µg/m^3)	—
	3 Hour	—	0.5 ppm (1300 µg/m^3)
	1 Hour	—	—
Lead[d]	30 Day Average		—
	Calendar Quarter	1.5 µg/m^3	Same as Primary

[a]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 the expected number of days per calendar year with a 24-hour average concentration above150 µg/m3 is equal to or less than one. For PM2.5, 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.

[b]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 torr. Most measurements of air quality are to be corrected to these reference conditions; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

[c]The annual standard of 50 µg/m3 was revoked by EPA in December 2006, due to lack of evidence linking health problems to long-term exposure to coarse particulate pollution.

Source: California Air Resources Board, 2007 (Revised 2/22/07).

Table 2-15 – Health Effects Summary for Air Pollutants

Pollutant	Sources	Primary Effects
Ozone	Atmospheric reaction of organic gases with nitrogen oxides in the presence of sunlight.	Aggravation of respiratory diseases; irritation of eyes; impairment of pulmonary function; plant leaf injury.
Nitrogen Dioxide	Motor vehicle exhaust; high temperature; stationary combustion; atmospheric reactions.	Aggravation of respiratory illness; reduced visibility; reduced plant growth; formation of acid rain.
Carbon Monoxide	Incomplete combustion of fuels and other carbon-containing substances such as motor vehicle exhaust, and natural events such as decomposition of organic matter.	Reduced tolerance for exercise; impairment of mental function; impairment of fetal development; impairment of learning ability; death at high levels of exposure; aggravation of some cardiovascular diseases (angina).
Particulate Matter (PM_{10} and $PM_{2.5}$)	Fuel combustion in motor vehicles, equipment, and industrial sources; construction activities; industrial processes; residential and agricultural burning; atmospheric chemical reactions.	Reduced lung function; aggravation of the effects of gaseous pollutants; aggravation of respiratory and cardio-respiratory diseases; increased cough and chest discomfort; soiling; reduced visibility.
Sulfur Dioxide	Combustion of sulfur-containing fossil fuels; smelting of sulfur-bearing metal ores; industrial processes.	Aggravation of respiratory and cardiovascular diseases; reduced lung function; carcinogenesis; irritation of eyes; reduced visibility; plant injury; deterioration of materials (textiles, leather, finishes, coating, etc.)
Lead	Contaminated soil.	Impairment of blood function and nerve construction; behavioral and hearing problems in children.
Source: EPA, 2006a.		

Ventura County is currently classified as a "moderate" nonattainment area for Ozone based on the new 8-hour Ozone standard and has until June 2010 to meet the standard. The former 1-hour Ozone standard was revoked by EPA on June 15, 2005 and thus, is no longer in effect for the State of California. The Ventura County is in attainment for all other criteria air pollutants under the NAAQS.

Transportation Conformity

The CAAAs of 1990 require that transportation plans, programs, and projects that are funded by or approved under Title 23 United States Code (U.S.C.) or the Federal Transit Act, conform to state or federal air quality plans for achieving NAAQS. "Conformity" is defined under section 176(c) of CAA as conforming to the purpose of the state air quality implementation plan (SIP) to ensure that transportation plans, programs, and projects do not: 1) produce new air quality violations, 2) worsen existing violations, or 3) delay timely attainment of national ambient air quality standards (NAAQS). According to the Clean Air Act, federally supported activities must conform to the implementation plan's purpose of attaining and maintaining these standards.

The 2004 final rule included criteria and procedures for the new 8-hour ozone and fine particulate matter ($PM_{2.5}$) national ambient air quality standards (NAAQS).

In March of 2006, the Transportation Conformity Rule was updated to include regulations for performing qualitative analysis of PM_{10} and $PM_{2.5}$ hotspot impacts. Only projects that are considered "Projects of Air Quality Concern" are required to perform an analysis. Projects of air quality concern are defined, generally, as: 1) new or expanded highway projects that have a significant number of or significant increase in diesel vehicles, 2) projects affecting intersections that are Level of Service D, E, or F with a significant number of diesel vehicles, 3) new or expanded bus and rail terminals and transfer points with a significant number of diesel vehicles congregating in a single location, and 4) projects in or affecting locations, areas or categories of sites which are identified in the PM_{10} or $PM_{2.5}$ applicable implementation plan as sites of possible violation.

2.2.5.2 Affected Environment

A. Existing Air Quality

CARB maintains monitoring stations throughout the SCCAB to monitor concentrations of criteria pollutants in the air. The most representative air quality monitoring station near to the project site is the El Rio-Rio Mesa High School Monitoring Site, located at 545 Central Avenue, El Rio at the intersection of Central Avenue and North Rose Avenue. The El Rio monitoring station is located approximately 2 miles northwest of the U.S. 101/Del Norte interchange. Table 2-16 provides the most recent available monitored ambient air quality data from this monitoring station for the years of 2002 to 2005. As shown, the state and federal standards were not exceeded for all monitored criteria air pollutants, with the exception of PM_{10} and $PM_{2.5}$.

Table 2-16 – Criteria Air Pollutants Data Summary – El Rio Monitoring Station

Pollutant	Standard	2003	2004	2005	2006
Ozone (O_3)	(1-Hour)				
	Maximum Concentration (ppm)	0.08	0.08	0.08	0.09
	Days > CAAQS (0.09 ppm)	0	0	0	0
	(8-Hour)				
	Maximum Concentration (ppm)	0.07	0.08	0.07	0.07
	Days > NAAQS (0.08 ppm)	0	0	0	0
	Days > CAAQS (0.07 ppm) [a]	n/a	n/a	0	0
Respirable Particulate Matter (PM_{10})	(24-Hour)				
	Maximum Concentration ($\mu g/m^3$)	127	60	54	119
	Days > CAAQS (50 $\mu g/m^3$) [b]	31	7	12	24
	Days > NAAQS (150 $\mu g/m^3$)	0	0	0	0
	(Annual Average)				
	Annual Arithmetic Mean (50 $\mu g/m^3$)	31	28	25	27
	Annual Geometric Mean (20 $\mu g/m^3$)	n/a	29	26	28
Fine Particulate Matter ($PM_{2.5}$)	(24-Hour)				
	Maximum Concentration ($\mu g/m^3$)	82	29	35	30
	Days > NAAQS (65 $\mu g/m^3$) [c,d]	1	0	0	0
	3-year Average 98th Percentile ($\mu g/m^3$) [c]	30	28	27	25
	(Annual)				
	Annual Arithmetic Mean (15 $\mu g/m^3$)	12	12	11	10
Carbon Monoxide (CO)	(1-Hour)				
	Maximum Concentration (ppm)	7.2	2.1	n/a	n/a
	Days > CAAQS (20 ppm)	0	0	n/a	n/a
	Days > NAAQS (35 ppm)	0	0	n/a	n/a
	(8-Hour)				
	Maximum Concentration (ppm)	3.5	1.5	n/a	n/a
	Days > CAAQS (9.0 ppm)	0	0	n/a	n/a
Nitrogen Dioxide (NO_2)	(1-hour)				
	Maximum Concentration (ppm)	0.06	0.06	0.07	0.05
	Days > NAAQS (9 ppm)	0	0	0	0
	Days > CAAQS (0.25 ppm)	0	0	0	0
	(Annual)				
	Annual Arithmetic Mean (0.053 ppm)	0.011	0.011	0.011	0.010
Sulfur Dioxide (SO_2)	(24-hour)				
	Maximum Concentration (ppm)	0.002	0.001	n/a	n/a
	Days > CAAQS (0.04 ppm)	0	0	n/a	n/a
	Days > NAAQS (0.14 ppm)	0	0	n/a	n/a
	(Annual)				
	Annual Arithmetic Mean (0.03 ppm)	n/a	n/a	n/a	n/a

ppm: parts per million; $\mu g/m^3$: micrograms per cubic meter; AAM: Annual Arithmetic Mean; n/a: not available

[a] *The new California 8-hour-average O_3 standard was adopted by CARB on April 28, 2005; therefore, the exceedance statistics are not applicable before this date.*

[b] *State statistics are based on California-approved samplers, whereas national statistics are based on samplers using federal reference or equivalent methods. State and national statistics may therefore be based on different samplers.*

[c] *Attainment condition for $PM_{2.5}$ is that the 3-year average of the 98th percentile of 24-hour concentrations at each monitor within an area must not exceed the standard.*

[d] *Days exceeding the NAAQS for $PM_{2.5}$ is based on 1997 standard of 65 $\mu g/m^3$, as it is the standard upon which the current $PM_{2.5}$ designations are based.*

Source: CARB, 2007.

Particulate Matter (PM_{10}) – The highest recorded concentration during the period of 2003 to 2006 was 127 micrograms per cubic meter (µg/m^3), which was recorded in 2003. The national PM_{10} standard was not exceeded during this period. PM_{10} is monitored every six days coincident to a national schedule; thus, PM_{10} exceedances are estimated values based on the number of days that measured value exceeded the standard level. Annual averages show no exceedance from the NAAQS, but exceed the more stringent state standard.

Fine Particulates ($PM_{2.5}$) – In 2003, the highest 24-hour $PM_{2.5}$ maximum concentration was recorded at 82 µg/m^3. During 2004 through 2006. the 24-hour $PM_{2.5}$ maximum concentration was greatly reduced ranging between 29 and 35 µg/m^3. The annual average concentration values ranged between 11 and 13 µg/m^3; no exceedance from the 15 µg/m^3 standard level occurred.

B. Sensitive Receptors

Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. Sensitive receptors include residential areas, hospitals, elder care facilities, rehabilitation center, elementary schools, places of worship, and parks.

Residential areas are considered to be sensitive to air pollution because residents (including children and the elderly) tend to be at home for extended periods of time, resulting in sustained exposure to pollutants. Places where children congregate (e.g., schools, daycares and play areas) are also considered especially sensitive to air pollution as children's lungs are not as fully developed as adult lungs. Recreational land uses are considered moderately sensitive to air pollution. Although exposure periods are generally short, exercise may place a high demand on respiratory functions, which can be impaired by air pollution. In addition, noticeable air pollution can detract from the enjoyment of recreation. Industrial and commercial areas are considered the least sensitive to air pollution. Exposure periods are relatively short and intermittent, as the majority of the workers tend to stay indoors most of the time. In addition, the working population is generally the healthiest segment of the public.

The nearest sensitive receptor location in the vicinity of the project site is the residential area within the Nyeland Acres Neighborhood, located approximately 300 feet west of the proposed northbound loop of project Alternatives 3 and 4. The locations of sensitive receptors in the vicinity of the project site are shown in Figure 2-8**.**

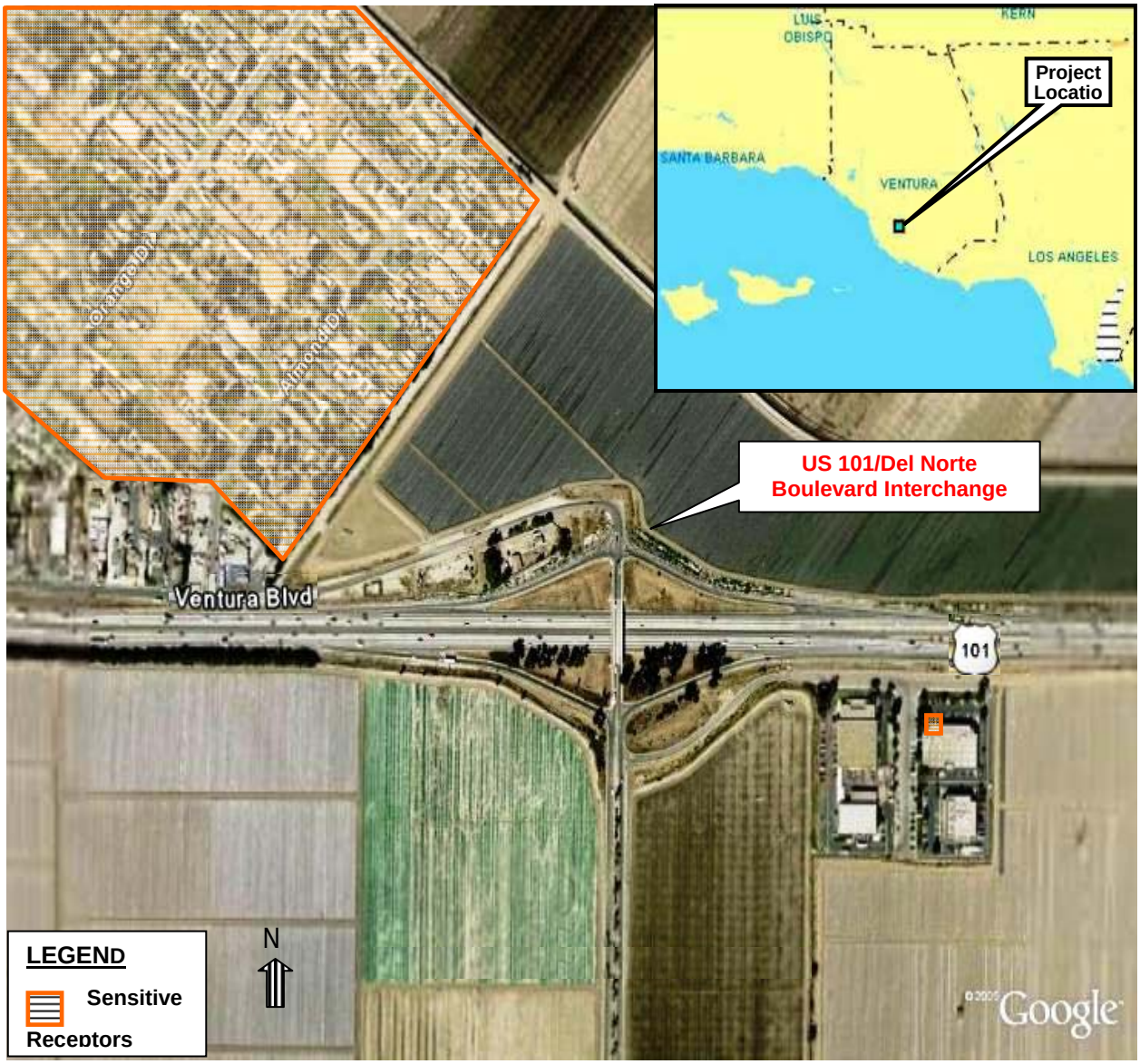


Figure 2-8 – Project Site and Sensitive Receptors Location

C. Regional Air Quality Conformity

In determining whether a project conforms with an approved air quality plan, agencies must use current emission estimates based on the most recent population, employment, travel, and congestion estimates determined by an area's metropolitan planning organization (MPO). MPOs are required to develop and maintain 20-year Regional Transportation Plans (RTP) and 3-year Regional Transportation Improvement Programs (RTIP or TIP) that set out transportation policies and programs for the region. A conforming RTIP/TIP model outcome projects that the regulated pollutants will be reduced to acceptable levels within time frames that meet the NAAQS.

The Southern California Association of Governments (SCAG) is the MPO for the project region, responsible for developing RTP and RTIP for the region including Los Angeles, Orange, San Bernardino, Riverside, Imperial, and Ventura Counties. The RTP provides a long-term vision of regional transportation goals, policies, objectives, and strategies; assesses current and projected demand for travel and goods movement; and identifies necessary actions to meet the region's mobility and accessibility needs. The 2004 RTP was federally approved on June 7, 2005.

The 2006 RTIP was developed in compliance with state and federal requirements. County transportation commissions have the responsibility (under state law) of proposing county projects, using policies, programs, and projects of the current RTP as a guide, from among submittals by cities and local agencies. The local priority lists of projects were forwarded to SCAG for review. From these lists, SCAG developed the 2006 RTIP based on consistency with the current RTP, inter-county connectivity, financial constraints, and conformity requirements. The 2006 RTIP implements the 2004 RTP and includes a listing of all transportation projects proposed over a six-year period, Fiscal Years (FY) 2006/7 – 2011/12. The 2006 RTIP was adopted on October 2, 2006. In order to be in conformance, a project must be included in the list of projects of the approved transportation plans and programs.

The proposed project is identified in the Appendix I of the federally approved 2004 RTP, within the "2004 RTP – Plan Projects" list, as Project No. "5M0405" and described as "interchange improvement and 4-lane overcrossing with left turn pocket." The U.S.-101/ Del Norte Interchange/Ramps Reconstruction Project is listed in the Final 2006 RTIP – Ventura County State Highway Projects list, under the conformity category "non-exempt" and with Project ID of "VEN051006" (see Appendix A). The 2006 RTIP was federally approved on October 2, 2006, and the Federal Statewide Transportation Improvement Program (FSTIP) was expired on October 4, 2006. The 2006 RTIP is also consistent with the 2006 State Transportation Improvement Program (STIP) cycle and incorporates the SCAG portion of the 2006 STIP. Given that the proposed project is consistent with the 2004 RTP and included in the 2006 RTIP, it will not interfere with the timely implementation of all Transportation Control Measures (TCMs) identified in the currently approved State Implementation Plan (SIP).

In March of 2006, the Transportation Conformity Rule was updated to include regulations for performing qualitative analysis of PM_{10} and $PM_{2.5}$ Hotspot impacts. A hot-spot analysis is defined in the Code of Federal Regulations (CFR) (40 CFR 93.101) as an estimation of likely future localized $PM_{2.5}$ or PM_{10} pollutant concentrations and a comparison of those concentrations to the relevant air quality standards. A hot-spot analysis assesses the air quality localized impacts, in areas near congested roadway intersections, highways ramps or transit terminals. For transportation projects, such an analysis can demonstrate that a project meets Clean Air Act conformity requirements to support State and local air quality goals with respect to potential localized air quality impacts. Only projects that are considered "Projects of Air Quality Concern" (POAQ), are required to perform hot-spot analysis.

The proposed project is fully funded and is in the 2004 Regional Transportation Plan which was found to conform by the Southern California Association of Governments in April 2004 (amended on July 27, 2006), and FHWA and FTA adopted the air quality conformity finding on June 7, 2005. The project is also included in the Southern California Association of Governments financially constrained 2006 Regional Transportation Improvement Program, Appendix I,

Project No. 5M0405. The Southern California Association of Governments 2006 Regional Transportation Improvement Program was found to conform by FHWA and FTA on October 2, 2006. The design concept and scope of the proposed project is consistent with the project description in the 2204 RTP, the 2006 RTIP and the assumptions in the Southern California Association of Governments' regional emissions analysis.

D. Project Level Conformity

Ventura County is currently classified as "moderate" nonattainment area for Ozone based on the new 8-hour Ozone standard. According to the CAAQS, Ventura County is classified as a "severe" nonattainment area for O_3, and nonattainment for $PM_{2.5}$ and PM_{10}.

CO and particulate matter (PM_{10} and $PM_{2.5}$) are the pollutants of major concern along roadways. As such, concentrations of CO and PM_{10} at the most congested intersections or links are usually indicative of the local air quality generated by a roadway network, and are used to evaluate the project impacts on local air quality. The UC Davis and Caltrans document *Transportation Project-Level Carbon Monoxide Protocol* (*UC Davis, 1997*) was used to determine if a CO hot spot analysis would be required. For the local impacts of particulate matter (PM_{10} and $PM_{2.5}$), the hot-spot analysis requirements of the March 10, 2006 final rule was implemented, using the *Transportation Conformity Guidance for Qualitative Hot-Spot Analyses in $PM_{2.5}$ and PM_{10} Nonattainment and Maintenance Areas* (Guidance) *[EPA420-B-06-902, March 2006]* was developed by the EPA and FHWA (*EPA, 2006b).*

The UC Davis CO protocol was used to determine if a CO hot-spot analysis would be required. This protocol has a screening exercise that would determine if the project requires a qualitative or a quantitative analysis.

CO Hot Spot Analysis

The UC Davis CO protocol was used to determine if a CO hot-spot analysis would be required. This protocol has a screening exercise that would determine if the project requires a qualitative or a quantitative analysis. Below are the steps taken following Figure 1 of the UC Davis CO protocol (see Appendix B).

3.1.1 Is the project exempt from all emissions analyses?

No – The project type is not listed in Table 1 of the protocol as exempt from all emission analyses; *continue to step 3.1.2*

3.1.2 Is project exempt from regional emissions analyses?

No – The project is an interchange reconfiguration project which is listed in Table 2 of the Protocol as exempt for conformity per 40 CFR93.127. However, the project includes other elements such as widening the Del Norte OC, increase the number of travel lanes on the OC from 2 to 5 lanes, and constructing a new northbound loop on-ramp in the northeast quadrant of the interchange. These elements are not exempt from regional conformity requirements; *continue to step 3.1.3*

3.1.3 Is project defined as regionally significant?

Yes – As described in section 2.11 of the Protocol, the project is defined as regionally significant in accordance with 40 CFR §93.101 and pursuant to §93.105(c)(1)(ii). The project has been modeled in the regional emissions analysis of the currently conforming RTP and RTIP, (see Appendix A); *continue to step 3.1.4*

3.1.4 Is project in a federal attainment area?

No – The project is in SCCAB, which is a moderate nonattainment area for 8-hour O_3; *continue to step 3.1.5*

3.1.5 Is there a currently conforming RTP and TIP?

Yes – The 2004 RTP (approved by EPA on June 7, 2004) and 2006 RTIP (adopted on October 2, 2006) are the currently conforming transportation plans for the project region; *continue to step 3.1.6*

3.1.6 Is the project included in the regional emissions analysis supporting the currently conforming RTP and TIP?

Yes – The project is included in both documents (see Appendix A); *continue to step 3.1.7*

3.1.7 Has the project design concept and/or scope changed significantly from that in regional analysis?

No – *continue to step 3.1.9*

3.1.9 Examine local impacts – Proceed to Section 4 (Figure 3) [see Appendix B]

Section 4, local analysis: procedures delineated in the flow chart of Figure 3 of the CO Protocol were followed as described below.

Level 1. Is the project in a CO nonattainment area?

No – The project is located in Ventura County which is a CO attainment area. *Proceed to Level 1a*

Level 1a. Was the area designation as "attainment" after the 1990 Clean Air Act?

Yes – *Proceed to Level 7*

Level 7. Does project worsen air quality?

No – Based on the following discussion, as prescribed by the Protocol, the project is not likely to worsen air quality at the intersections or along the roadway segments within the local project area.

Qualitative CO Hot Spot Analysis

1. *Does the project significantly increase the percentage of vehicles operating in the cold start mode?*

   No. The project does not include areas such as parking lots, where cold start emissions are expected to occur.

2. *Does the project significantly increase traffic volumes?*

   No. Based on the project traffic study (*Parsons, 2005*), the project would not affect freeway traffic volume or traffic mix, and it would not affect the diesel truck percentage or volume on Del Norte Boulevard. The proposed improvements would not increase traffic volume, but would facilitate the projected future traffic increase in the area. The traffic volumes of project Build and No Build Alternatives would be the same.

3. *Does the project worsen traffic flow?*

   No. As the project traffic analysis indicates, within the project limits all approaches, ramps, and adjacent intersections would have less delay and improved level of service (LOS) as a result of the proposed interchange improvements. Alternatives 3 and 4, would further improve the northbound ramps LOS by replacing the northbound left-turn movement (southbound Del Norte Boulevard to northbound US 101 ramp) with either a right turn (Alternative 3) or through traffic movement (Alternative 4) and a loop ramp. This configuration would expand the weaving length and thus ensure adequate left turn storage and a continuous movement, resulting in a lower congestion and increase in speed.

Based on the above qualitative analysis, the project is satisfactory and no further analysis is required.

Particulate Matter ($PM_{10}$and $PM_{2.5}$) Hot Spot Analysis

The PM_{10} and $PM_{2.5}$ hotspot analyses were performed following the EPA Guidance document (*EPA, 2006b*). According to the Guidance document if a project is not in the federal PM_{10} and $PM_{2.5}$ nonattainment or maintenance area, then no further analysis is required. The project site is in a federal attainment area for both PM_{10} and $PM_{2.5.}$ Therefore, PM_{10} or $PM_{2.5}$ hot spot analysis is not required for the proposed project.

2.2.5.3 Environmental Consequences

The proposed reconstruction of the U.S. 101/Del Norte Boulevard interchange has the potential to generate air emissions during both the construction and operation phases. The emissions associated with construction phase activities include operation of construction equipment, disturbance of soil, and vehicular emissions of construction workers commuting from home to worksite. The emissions associated with the operation phase of the project would be from vehicular traffic. The build alternatives would all have impacts similar to the following.

A. Temporary Impacts

Temporary air quality impacts would result from project construction activities. Construction of the proposed project has the potential to create air quality impacts through the use of heavy-duty

construction equipment and through vehicle trips generated from construction workers traveling to and from the project site. In addition, fugitive dust emissions would result from construction activities such as structure demolition, grading, pavement grinding and paving operations. Mobile source emissions, primarily NO_x, would result from the use of construction equipment such as bulldozers, loaders, and cranes. During the finishing phase, paving operations would release reactive organic compounds and off-gassing products. Construction emissions can vary substantially from day to day, depending on the level of activity, the specific mix of construction equipment and, for dust, the prevailing weather conditions.

B. Permanent Impacts

The primary source of air pollutants emissions generated by the proposed project would be from motor vehicles. Estimated emissions from the project were included as part of the 2006 RTIP. Because the proposed improvements to the U.S. 101/Del Norte ramps and overcrossing are included in the regional analysis for determining emissions budgets of the RTIP, the project regional air quality impacts would not be significant. Furthermore, the proposed project would not cause an increase in the Ventura County's population, but it would accommodate the predicted future population of the area. Therefore an additional regional analysis is not required for this project. Traffic patterns would improve the LOS of the U.S. 101/Del Norte interchange from LOS F for the No Build Alternative to LOS E for Alternative 2. The following are impact discussions pertinent to current federal requirements.

Particulate Matter (PM_{10} and $PM_{2.5}$) Hot Spot Analyses

The PM_{10} and $PM_{2.5}$ hotspot analyses were performed following the EPA Guidance document (*EPA, 2006b*). According to the Guidance document if a project is not in the federal PM_{10} and $PM_{2.5}$ nonattainment or maintenance area, then no further analysis is required. The project site is in a federal attainment area for both PM_{10} and $PM_{2.5.}$ Therefore, PM_{10} or $PM_{2.5}$ hot spot analysis is not required for the proposed project.

Mobile Source Air Toxics (MSATs)

Mobile Source Air Toxics (MSATs) are a subset of the 188 air toxics defined in the CAA as hazardous air pollutants (HAPs). The EPA identified 21 of these pollutants as MSATs, which are set forth in an EPA final rule, *Control of Emissions of Hazardous Air Pollutants from Mobile Sources (66 FR 17235)*. The list includes toxics that are emitted from both on-road mobile sources and non-road mobile sources (including non-road vehicles and construction equipment, commercial boats, trains, ships, and aircraft). The EPA further extracted a subset of this list of 21 components that are now labeled as the "six priority MSATs." These include: *benzene, formaldehyde, acetaldehyde, diesel particulate matter/diesel exhaust organic gases, acrolein, and 1,3-butadiene,* and are considered the priority transportation toxics.

The FHWA released an interim guidance on February 3, 2006, determining when and how to address MSATs impact in the NEPA process for transportation projects. The FHWA has identified three levels of analysis; 1) *no analysis* for exempt projects or projects with no meaningful potential MSAT effects; 2) *qualitative analysis* for projects with low potential MSAT effects; and 3) *quantitative analysis* for projects with higher potential MSAT effects.

Under Category 1 (exempt projects), three types of projects are included; a) projects qualifying as a categorical exclusion under 23 CFR 771.117(c), b) projects exempt under the CAA conformity rule under 40 CFR 93.126, and c) other projects with no meaningful impacts on traffic volumes or vehicle mix. This project would qualify for exemption from analysis under "other projects with no meaningful impacts on traffic volumes or vehicle mix", as discussed below.

For each project alternative, the amount of Air Toxics emitted would be proportional to the vehicle miles traveled (VMT), assuming that other variables such as fleet mix are the same for each alternative. The project VMT for each of the Build Alternatives would be the same as the No Build Alternative, or slightly higher because the increased capacity and efficiency of the proposed project could attract rerouted trips from other roads in the transportation network. This increase in VMT could lead to slightly higher TAC emissions for the action alternative along the proposed project, along with a corresponding decrease in TAC emissions along the parallel routes. The emissions increase will be somewhat offset by lower TAC emission rates due to increased speeds. According to EPA's MOBILE6 emissions model, emissions of all of the TACs from mobile sources, except for diesel particulate matter, decrease as speed increases.

Because the estimated VMT under each of the project alternatives are nearly the same, it is expected that there would be no appreciable difference in overall TACs emissions among the various alternatives. Also, air toxic emissions will likely be lower than the present levels in the design year as a result of EPA's national control programs that are projected to reduce Mobile Source Air Toxic emissions by 57 to 87 percent between 2000 and 2020 *(FHWA, 2006)*. Local conditions may differ from these national projections in terms of fleet mix and turnover, VMT growth rates, and local control measures. However, the magnitude of the EPA-projected reductions is significantly high (even after accounting for VMT growth); thus air toxics emissions in the project area are likely to be lower for the build scenarios.

The project would not create additional new diesel particulate matter and toxic air contaminant sources; however, the north ramp in the build scenario under Alternative 3 would be closer to the residential area (about 300 feet west of the north ramp). This will move some traffic closer to nearby residences; thus, under Alternative 3, there may be localized areas where ambient concentrations of TACs could be higher than the No Build Alternative. However, since traffic patterns would be greatly improved (LOS B for Alternative 3 compared to LOS F for No Build Alternative, and LOS E for Alternative 2, based on the project traffic study), congestion and idling emissions would be significantly reduced. Therefore, the reduced congestion and increase in speeds (which would lower the TAC emissions) would offset the effect of closer distance of the ramps to the residence, and a decrease in TAC concentrations is expected. It should also be noted that the nearby residences are more affected by the main line U.S. 101 traffic rather than the U.S. 101/Del Norte interchange traffic due to the fact that main line traffic has much higher traffic volumes. However, since the project would not increase the traffic volume on the main line of U.S. 101, no adverse TAC impact would occur.

2.2.5.4 Measures to Minimize Harm

A. Temporary Measures

Measures to minimize harm aimed at construction emissions are not required under federal law. See Chapter 3 for a discussion of impacts under CEQA and locally prescribed measures to minimize harm.

B. Permanent Measures

Permanent measures are not required.

2.2.6 Noise

2.2.6.1 Regulatory Setting

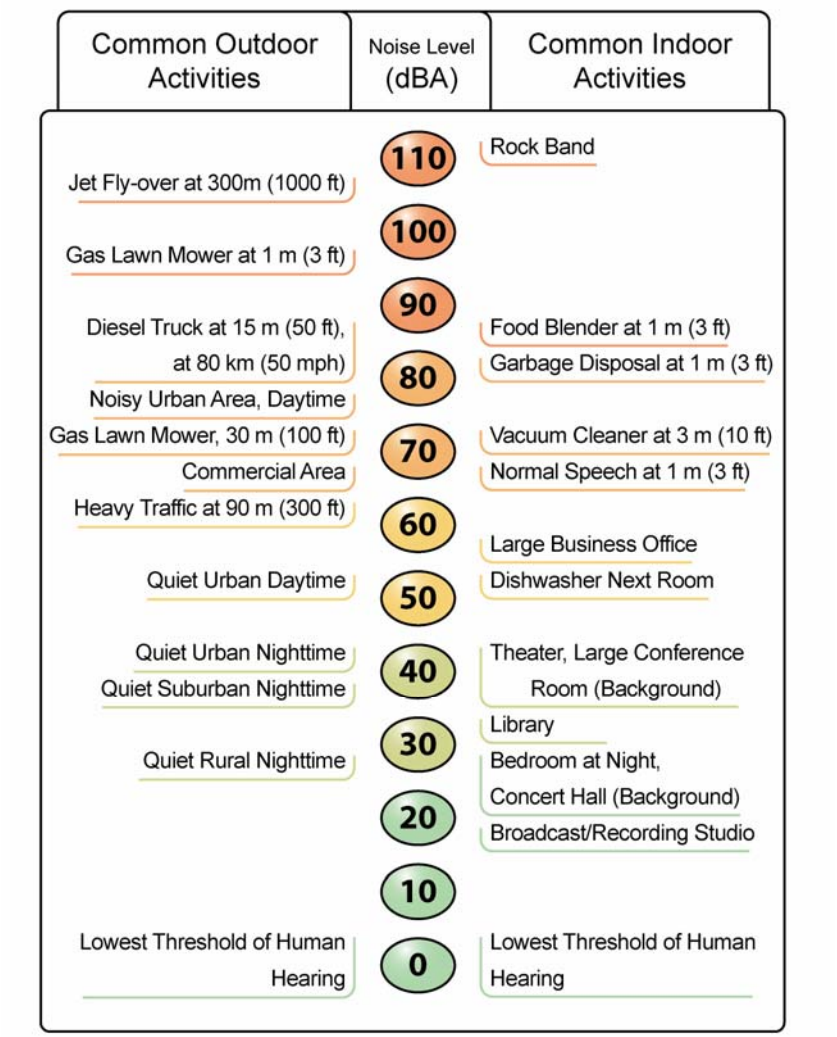
For highway transportation projects with FHWA involvement, the federal-Aid Highway Act of 1970 and the associated implementing regulations (23 CFR 772) govern the analysis and abatement of traffic noise impacts. The regulations require that potential noise impacts in areas of frequent human use be identified during the planning and design of a highway project. The regulations contain noise abatement criteria (NAC) that are used to determine when a noise impact would occur. The NAC differ depending on the type of land use under analysis. For example, the NAC for residences (67 dBA) is lower than the NAC for commercial areas (72 dBA). Table 2-17 lists the noise abatement criteria for use in the 23 CFR 772 analysis.

Table 2-17 – Abatement Criteria

Activity Category	NAC, Hourly A-Weighted Noise Level, dBA L_{eq}(h)	Description of Activities
A	57 Exterior	Lands on 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 intended purpose
B	67 Exterior	Picnic areas, recreation areas, playgrounds, active sport areas, parks, residences, motels, hotels, schools, churches, libraries, and hospitals.
C	72 Exterior	Developed lands, properties, or activities not included in Categories A or B above
D	--	Undeveloped lands.
E	52 Interior	Residence, motels, hotels, public meeting rooms, schools, churches, libraries, hospitals, and auditoriums
Source: 23 CFR 772		

Table 2-18 lists the noise levels of common activities to enable readers to compare the actual and predicted highway noise-levels discussed in this section with common activities.

Table 2-18 – Noise Level



Source: Caltrans, 2006.

In accordance with the Department's *Traffic Noise Analysis Protocol for New Highway Construction and Reconstruction Projects, October 1998*, a noise impact occurs when the future noise level with the project results in a substantial increase in noise level (defined as a 12 dBA or more increase) or when the future noise level with the project approaches or exceeds the NAC. Approaching the NAC is defined as coming within 1 dBA of the NAC.

If it is determined that the project will have noise impacts, then potential abatement measures must be considered. Noise abatement measures that are determined to be reasonable and feasible at the time of final design are incorporated into the project plans and specifications. This document discusses noise abatement measures that would likely be incorporated in the project.

The Department's *Traffic Noise Analysis Protocol* sets forth the criteria for determining when an abatement measure is reasonable and feasible. Feasibility of noise abatement is basically an

engineering concern. A minimum 5 dBA reduction in the future noise level must be achieved for an abatement measure to be considered feasible. Other considerations include topography, access requirements, other noise sources and safety considerations. The reasonableness determination is basically a cost-benefit analysis. Factors used in determining whether a proposed noise abatement measure is reasonable include: residents acceptance, the absolute noise level, build versus existing noise, environmental impacts of abatement, public and local agencies input, newly constructed development versus development pre-dating 1978 and the cost per benefited residence.

2.2.6.2 Affected Environment

A. Selection of Sensitive Receptor Sites

Noise measurement sites are locations where noise measurements are taken in order to determine existing noise levels and to verify or calibrate computer noise models. These sites are chosen as being representative of similar sensitive sites in the area. Locations that are expected to receive the greatest noise impacts, such as the first row of houses from the noise source, are generally chosen. Noise measurements were conducted in frequent human-use areas. All measurement sites were selected so that there would be no unusual noises from sources such as dogs, pool pumps, or children that could affect the measured levels. It is also desirable to choose sites that are free of major obstructions or contamination.

Table 2-19 presents the results of the ambient noise measurements. Existing noise levels at sensitive receptors that would be affected by the project have been measured to be between 56 and 68 dBA.

Table 2-19 – Noise Measurement Results

Site No.	Location	Land Use	Noise Abatement Category / Criterion, Leq(h), dBA	Time of Measurement	Measured Noise Level Leq(h), dBA
ST1	Rear yard property line 3802 Frierich Oxnard, CA	Residential	B (67 dBA)	2:35 – 2:50 pm	57
ST2	Rear yard property line 3544 Almond Dr. Oxnard, CA	Residential	B (67 dBA)	3:10 – 3:25 pm	62
ST3	Rear yard property line Residence on Almond Dr. Oxnard, CA	Residential	B (67 dBA)	4:05 – 4:15 pm	64
ST4	Rear yard property line Residence on Almond Dr. Oxnard, CA	Residential	B (67 dBA)	3:50 – 4:00 pm	68
Source: Parsons, 2006.					

2.2.6.3 Environmental Consequences

A. Temporary Impacts

Construction noise impacts can be assessed by comparing existing noise levels with expected noise levels produced by various construction activities. More detailed construction noise levels cannot be calculated at this time because some of the necessary data, such as the type of equipment, effective usage factor, and number of each equipment type, are not yet available. Given the substantial distance between the proposed project and nearby receptors, it is not likely that adverse impacts would result. Table 2-20 lists typical construction noise levels for select construction equipment.

Table 2-20 – Typical Construction Noise

Construction Phase	Leq(h), dBA	
	15 meters (50 feet) from Centerline	30 meters (100 feet) from Centerline
Clearing and grubbing	86	83
Earthwork	88	85
Foundation	85	82
Base Preparation	88	85
Paving	89	86
Source; Parsons, 2006.		

B. Permanent Impacts

The highest traffic noise levels occur when traffic is heavy but remains free-flowing. Level-of-Service (LOS) D volumes produce this condition and therefore, were modeled to ensure the absolute worst-case scenario traffic noise for the future year, per Caltrans District 7 directive. The LOS D volumes or limits used for this project are 2,000 vehicles per hour per lane for the U.S. 101 mainline. U.S. 101 has three through lanes in each direction within the project limits.

Tables 2-21, 2-22, and 2-23 present the future traffic volumes and traffic distributions used for the noise analysis for Alternatives 2 and 3, respectively. The traffic distribution for the projected Year 2030 has been applied to the LOS D volume limit of 2,000 vehicles per hour per lane to obtain these volumes. Speeds of 65 miles per hour [mph]) are assumed for all vehicle types for the U.S.-101 mainline traffic. Since the freeway traffic would be the dominant noise source at the receptors located adjacent to the project corridor, no local surface street traffic was modeled.

Tables 2-24, 2-25, and 2-26 present the predicted future noise levels at sensitive receptors for the 'without barrier' scenario and 'with barrier' scenario at various heights as well as the recommended barrier location for noise abatement. All recommended barrier heights and locations are designed to provide a minimum 5 dB noise reduction. Barrier heights were usually increased by an additional 2 feet (0.6 meter) if a 2 dB or greater noise reduction could be achieved. Proposed barrier heights and locations are shown for build Alternatives 2, 3 and 4, in Figures 2-10, 2-11 and 2-12, respectively.

Modeling results indicate that residences represented by Receptors R1 through R3A would be potentially affected by the proposed project.

Table 2-21 – Modeled Traffic Volumes – Alternative 2

Description of Traffic Lane	Number of Lanes	Total Traffic Volumes[1]	Travel Speeds, mph (km/h)	Volumes by Vehicle Type					
				Cars	% Cars	Medium Trucks[2]	% MT	Heavy Trucks[2]	% HT
Northbound Traffic									
NB Inside Lane	1	2,000	65 (105)	2,000	100.0	0	0	0	0
NB Outside Lanes	2	4,000	65 (105)	3,628	93.8	222	3.7	150	2.5
NB Off Ramp	2	1,460	65 (105) to 0	1,369	93.8	54	3.7	37	2.5
NB On Ramp	1	780	0 to 65 (105)	732	93.8	29	3.7	20	2.5
Southbound Traffic									
SB Inside Lane	1	2,000	65 (105)	2,000	100.0	0	0	0	0
SB Outside Lane	2	4,000	65 (105)	3,628	93.8	222	3.7	150	2.5
SB Off Ramp	1	590	65 (105) to 0	553	93.8	22	3.7	15	2.5
SB On Ramp	1	1,580	0 to 65 (105)	1,482	93.8	58	3.7	40	2.5

Notes:
1 – Total volume based on LOS D volume.
2 – Medium and heavy truck volumes are 3.7% and 2.5% of total volumes, respectively.
3 – Traffic volumes for each segment of the roadway represent worst-case traffic noise levels.
Source: Parsons, 2006.

Table 2-22 – Modeled Traffic Volumes – Alternative 3

Description of Traffic Lane	Number of Lanes	Total Traffic Volumes[1]	Travel Speeds, mph (km/h)	Volumes by Vehicle Type					
				Cars	% Cars	Medium Trucks[2]	% MT	Heavy Trucks[2]	% HT
Northbound Traffic									
NB Inside Lane	1	2,000	65 (105)	2,000	100.0	0	0	0	0
NB Outside Lanes	2	4,000	65 (105)	3,628	93.8	222	3.7	150	2.5
NB Off Ramp	2	1,460	65 (105) to 0	1,369	93.8	54	3.7	37	2.5
NB On Ramp	1	390	0 to 65 (105)	366	93.8	14	3.7	10	2.5
NB Loop On Ramp	1	390	0 to 65 (105)	366	93.8	14	3.7	10	2.5
Southbound Traffic									
SB Inside Lane	1	2,000	65 (105)	2,000	100.0	0	0	0	0
SB Outside Lane	2	4,000	65 (105)	3,628	93.8	222	3.7	150	2.5
SB Off Ramp	1	590	65 (105) to 0	553	93.8	22	3.7	15	2.5
SB On Ramp	1	1,580	0 to 65 (105)	1,482	93.8	58	3.7	40	2.5

Notes:
1 – Total volume based on LOS D volume.
2 – Medium and heavy truck volumes are 3.7% and 2.5% of total volumes, respectively.
3 – Traffic volumes for each segment of the roadway represent worst-case traffic noise levels.
Source: Parsons, 2006.

Table 2-23 – Modeled Traffic Volumes – Alternative 4

Description of Traffic Lane	Number of Lanes	Total Traffic Volumes[1]	Travel Speeds, mph (km/h)	Volumes by Vehicle Type					
				Cars	% Cars	Medium Trucks[2]	% MT	Heavy Trucks[2]	% HT
Northbound Traffic									
NB Inside Lane	1	2,000	65 (105)	2,000	100.0	0	0	0	0
NB Outside Lanes	2	4,000	65 (105)	3,628	93.8	222	3.7	150	2.5
NB Off Ramp	2	1,460	65 (105) to 0	1,369	93.8	54	3.7	37	2.5
NB On Ramp	1	780	0 to 65 (105)	732	93.8	29	3.7	20	2.5
NB Loop On Ramp									
Southbound Traffic									
SB Inside Lane	1	2,000	65 (105)	2,000	100.0	0	0	0	0
SB Outside Lane	2	4,000	65 (105)	3,628	93.8	222	3.7	150	2.5
SB Off Ramp	2	590	65 (105) to 0	553	93.8	22	3.7	15	2.5
SB On Ramp	1	1,580	0 to 65 (105)	1,482	93.8	58	3.7	40	2.5

Notes:
1 – Total volume based on LOS D volume.
2 – Medium and heavy truck volumes are 3.7% and 2.5% of total volumes, respectively.
3 – Traffic volumes for each segment of the roadway represent worst-case traffic noise levels.
Source: Parsons, 2006.

Table 2-24 – Traffic Noise Prediction and Barrier Analysis – Alternative 2

Rec No.	Land Use[2]	Existing Noise Levels[1,3] Leq(h), dBA	U.S. 101 Future Peak Hour Noise Levels, Leq(h), dBA[1,6]											Barrier No./ Location
			Project "Build" Without Barrier	Activity Category and NAC ()	Impact Type (S, A/E or None)[4]	Noise Prediction With Barrier and Barrier Insertion Loss (IL)[7]								
						6 ft (1.8m)		8 ft (2.4 m)		10 ft (3.0 m)		12 ft (3.7 m)		
						Leq(h)	IL	Leq(h)	IL	Leq(h)	IL	Leq(h)	IL	
R 1[C]	SFR	71 [E]	71	B (67)	A/E	67	4	67	4	66 [R,T]	5	65	6	S 114 / Property Line
R 2	SFR	68 [M,ST4]	68	B (67)	A/E	65	3	63 [R,T]	5	62	6	61	7	
R 3	MFR	65 [E]	67	B (67)	A/E	63	4	62 [R,T]	5	61	6	60	7	
R 3A	MFR	64 [M,ST3]	66	B (67)	A/E	62	4	61 [R,T]	5	60	6	59	7	
R 4	SFR	63 [E]	65	B (67)	None	63	2	62	3	62	3	61	4	
R 5	SFR	62 [E]	64	B (67)	None	61	3	59	5	58	6	57	7	
R 6	SFR	61 [E]	63	B (67)	None	59	4	58	5	57	6	56	7	
R 7	SFR	63 [E,B]	61	B (67)	None	58	3	57	4	56	5	55	6	
R 8	SFR	62 [M,ST2,B]	60	B (67)	None	57	3	56	4	55	5	54	6	
R 9	SFR	60 [E,B]	58	B (67)	None	56	2	55	3	54	4	53	5	
R 10	SFR	59 [E,B]	57	B (67)	None	55	2	54	3	53	4	52	5	
R 11	MFR	58 [E,B]	55	B (67)	None	54	1	53	2	52	3	51	4	
R 12	SFR	57 [M,ST1,B]	54	B (67)	None	53	1	52	2	51	3	50	4	
R 13[*]	SFR	73 [M, CAL]	0	C (72)	None	--	--	--	--	--	--	--	--	--

Notes:
1 - Leq(h) are A-weighted, peak hour noise levels in decibels.
2 - Land Use: SFR - single-family residence; MFR - multi-family residence; COM - commercial.
3 - M - Measured noise level; STxx - measurement site number; E - Estimated using future "Build" and measured data; CAL - Calibration site.
4 - S = Substantial Increase (12 dBA or more); A/E = Approach or exceed NAC.
5 - Barrier height recommended to meet requirements at adjacent receptor(s).
6 - Traffic noise from the freeway only; other local noise sources are not included.
7 - Wall heights are relative to the finished grade of backyards.
C - Critical design receiver which meets certain conditons defined primarily used in the determination of noise abatement reasonableness.
R - Recommended height to meet feasibility requirements of Department's Noise Abatement Protocol.
T - Minimum height required to block the line-of-sight from the receptor to truck exhaust stacks.
R - Recommended height to meet feasibility requirements of Department's Noise Abatement Protocol.
T - Minimum height required to block the line-of-sight from the receptor to truck exhaust stacks.
W - Includes the benefits of an existing soundwall/property wall.
B - Measured noise levels are higher than predicted noise levels due to existing background noise.
* No outdoor use activity was observed in this area; therefore, no noise abatement was considered.
Source: Parsons, 2006.

Table 2-25 – Traffic Noise Prediction and Barrier Analysis – Alternative 3

Rec No.	Land Use[2]	Existing Noise Levels[1,3] Leq(h), dBA	U.S. 101 Future Peak Hour Noise Levels, Leq(h), dBA[1,6]												Barrier No./ Location
			Project "Build" Without Barrier	Activity Category and NAC ()	Impact Type (S, A/E or None)[4]	Noise Prediction With Barrier and Barrier Insertion Loss (IL)[7]									
						6 ft (1.8m)		8 ft (2.4 m)		10 ft (3.0 m)		12 ft (3.7 m)			
						Leq(h)	IL	Leq(h)	IL	Leq(h)	IL	Leq(h)	IL		
R 1[C]	SFR	71 [E]	72	B (67)	A/E	68	4	67	5	66 [R,T]	5	66	6	S 114 / Property Line	
R 2	SFR	68 [M,ST4]	69	B (67)	A/E	65	4	63 [R,T]	6	62	7	61	8		
R 3	MFR	65 [E]	67	B (67)	A/E	63	4	62 [R,T]	5	61	6	60	7		
R 3A	MFR	64 [M,ST3]	66	B (67)	A/E	62	4	61 [R,T]	5	60	6	59	7		
R 4	SFR	63 [E]	65	B (67)	None	63	2	62	3	62	3	61	4		
R 5	SFR	62 [E]	64	B (67)	None	61	3	59	5	58	6	58	6		
R 6	SFR	60 [E]	62	B (67)	None	59	3	58	4	57	5	56	6		
R 7	SFR	63 [E,B]	61	B (67)	None	58	3	57	4	56	5	55	6		
R 8	SFR	62 [M,ST2,B]	60	B (67)	None	57	3	56	4	55	5	54	6		
R 9	SFR	60 [E,B]	58	B (67)	None	56	2	55	3	54	4	53	5		
R 10	SFR	59 [E,B]	57	B (67)	None	55	2	54	3	53	4	52	5		
R 11	MFR	58 [E,B]	56	B (67)	None	54	2	53	3	52	4	51	5		
R 12	SFR	57 [M,ST1,B]	55	B (67)	None	53	2	52		52	3	50	5		
R 13[*]	SFR	73 [M, CAL]	75	C (72)	A/E	--	--	--	--	--	--	--	--	--	

Notes:
1 - Leq(h) are A-weighted, peak hour noise levels in decibels.
2 - Land Use: SFR - single-family residence; MFR - multi-family residence; COM - commercial.
3 - M - Measured noise level; STxx - measurement site number; E - Estimated using future "Build" and measured data; CAL - Calibration site.
4 - S = Substantial Increase (12 dBA or more); A/E = Approach or exceed NAC.
5 - Barrier height recommended to meet requirements at adjacent receptor(s).
6 - Traffic noise from the freeway only; other local noise sources are not included.
7 - Wall heights are relative to the finished grade of backyards.
C - Critical design receiver which meets certain conditiions defined primarily used in the determination of noise abatement reasonableness.
R - Recommended height to meet feasibility requirements of Department's Noise Abatement Protocol.
T - Minimum height required to block the line-of-sight from the receptor to truck exhaust stacks.
W - Includes the benefits of an existing soundwall/property wall.
B - Measured noise levels are higher than predicted noise levels due to existing background noise.
* No outdoor use activity was observed in this area; therefore, no noise abatement was considered.
Source: Parsons, 2006.

Table 2-26 – Traffic Noise Prediction and Barrier Analysis – Alternative 4

Rec No.	Land Use[2]	Existing Noise Levels[1,3] Leq(h), dBA	U.S. 101 Future Peak Hour Noise Levels, Leq(h), dBA[1,6]												Barrier No./ Location
			Project "Build" Without Barrier	Activity Category and NAC ()	Impact Type (S, A/E or None)[4]	Noise Prediction With Barrier and Barrier Insertion Loss (IL)[7]									
						6 ft (1.8m)		8 ft (2.4 m)		10 ft (3.0 m)		12 ft (3.7 m)			
						Leq(h)	IL	Leq(h)	IL	Leq(h)	IL	Leq(h)	IL		
R 1[C]	SFR	71 [E]	72	B (67)	A/E	68	4	66	6	66 [R,T]	6	65	7	S 114 / Property Line	
R 2	SFR	68 [M,ST4]	68	B (67)	A/E	65	3	63 [R,T]	5	62	6	61	7		
R 3	MFR	65 [E]	66	B (67)	A/E	63	3	61 [R,T]	5	61	5	60	6		
R 3A	MFR	64 [M,ST3]	65	B (67)	NONE	62	3	60 [5,T]	5	60	5	59	6		
R 4	SFR	63 [E]	64	B (67)	NONE	63	1	62	2	62	2	61	3		
R 5	SFR	62 [E]	63	B (67)	NONE	60	3	59	4	58	55	57	6		
R 6	SFR	60 [E]	62	B (67)	NONE	59	3	58	4	57	4	56	6		
R 7	SFR	63 [E,B]	60	B (67)	NONE	58	2	56	4	56	4	55	5		
R 8	SFR	62 [M,ST2,B]	59	B (67)	NONE	57	2	56	3	55	4	54	5		
R 9	SFR	60 [E,B]	58	B (67)	NONE	56	2	55	3	54	4	53	5		
R 10	SFR	59 [E,B]	57	B (67)	NONE	54	3	53	4	53	4	52	5		
R 11	MFR	58 [E,B]	56	B (67)	NONE	54	2	53	3	52	4	51	5		
R 12	SFR	57 [M,ST1,B]	55	B (67)	NONE	53	2	52	3	51	4	50	5		
R 13[*]	SFR	73 [M, CAL]	75	C (72)	A/E	--	--	--	--	--	--	--	--	--	

Notes:
1 - Leq(h) are A-weighted, peak hour noise levels in decibels.
2 - Land Use: SFR - single-family residence; MFR - multi-family residence; COM - commercial.
3 - M - Measured noise level; STxx - measurement site number; E - Estimated using future "Build" and measured data; CAL - Calibration site.
4 - S = Substantial Increase (12 dBA or more); A/E = Approach or exceed NAC.
5 - Barrier height recommended to meet requirements at adjacent receptor(s).
6 - Traffic noise from the freeway only; other local noise sources are not included.
7 - Wall heights are relative to the finished grade of backyards.
C - Critical design receiver which meets certain conditiions defined primarily used in the determination of noise abatement reasonableness.
R - Recommended height to meet feasibility requirements of Department's Noise Abatement Protocol.
T - Minimum height required to block the line-of-sight from the receptor to truck exhaust stacks.
W - Includes the benefits of an existing soundwall/property wall.
B - Measured noise levels are higher than predicted noise levels due to existing background noise.
* No outdoor use activity was observed in this area; therefore, no noise abatement was considered.
Source: Parsons, 2006.

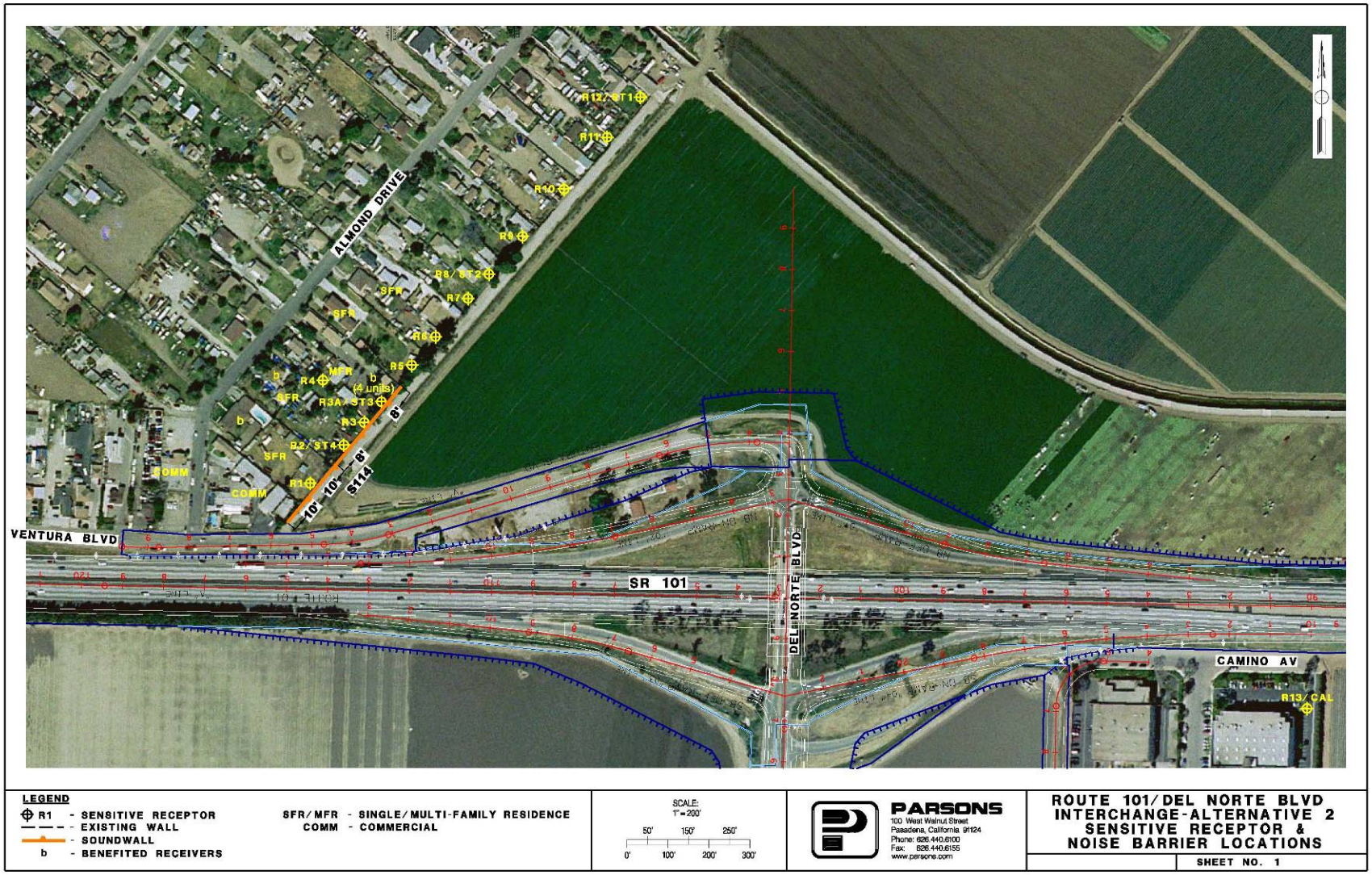


Figure 2-9 – Alternative 2 Proposed Sound Barrier

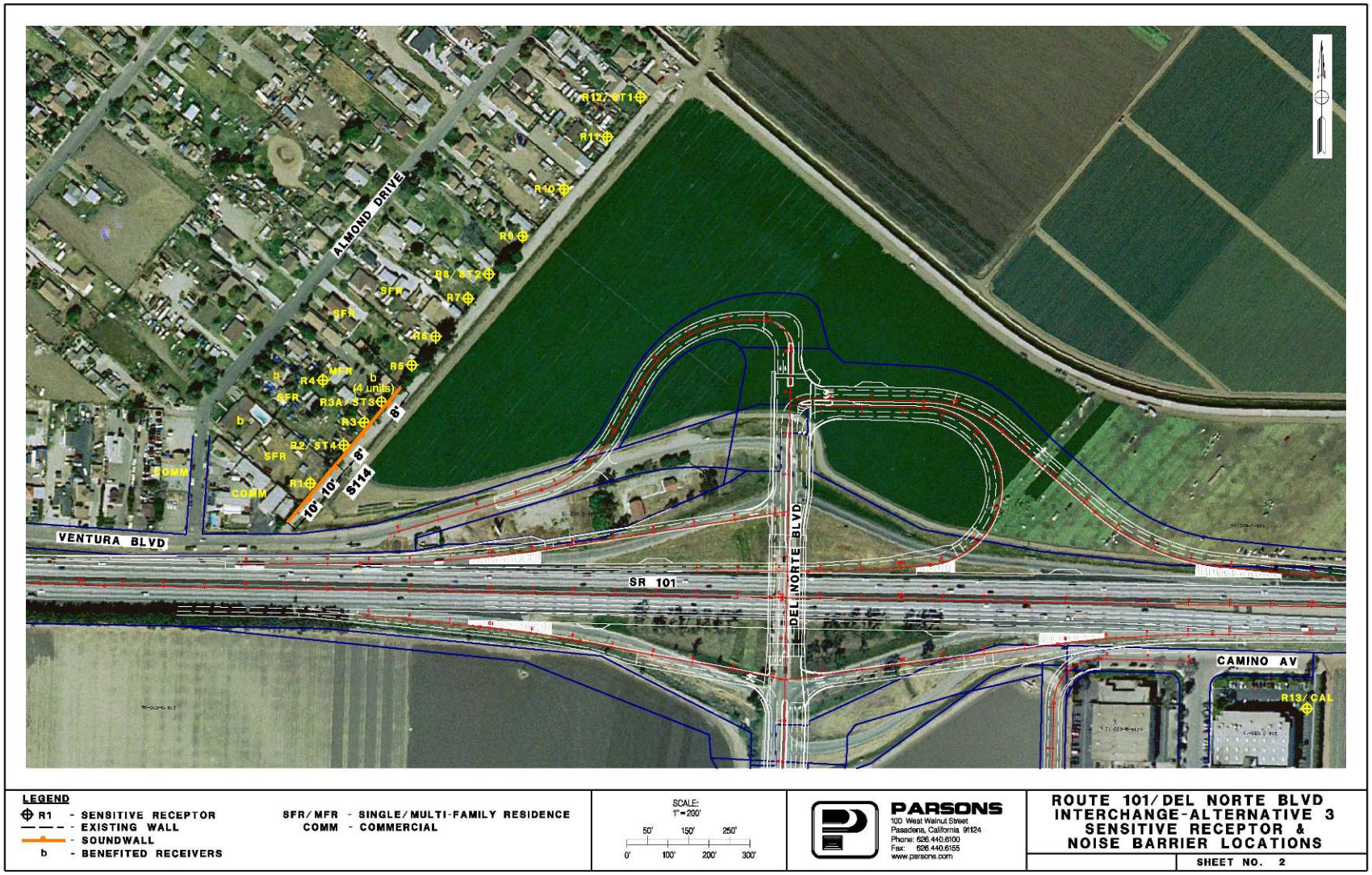


Figure 2-10 – Alternative 3 Proposed Sound Barrier

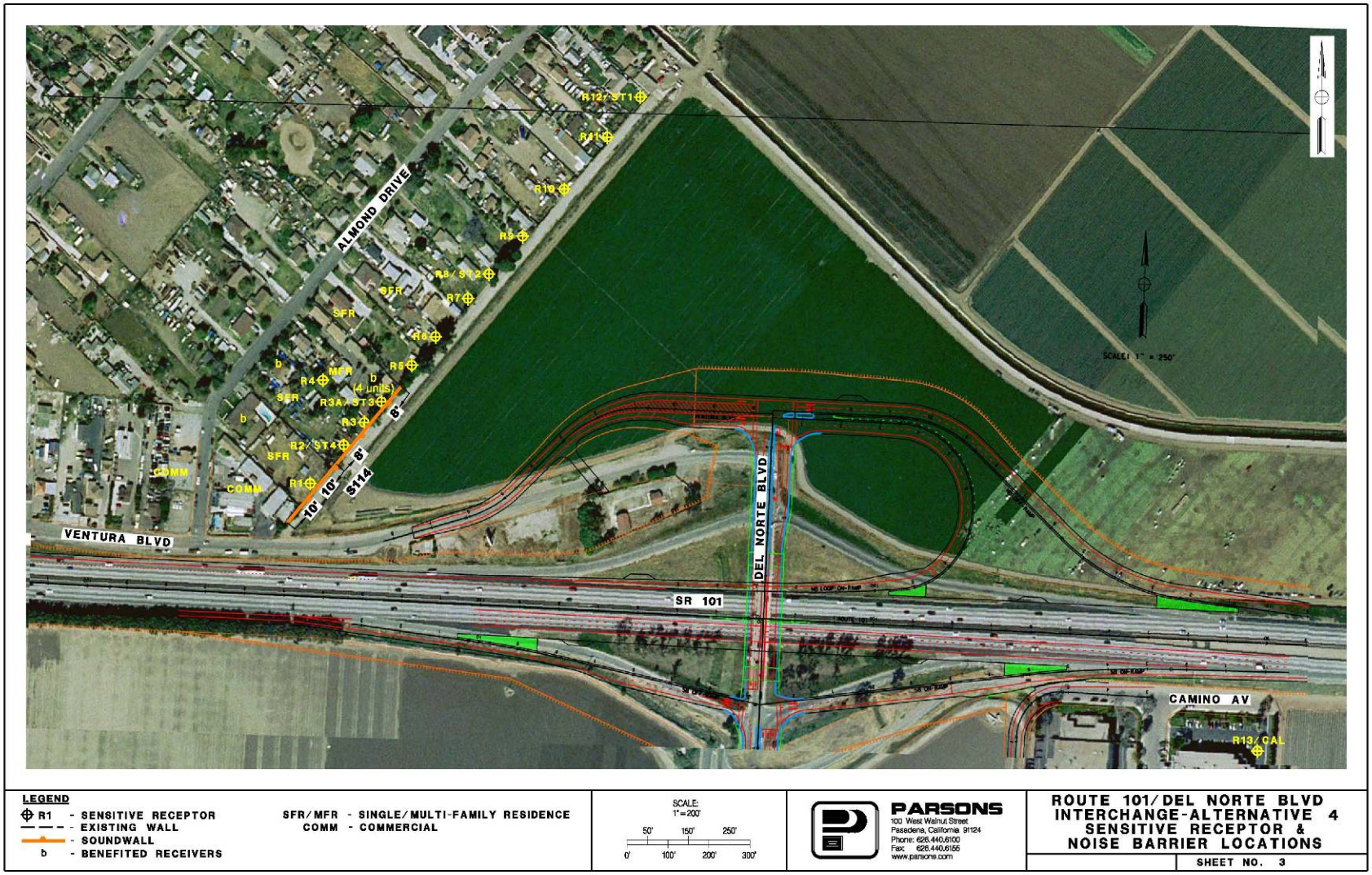


Figure 2-11 – Alternative 4 Proposed Sound Barrier

2.2.6.4 Measures to Minimize Harm

A. Temporary Measures

Measures to minimize harm are not required due to the distance of separation; however, the following measures to minimize harm are recommended in order to reduce construction noise:

N-C1: Equipment Noise Control

- ***Where practical, feasible and reasonable, proposed soundwalls shall be constructed prior to the start of the project as a mean of minimizing any impact on the sensitive receptors.***
- ***Use newer equipment with improved noise muffling and ensure that all equipment items have the manufacturers' recommended noise abatement measures, such as mufflers, engine enclosures, and engine vibration isolators intact and operational. Newer equipment will generally be quieter in operation than older equipment. All construction equipment should be inspected at periodic intervals to ensure proper maintenance and presence of noise control devices (e.g., mufflers and shrouding, etc.).***
- ***Utilize construction methods or equipment that will provide the lowest level of noise and ground vibration impact such as alternative low noise pile installation methods.***
- ***Turn off idling equipment.***
- ***Temporary noise barriers should be used and relocated, as needed, to protect sensitive receptors against excessive noise from construction activities. Noise barriers can be made of heavy plywood, or moveable insulated sound blankets.***

N-C2: Administrative Measures

- ***Implement a construction noise and/or vibration monitoring program in order to limit the impacts.***
- ***Comply with relevant noise ordinance of the City of Oxnard, i.e., the City does not impose a limit on noise generated by construction activities provided that the construction only occurs during daytime hours between 7 am and 6 pm on weekdays and Saturday.***
- ***Limit construction activities to daytime hours, if possible. If nighttime construction is absolutely necessary, the proper permits and variances shall be obtained.***
- ***Keep noise levels relatively uniform and avoid impulsive noises.***
- ***Maintain good public relations with the community to minimize objections to the unavoidable construction noise. Provide frequent activity updates of all construction activities and schedules.***

B. Permanent Measures

Abatement would be required for all build alternatives, in the form of soundwalls, as described Tables 2-24 through 2-26:

N-1: Soundwalls will be constructed in the locations, lengths and heights prescribed by the noise impact analysis.

2.2.7 Energy

2.2.7.1 Affected Environment

Southern California has had the benefit of sufficient energy supplies to serve the rapid growth that has taken place over the past 50 years. Much of the energy consumed in the region is for residential, commercial, and transportation purposes. The Southern California Association of Governments (SCAG) tracks and forecasts energy use in the southern California area. The proposed project's region includes the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura (SCAG, 2006). Transportation energy for motor vehicles is primarily provided by direct combustion of petroleum fuels – gasoline and diesel fuel – with smaller contributions from compressed natural gas. Electricity is used in a relatively small number of electric-powered vehicles.

In addition to hydrocarbon energy sources, there are nearly 300 operational power plants located in the counties of Los Angeles, Orange, Riverside, and San Bernardino that each produce at least 100 kilowatt (0.1 megawatt) of electricity (CEC, 2007a). Electric energy in the region is provided primarily through Southern California Edison and the LADWP distribution networks, along with three municipalities having their own power plants located in the region (Glendale, Burbank, and Pasadena), and by the Imperial Irrigation District and San Diego Gas & Electric providing service to the extreme southern areas of Riverside and Orange Counties, respectively. Because of the current restructuring of the electric energy industry throughout California, many of the facilities owned by investor-owned utilities have been divested. Twenty-three new power-generating facilities are planned for the Los Angeles Region, and they are currently going through the permitting process (CEC, 2007b).

The majority of the electric energy used in southern California is imported to the region from coal-fired and hydroelectric generating facilities located elsewhere in California and out of state. Utilities in southern California participate in power-sharing arrangements with a number of other entities throughout the western United States. In 2005, the SCAG region consumed almost 128,000 gigawatt-hours (GWh) of electricity, about 48 percent of the total consumption in the state. Electricity consumption increased 15 percent during the 1990s. Since 2001, electricity consumption has been increasing about 1.3 percent per year (SCAG, 2007).

In 2005, the region consumed about 8.8 billion gallons of vehicle fuels, an increase of over 20 percent from 1995 (SCAG, 2007). The California Energy Commission (CEC) predicts that the natural gas demand in on-road vehicles will increase from 75 million therms in 2003 to 200 million therms in 2025. Transportation electricity will grow from 600 million kWh in 2003 to 1,800 kWh in 2025 (CEC, 2007c).

Forecasts by CEC indicate that vehicle miles traveled (VMT) for all vehicles (light-duty, heavy-duty, and transit) in California will increase by an average of 1.75 percent per year between 2000 and 2020 (CEC, 2007c). The related increase in gasoline consumption results from a combination of forecast increases in population and VMT, and lower than previously expected

sales of natural gas-fueled vehicles and insufficient sales of electric vehicles sufficient to meet CARB zero emission vehicle fleet penetration mandates.

The CEC base case forecast projects statewide on-road gasoline demand to increase by 0.1% per year from 2005 to 2025. Diesel demand is expected to grow by an average of 2.7% per year from 2005 to 2025 (CEC, 2007c). The base case includes a substantial increase in full-hybrid vehicles. CEC projects average gasoline fuel efficiencies for light-duty motor vehicles in 2030 of 20.7 miles per gallon and diesel fuel efficiency of 5.07 miles per gallon for trucks (CEC, 2002).

2.2.7.2 Environmental Consequences

A. Temporary Impacts

Construction equipment and construction worker vehicles operated during project demolition and construction would use fossil fuels. This increased fuel consumption would be temporary and would cease at the end of the construction activity, and it would not have a residual requirement for additional energy input.

B. Permanent Impacts

No Build Alternative

Under the No Build Alternative, the U.S. 101/Del Norte interchange would remain in its existing condition without improvements. Based on the traffic analysis conducted for this project (Parsons, 2005), the ADT and VMT at the U.S. 101/Del Norte interchange for 2005 and 2030 under the No Build Alternative are shown in Table 2-27.

Table 2-27 – Existing and Future (2030) Forecast ADT and VMT – No Build Alternative

Parameter	Vehicles
2005 ADT	42,100
2005 Round Trips[1]	21,050
2005 VMT	421,000
2030 ADT[1]	111,600
2030 Round Trips[2]	55,800
2030 VMT	1,116,000

[1]Assumes one-half of the total ADT represents round trips.
[2]Assumes 20 miles round trip per automobile and truck.
Source: Parsons, 2005x.

Dividing future VMT by the current average gasoline and diesel fuel efficiencies yields a daily 2005 gasoline use estimate of approximately 1,905 gallons (7,213 liters), and a diesel fuel use estimate of approximately 498 gallons (1,886 liters). Using 2030 No Build VMT forecasts and future fuel provides an estimate of daily 2030 gasoline use of approximately 5,051 gallons (19,120 liters), and a forecast 2030 diesel use of approximately 1,321 gallons (5,000 liters).

Build Alternatives

All build alternatives would have similar impacts. The existing overcrossing will be replaced with one that would provide 5 lanes of traffic (two through lanes in each direction and one back-to-back left-turn lane). The on- and off-ramps in both directions of travel would be realigned to accommodate the proposed future freeway widening. An auxiliary lane would be added leading to the southbound off-ramp. Camino Avenue, a local connector road to the south of U.S. 101,

would be realigned further south. Ventura Boulevard, which is located north of the existing northbound on-ramp to U.S. 101, would also be realigned slightly to the north.

Based on the traffic analysis conducted for this project (Parsons, 2005), the ADT and VMT at the U.S. 101/Del Norte interchange for 2005 and 2030 under the build alternatives are shown in Table 2-28.

Table 2-28 – Existing and Future (2030) Forecast ADT and VMT – Build Alternatives

Parameter	Vehicles
2005 ADT	42,100
2005 Round Trips[1]	21,050
2005 VMT	421,000
2030 ADT[1]	111,600
2030 Round Trips[2]	55,800
2030 VMT	1,116,000

[1]Assumes one-half of the total ADT represents round trips.
[2]Assumes 20 miles round trip per automobile and truck.
Source: FPL and Associates, 2004.

Dividing future VMT by the current average gasoline and diesel fuel efficiencies yields a daily 2005 gasoline use estimate of approximately 905 gallons (7,213 liters), and a diesel fuel use estimate of approximately 498 gallons (1,886 liters). Using 2030 Alternative 2 VMT forecasts and future fuel efficiencies provides an estimate of daily 2030 gasoline use of approximately 5,051 gallons (19,120 liters), and a forecast 2030 diesel use of approximately 1,321 gallons (5,000 liters). Since this is a no-growth project, there is no increase or decrease in traffic associated with this project. Therefore, the only increase in energy use would be limited to the energy use during construction. This relatively small increase in energy use would not result in the loss of availability of a known mineral resource that would be of future value to the region and residents of the state.

2.2.7.3 Measures to Minimize Harm

A. Temporary Measures

The marginal increases in fossil fuel use resulting from project construction are not expected to have appreciable impacts on energy resources. No temporary measures are required.

B. Permanent Measures

When balancing energy used during operation against energy saved by relieving congestion and other transportation efficiencies, the project would not have substantial energy impacts. No permanent measures are required.

2.3 Biological Environment

2.3.1 Natural Communities

This section of the document discusses natural communities of concern. The focus of this section is on biological communities, not individual plant or animal species. This section also includes information on wildlife corridors and habitat fragmentation. Wildlife corridors are areas of

habitat used by wildlife for seasonal or daily migration. Habitat fragmentation involves the potential for dividing sensitive habitat and thereby lessening its biological value.

2.3.1.1 Affected Environment

A terrestrial ecologist knowledgeable of southern California biota conducted a pedestrian survey of existing conditions on March 10, 2005 (Parsons, 2005c). The project area is fundamentally agricultural in character and has been since at least 1938, except where the freeway itself passes through agricultural fields. No native or special-status plant communities are present at the project site. There are no wildlife corridors or streams in the project area and there are no riparian habitats or other sensitive natural communities. The biotic community Southern Riparian Scrub was noted in 1986 from aerial imagery but now occurs only in the riverbed of the Santa Clara River, more than three miles northwest of the project.

The field north of the proposed project was planted in strawberries for harvest in spring 2005. Celery occupied the field to the southeast and Romaine lettuce that to the southwest.

Landscape ornamentals dominate three out of the four embankments and flat places of the proposed project itself. Large, mature gum trees (*Eucalyptus* sp.) line the freeway in the southwest and southeast quadrants. South African daisy (*Gazania* sp.), iceplant *(Carpobrotus edulis*), and other low-growing ornamentals were planted beneath the eucalyptuses. The outward side of the northeast quadrant has been planted with queen palms (*Syagrus* sp.), lantana (*Lantana* sp.), locust trees (*Robinia* sp.), privet (*Ligustrum* sp.), and other ornamental shrubs and ground covers. A buried irrigation system sustains these ornamentals. The inward sides of both NE and NW quadrants were bare at the time of inspection except for two ornamental oaks (*Quercus* sp.) planted recently between the exit ramp and freeway in the northeast quadrant.

The outward side of the embankments in the remaining three quadrants contain a few

clumps of native plant communities in isolated spots. Scattered native shrubs and annual forbs still grow patchily in the SE and SW quadrants: coyote brush (*Baccaharis pilularis*), mulefat *(B. salicifolia*), quail bush (*Atriplex lentiformis*), a composite not yet in flower (probably a *Senecio*), prickly pear cactus (*Opuntia* cf. *littoralis*), California poppies (*Eschscholtzia californica*), California mugwort (*Artemisia douglasiana*), cobweb thistle (*Cirsium occidentale*), deer weed (*Lotus scoparius*), lupine (*Lupinus succulentus*), and western ragweed (*Ambrosia psilostachya*). A solitary California sagebrush (*Artemisia californica*) still survives on the outward side of the northwest embankment, the transition from Del Norte Boulevard to Ventura Boulevard. Where left unattended, weedy and mostly non-native species have taken hold: wild oats (*Avena* sp.), soft chess grass (*Bromus mollis*), ripgut brome (*B. diandrus*), red brome (*B. rubens madritensis*), foxtail barley (*Hordeum jubatum*), European fountain grass (*Pennisetum setaceum*), bristle grass (*Setaria* sp.), tree tobacco (*Nicotiana glauca*), common mallow (*Malva parviflora*), wild radish (*Raphanus sativus*), mustard (*Brassica* sp.), lamb's quarters (*Chenopodium album*), a vetch (*Vicia* cf. *americana*), yellow sweet clover (*Melilotus officinalis*), and crane's bill (*Erodium* sp.). Small clumps of sweet fennel (*Foeniculum vulgare*) grow on the outside slope of the embankment in the southeast quadrant.

2.3.1.2 Environmental Consequences

Unless otherwise specified below, all of the build alternatives would have similar impacts.

A. Temporary Impacts

The project would remove up to 30 eucalyptus trees and the two oak trees. Please see Section 2.1.7, Visual/Aesthetics, for a discussion of this impact. None of the alternatives would adversely affect native or natural biological communities as none are present.

B. Permanent Impacts

Once operational, the project would not have any impacts affecting natural communities.

2.3.1.3 Measures to Minimize Harm

A. Temporary Measures

No temporary measures are required.

B. Permanent Measures

No permanent measures are required.

2.3.2 Wetlands and Waters of the U.S.

2.3.2.1 Regulatory Setting

Wetlands and other Waters of the U.S. are protected under a number of laws and regulations. At the federal level, the Clean Water Act (33 U.S.C. 1344) is the primary law regulating wetlands and waters. The Clean Water Act regulates the discharge of dredged or fill material into waters of the United States, including wetlands. Waters of the United States include navigable waters, interstate waters, territorial seas and other waters that may be used in interstate or foreign commerce. To classify wetlands for the purposes of the Clean Water Act, a three-parameter approach is used that includes the presence of hydrophytic (water-loving) vegetation, wetland hydrology, and hydric soils (soils subject to saturation/inundation). All three parameters must be present, under normal circumstances, for an area to be designated as a jurisdictional wetland under the Clean Water Act.

The Regional Water Quality Control Boards (RWQCB) were established under the Porter-Cologne Water Quality Control Act to oversee water quality. The RWQCB also issues water quality certifications in compliance with Section 401 of the Clean Water Act. Please see the Water Quality section for additional details.

2.3.2.2 Affected Environment

The only watercourses considered Waters of the U.S. in the vicinity of the project are the Beardsley Channel and Revolon Slough which both lie outside of the proposed project area. Historically, runoff flowed southeasterly as sheet flow toward Beardsley Channel which flows into Revolon Slough, a tributary to Calleguas Creek which itself runs to the ocean at Mugu Lagoon. The natural water course feeding Revolon Slough originates north of the Camarillo Hills, passes around their west side as Beardsley Wash, then turns southeasterly about where

U.S. 101 crosses the drainage about half a mile east of the project area. Both the wash (now Beardsley Channel) and Revolon Slough were fully lined decades ago.

Four separate places in the project area had standing water during the site survey. Presumably tailwater from the strawberry fields north of the proposed project sustains these four places. Culverts can be traced through all the embankments and beneath U.S. 101 itself, eventually draining to the largest of the ditches, that on the southeast side of the proposed project. The most water occurred in the large ditch adjacent to Camino Avenue, in the southeast quadrant. Two indicator species, curly dock (*Rumex crispus*) and a sedge (*Carex* sp.), were both growing in the water and the same dock was numerous in the smaller wet place in the northwest quadrant. However, this water accumulated in human-made, agricultural ditches and does not meet criteria for jurisdictional wetlands by the U.S. Army Corps of Engineers and it is not designated as a sensitive environment by the City or County (City of Oxnard, 2004a; Smith, 2005).

These ditches receive periodic maintenance, consistent with agricultural routine practice and needs in the immediate area. Wetlands do not exist within the area of immediate project disturbance.

2.3.2.3 Environmental consequences

A. Temporary Impacts

None of the build alternatives would affect wetlands or waters of the U.S. as none are present in the project area. The project would not dredge material from wetlands or waters nor are wetlands or waters present to receive fill material. Neither a Section 401 Water Quality Certification (required to address how the project would avoid the release of pollutants into the federal waters), a Section 1602 Streambed Alteration Agreement (required if the project includes any alterations within the streambeds) nor a Section 404 Permit (required for any placement of fill within the federal waters) would be required for this project.

B. Permanent Impacts

None of the build alternatives would affect wetlands or waters of the U.S. as none are present in the project area.

2.3.2.4 Measures to Minimize Harm

A. Temporary Measures

No temporary measures are required.

B. Permanent Measures

No permanent measures are required.

2.3.3 Plant Species

2.3.3.1 Regulatory Setting

The U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Game (CDFG) share regulatory responsibility for the protection of special-status plant species.

"Special-status" species are selected for protection because they are rare and/or subject to population and habitat declines. Special status is a general term for species that are afforded varying levels of regulatory protection. The highest level of protection is given to threatened and endangered species; these are species that are formally listed or proposed for listing as endangered or threatened under the Federal Endangered Species Act (FESA) and/or the California Endangered Species Act (CESA). Please see the Threatened and Endangered Species Section 2.3.5 in this document for more information regarding these species.

This section of the document discusses all the other special-status plant species, including CDFG fully protected species and species of special concern, USFWS candidate species, and non-listed California Native Plant Society (CNPS) rare and endangered plants.

The regulatory requirements for FESA can be found at United States Code 16 (USC), Section 1531, et. seq. See also 50 CFR Part 402.

2.3.3.2 Affected Environment

A search for existing records of all species of concern and natural ecological communities in the California Natural Diversity Data Base (CNDDB) within six miles of the project site was conducted (CDFG, July 1, 2005). This investigation yielded three vascular plant species which could potentially occur at the project site. Two are listed species and are discussed in Section 2.3.5 below. The third is the Conejo buckwheat, *Eriogonum crocatum,* which is noted as rare, G2, very threatened [where G2 means species known from rather few localities, but evidently stable in those locations].

However, when mapped on a topographic map, the Conejo buckwheat is found in the Santa Monica Mountains. to the southeast of the project at five-six miles distance from the proposed project. As the project area does not contain any natural habitat, no special status species were found in the field survey, and the known occurences of the Conejo buckwheat is over sic miles away, it is concluded that no special status plant species occur in the project area.

2.3.3.3 Environmental Consequences

A. Temporary Impacts

No impacts to sensitive plant species would occur from this project.

B. Permanent Impacts

No impacts to sensitive plant species would occur from this project.

2.3.3.4 Measures to Minimize Harm

A. Temporary Measures

No temporary measures are required.

B. Permanent Measures

No permanent measures are required.

2.3.4 Animal Species

2.3.4.1 Regulatory Setting

Many state and federal laws regulate impacts to wildlife. The U.S. Fish and Wildlife Service (USFWS), the National Oceanic and Atmospheric Administration (NOAA) Fisheries and the California Department of Fish and Game (CDFG) are responsible for implementing these laws. This section discusses potential impacts and permit requirements associated with wildlife not listed or proposed for listing under the state or federal Endangered Species Act. Species listed or proposed for listing as threatened or endangered are discussed in Section 2.3.5 below. All other special-status animal species are discussed here.

Federal laws and regulations pertaining to wildlife include the following:

- National Environmental Policy Act
- Migratory Bird Treaty Act
- Fish and Wildlife Coordination Act

2.3.4.2 Affected Environment

The virtual absence from the immediate vicinity of the proposed project of any plant community native to this region also limits the area's general suitability to most animals. During the field survey a few western fence lizards (*Sceloporus occidentalis*) were encountered at assorted places. Burrows made by two rodents, pocket gophers (*Thomomys bottae*) and California ground squirrels (*Spermophilus beecheyi*) were found in a few places but neither was common. Most occurred along the banks of a large ditch in the southeast quadrant. All burrows of proper size were examined carefully for evidence of burrow owls: none are inhabited by anything other than *S. beecheyi*.

Insects aside, all other animals noted on site were birds. House finches (*Carpodacus mexicanus*) may be nesting in and around the proposed project. Song sparrows (*Melospiza melodia*), yellow warblers (*Dendroica petechia*), and yellow-rumped warblers (*D. coronata*) were foraging in a small stand of mulefat on the outward side of the embankment in the SE quadrant. California towhees (*Pipilo crissalis*) foraged amid dense brush in the southwest quadrant. Savannah sparrows (*Passerculus sandwichensis*) were numerous in the mostly bare dirt and sparse vegetation along bank tops of the ditch in the southeast quarter. Mallards (*Anas platyrhynchos*) were feeding in the ditch itself. A male kestrel (*Falco sparverius*) used the eucalyptus trees as perches from which to hunt. A eucalyptus in the southwestern quarter contains an active nest of red-tailed hawks (*Buteo jamaicensis*). The tree is in the middle of a line of eucalyptuses planted to decorate the side of the freeway. Hawks (and all raptors) are protected under the Migratory Bird Act.

A search for existing records of all species of concern and natural ecological communities in the California Natural Diversity Data Base (CNDDB) within six miles of the area of potential effect (CDFG, July 1, 2005 yielded seven animal species which could, potentially, occur at the project site. Three are listed species and are discussed in the Threatened and Endangered Species Section 2.3.5 below. The other four are:

- California horned lark, *Eremophila alpestris actia*, G5(T3), S3
- Coast (San Diego) horned lizard *Phrynosoma coronatum blainvillii*, G4(T3 - T4), S2 - S3
- arroyo chub *Gila orcutti*, G2 S2
- monarch butterfly *Danaus plexippus*, G5 S3

[where G2 means species known from rather few localities, but evidently stable in those locations, G3 means species recorded in quite a few locales, G4 means species apparently globally stable throughout its known range; G5 means species stable and secure throughout its known range; T3 – subspecies recorded in many localities, or from comparatively large populations. S2 – 6 to 20 recorded localities, or as many as 3,000 individuals, or inhabiting between 2,000 and 10,000 acres total; S3 – 21 to 100 recorded localities, or between 3,000 and 1,000 individuals, or inhabiting 10,000 to 50,000 acres.]

However, when mapped on a topographic map, three of these four species are over four miles distance from the proposed project, although the arroyo chub was found in Revolon Slough to the south. Habitat for these three species is not present in the project area.

The California subspecies of horned lark (*Eremophila alpestris actia*) was mapped 0.6 to two miles to the southeast of the project area. However, this subspecies is not considered of concern and is distinct from that on the NDDB.

2.3.4.3 Environmental Consequences

A. Temporary Impacts

The project would remove up to 30 eucalyptus trees some of which were being used at the time of the field survey as nesting and perching trees by a red-tail hawk and a kestrel. There are other eucalyptus trees nearby that would not be affected by the project.

If the red-tailed hawk nest is active, construction activities that would destroy the active nest or disrupt reproduction of red-tailed hawks must be undertaken outside the nesting season, which includes courtship through fledging. The nesting season occurs from approximately mid-February through August. Destruction of active raptor nests, or eggs not yet hatched therein, would contravene provisions of the Migratory Bird Treaty Act of 1918. Potentially adverse impacts to these species caused by proposed project demolition and construction can be addressed through avoidance, a monitoring program, or other mitigation.

Dependent on the proposed project construction footprint and schedule, an area of nondisturbance around the nest may need to be determined, which would include the eucalyptus tree containing the nest, all surrounding trees, and likely the entire shoulder area southwest of the overcrossing. If construction would occur during the nesting season, a monitoring program would be needed to ensure nondisturbance of the nest. The monitoring program, adequacy of avoidance measures, and any subsequent mitigation may require CDFG and USFWS approval and oversight.

B. Permanent Impacts

There would be no long term impacts to animal species of concern from the project although further loss of nesting or roosting trees may occur as the area is developed. See also Section 2.1.7, Visual/Aesthetics, for impacts to landscaping.

2.3.4.4 Measures to Minimize Harm

A. Temporary Measures

The following construction temporary measures are recommended:

BIO-C1: A pre-construction survey of the eucalyptus trees to ascertain the presence of eggs or unfledged chicks in the hawk's nest will be performed.

BIO-C2: Phasing of construction schedules or location of activity to avoid destruction or disturbance of the hawk nest during the breeding season will be performed as necessary. Monitoring as required will be performed.

BIO-C3: A pre-construction survey for burrowing owls will be conducted no more than 30 days prior to the start of project construction to verify the absence of burrowing owls at the project site.

B. Permanent Measures

No permanent measures are required.

2.3.5 Threatened and Endangered Species

2.3.5.1 Regulatory Setting

The primary federal law protecting threatened and endangered species is the Federal Endangered Species Act (FESA): 16 United States Code (USC), Section 1531, et seq. See also 50 CFR Part 402. This act and subsequent amendments provide for the conservation of endangered and threatened species and the ecosystems upon which they depend. Under Section 7 of this act, federal agencies, such as the Federal Highway Administration, are required to consult with the U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NOAA Fisheries) to ensure that they are not undertaking, funding, permitting or authorizing actions likely to jeopardize the continued existence of listed species or destroy or adversely modify designated critical habitat. Critical habitat is defined as geographic locations critical to the existence of a threatened or endangered species. The outcome of consultation under Section 7 is a Biological Opinion or an incidental take permit. Section 3 of FESA defines take as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect or any attempt at such conduct."

California has enacted a similar law at the state level, the California Endangered Species Act (CESA), California Fish and Game Code, Section 2050, et seq. CESA emphasizes early consultation to avoid potential impacts to rare, endangered, and threatened species and to develop appropriate planning to offset project caused losses of listed species populations and their essential habitats. The California Department of Fish and Game (CDFG) is the agency responsible for implementing CESA. Section 2081 of the Fish and Game Code prohibits "take" of any species determined to be an endangered species or a threatened species. Take is defined in

Section 86 of the Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." CESA allows for take incidental to otherwise lawful development projects; for these actions an incidental take permit is issued by CDFG. For projects requiring a Biological Opinion under Section 7 of the FESA, CDFG may also authorize impacts to CESA species by issuing a Consistency Determination under Section 2080.1 of the Fish and Game Code.

2.3.5.2 Affected Environment

A search for existing records of all species of concern and natural ecological communities in the California Natural Diversity Data Base (CNDDB) within 10 km of the APE (California Department of Fish and Game, July 1, 2005), distilled from all elements reported in Camarillo, Oxnard, Santa Paula, and Saticoy quadrangles, yielded five listed species or subspecies known historically from the general region and which could, potentially, occur at the project site. Four of the five taxa are protected as endangered (E) pursuant to the federal Endangered Species Act of 1973. See Table 2-29 shows Listed Species Potentially within 10 km of the Project Area.

Table 2-29 – Listed Species Potentially within 10 km of the Project Area

Species	Status
vascular plants	
salt marsh bird's-beak *Cordylanthus maritimus maritimus*	FE; SE
Ventura Marsh milk-vetch *Astragalus pycnostachyus* var. *lanosissimus*	FE; SE
bony fish	
tidewater goby *Eucyclogobius newberryi*	FE; G3 S2 - S3
Birds	
least Bell's vireo *Vireo bellii pusillus*	FE; SE
western yellow-billed cuckoo *Coccyzus americanus occidentalis*	FC; SE
Source: California Natural Diversity Database, edition 3.0.5, 1 July 2005; Camarillo, Oxnard, Santa Paula, and Saticoy quadrangles	

[Notes: FE - Federal status endangered, FC – a formal candidate for Federal listing, – – indicates no current Federal status; SE - State status endangered; G3 – species recorded in quite a few locales, S2 – 6 to 20 recorded localities, or as many as 3000 individual, or inhabiting between 2000 and 10000 acres total; S3 – 21 to 100 recorded localities, or between 3000 and 1000 individuals, or inhabiting 10000 to 50000 acres.]

Placing the records of occurrence on a topographic map shows all these taxa to be at least four miles from the proposed project. The salt marsh bird's-beak was found at Ormond Beach south of the project; and the Ventura Marsh milk-vetch was found to the west and northwest beyond the west side of the Santa Clara River. The least Bell's vireo, western yellow billed cuckoo, and

tidewater goby are all mapped in the Santa Clara River to the west of the project area. There is no habitat for any of these species in the project area.

2.3.5.3 Environmental Consequences

A. Temporary Impacts

Proposed construction in the project area would have no effect on any listed species.

B. Operational Impacts

Operation of the proposed project would have no impact on Threatened and Endangered species.

2.3.5.4 Measures to Minimize Harm

A. Temporary Measures

No temporary measuresare required.

B. Permanent Measures

No permanent measures are required.

2.3.6 Invasive Species

2.3.6.1 Regulatory Setting

On February 3, 1999, President Clinton signed Executive Order 13112 requiring federal agencies to combat the introduction or spread of invasive species in the United States. The order defines invasive species as "any species, including its seeds, eggs, spores, or other biological material capable of propagating that species, that is not native to that ecosystem whose introduction does or is likely to cause economic or environmental harm or harm to human health." Federal Highway Administration guidance issued August 10, 1999 directs the use of the state's noxious weed list to define the invasive plants that must be considered as part of the NEPA analysis for a proposed project. No concise, authoritative, and comprehensive list of alien plant species has been promulgated by the Federal government. The State of California issued such a compendium[10] for alien plant species, ranked roughly by proclivity to spread aggressively through natural communities within the state.

2.3.6.2 Affected Environment

Seven species widely regarded as invasive pests occur within the project area. Two horticultural varieties planted deliberately at the proposed project are included on the list of most invasive wildland pest plants: the gum tree themselves, very likely the blue gum (*Eucalyptus globulus*) although without flowers certain identification is problematic, and iceplant (*Carpobrotus edulis*). Weedy opportunistic species include wild fennel (*Foeniculum vulgare*) and four grasses noted on site: European fountain grass (*Pennisetum setaceum*), red brome (*Bromus rubens madritensis*), ripgut brome (*B. diandrus*) and both species of wild oats (*Avena barbata* and *A. fatua*). No

[10] http://ucce.ucdavis.edu/files/filelibrary/5319/4898.pdf

invasive animal species were noted in the project area, which is either in agricultural use or disturbed.

2.3.6.3 Environmental Consequences

A. Temporary Impacts

All build alternatives will require grading and earth movement and subsequent revegetation. It is possible that seeds from invasive plants already on site will be dispersed via the wind or on construction machinery. Measures to minimize harm for combating dust, as described in Section 2.2.6, Air Quality, will combat this (covering or wetting storage piles and washing the tires of vehicle leaving the site.) Minimization of the quantity of soil leaving the project area will also reduce the impact.

B. Permanent Impacts

The long term operation of the proposed project would not support the introduction of invasive species. If currently listed invasive species are present and removed as part of construction and replaced with non-invasive species, then the project would have a beneficial effect.

2.3.6.4 Measures to Minimize Harm

A. Temporary Measures

The following temporary measure is recommended:

BIO-C4: Topsoil from the embankments and flat places within the proposed project would contain virtually all the seed stocks of plants species on site, including those now deemed invasive aliens. As an expedient and simple precaution against spreading them further within the region, all topsoils removed to a depth of 35cm (14 inches) during construction should be stockpiled on site for subsequent use as fill needed directly on site. While this measure has only limited effect on weedy invasives already present within the area of potential effect, at least construction would not abet their spread even farther and wider.

B. Permanent Measures

The following permanent measure is recommended:

BIO-1: Any restoration landscaping proposed as part of the project shall not use any invasive plant species listed by the California Exotic Pest Plant Council.

2.4 Cumulative Impacts

2.4.1 Related Projects

The following describes related projects that may have a bearing on or contribute to cumulative impacts when taken in context with the proposed action.

2.4.1.1 Projects on the State Highway System

U.S. 101 is a heavily traveled corridor providing for intraregional, interregional, interstate and international travel. As a consequence, U.S. 101 has seen continued growth in its use since it was upgraded to a freeway in 1956 as part of the National Highway System. In response to such increased use, a number of projects are either planned or under construction to respond to demands occurring now and in the future. Prominent among these is the proposed widening of U.S. 101 along its entirety in Ventura County. The Ventura County Transportation Commission (VCTC) has identified as a key project in its Congestion Management Program widening of U.S. 101 to eight lanes from the Los Angeles County line to the Santa Barbara line. Funding has not as yet been identified for this project and therefore it is a number of years away from being programmed for implementation.

Along U.S. 101, in the communities of Camarillo, Oxnard and Ventura, improvements to interchanges are being focused upon to improve traffic flow to/from these communities and facilitate movements from the local street system onto and off the freeway. Within Ventura County, a total of nine such projects have been identified. Among these, two are closest to the proposed U.S. 101/Del Norte Interchange Improvement Project, and therefore should be considered in the context of cumulative impacts.

- The U.S. 101/Rice Avenue interchange is located slightly less than one mile to the west of the Del Norte project. The design of this improved interchange is nearly complete and construction is expected to begin in the fall of 2007.

- The U.S. 101/Springville Drive interchange is a new interchange located approximately mid-way between the existing Central Avenue and Las Posas interchanges, approximately four miles to the east of the Del Norte project. This project is also nearing completion of design and is expected to begin construction by the fall of 2007.

2.4.1.2 Local Development Projects

The U.S. 101/Del Norte Interchange Improvement Project is bordered on the north largely by farmland, with a small commercial area located to the west of the project area on Ventura Boulevard. Northwest of the proposed project is the Nyeland Acres residential area. The entire area north of the freeway in this vicinity is located within the Ventura County governmental jurisdiction. No plans are known that would substantially change the land uses or intensity of development on the north side of the freeway. The majority of land in the general vicinity of the proposed project is currently agricultural in use and is subject to both local municipal and County agricultural land preservation ordinances.

On the south side of the freeway, the area is contained within the jurisdiction of the City of Oxnard. Two potential development projects are of importance to the Del Norte project. Both projects have been under discussion for some time; neither has yet progressed to a point of nearing plan approval and subsequent construction. No dates or for construction have, as yet, been established.

- Sakioka Farms Specific Plan – This plan proposes the development of 300 acres of industrial uses and 100 acres of business uses, between Rice Avenue and Del Norte Boulevard, south of the Del Norte interchange.
- Camino Real Business Park (Power Machinery) Specific Plan – This plan proposes development of 40 acres of business and industrial uses in the area south of the Del Norte interchange, east of Del Norte Boulevard.

Section 1.6 describes other planned projects within a 2-mile radius of the proposed project.

2.4.2 Potential Cumulative Impacts

The Council on Environmental Quality (CEQ) NEPA regulations define cumulative effects as those effects that result from incremental impacts of a proposed action when added to past, present, and reasonably foreseeable future actions regardless of which agency (federal or nonfederal) or person undertakes such actions. Cumulative effects can result from individually minor but collectively significant actions that take place over a period of time (40 CFR 1508.7). They are similarly defined in Section 15355 of the CEQA Guidelines (2005) as follows:

"Cumulative impacts" refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.

(a) The individual effects may be changes resulting from a single project or a number of separate projects.

(b) The cumulative impact from several projects is the change in the environment which, results from the incremental impact of the project when added to other closely related past, present, and reasonable forseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.

Based on the CEQ discussion of cumulative effects, the following principles can be applied to the assessment of cumulative effects of the proposed project:

- Cumulative effects typically are caused by the aggregate effects of past, present, and reasonably foreseeable future actions. These are the effects (past, present, and future) of the proposed action on a given resource *and* the effects (past, present, and future), if any, caused by all other related actions that affect the same resource.
- When other related actions are likely to affect a resource that is also affected by the proposed action, it does not matter who (public or private entity) has taken the related action(s).
- The scope of cumulative effects analyses can usually be limited to reasonable geographic boundaries and time periods. These boundaries should extend only so far as the point at which a resource is no longer substantially affected or where the effects are so speculative as to no longer be truly meaningful.

- Cumulative effects can include the effects (past, present, and future) on a given resource caused by similar types of actions (e.g., air emissions from several individual highway projects) *and/or* the effects (past, present, and future) on a given resource caused by different types of actions (e.g., air emissions from a highway project, a solid waste incinerator, and a mining facility).

The analysis that follows considers the potential cumulative effects, if any, that would result from construction and operation of the proposed project, combined with construction and operation of the related projects listed above.

2.4.2.1 Farmland/Land Use

Construction activities could occur at multiple interchanges during the same time frames, because their present implementation schedules overlap; however, the interchanges are separated by distance of one mile or more. It is also possible that the development project south of U.S. 101 would also be under construction during that same time frame. To the extent that multiple construction sites are operating at the same time, although additive effects, particularly as related to dust creation, could occur, the effects would be both separated by distance and controlled dust suppression specifications. Unless wind patterns were particularly adverse, these additive effects would likely not be substantial. Moreover, construction activities would be temporary and would not permanently harm the adjacent farmlands. For these reasons, a cumulative impact associated with construction activities is not expected. Measures to Minimize Harm pertaining to this impact would be the same as those proposed to generally reduce the disruptive effects of construction activities.

As is noted above under Land Use, the combined interchange projects would acquire land that is now in agricultural use, thereby reducing the amount of land available for growing in an area of highly valued agricultural land. In the case of both the Del Norte and Springville interchanges, the agricultural land removed is not large in quantity (under ten acres, but yet above local significance thresholds) and is located such that the land converted to transportation use is at the outside edge of the affected farm parcels, thereby minimizing the adverse effect within the context of the design constraints. The remainder parcel in the Del Norte case (and also likely in the Springville case) should be able to remain as productive farmland. In a cumulative sense, both interchange projects do have an adverse effect on farmland, but this will be minimized to the extent practicable, while still permitting the interchanges to be constructed.

In the larger context, the interchanges are adding to the removal of agricultural land that has occurred over time and therefore could be construed as contributing to further reductions in available farmland. Ventura County and its various local municipalities have recognized this past trend and have strong land use controls in place which govern land use decisions (as discussed above and in the main Land Use impact section) and are in large part aimed at providing protection to local farmland. Therefore, the cumulative impact associated with the Del Norte (and Springville) projects would be considered a moderate impact.

The affected area for this discussion would include the immediate surroundings of the U.S. 101/Del Norte interchange and would include the adjacent interchange projects and the developments south of U.S. 101.

Construction activities would not have a cumulative effect on land use because they would be confined to the immediate vicinity of the proposed project and further because the disruptive effects associated with construction activities would not translate into an effect on land use itself.

Completion of the proposed U.S. 101/Del Norte Interchange Improvement Project, as well as some of the adjacent interchange projects, would require the acquisition of agricultural land on the south side of U.S. 101 that located within the City of Oxnard that is zoned for uses consistent with the planned developments discussed as related projects. The land to be acquired on he north side of U.S. 101 is located within the jurisdiction of Ventura County, and in this area, agricultural land is under the protection of County ordinances. Affirmative actions on the part of Ventura County officials, including potentially a General Plan Amendment, approval by the Board of Supervisors and a General Plan Consistency Determination, may be necessary to effect this change of use from agricultural to transportation purposes.

Similarly, the adjacent interchange projects being pursued, including the Rice Avenue interchange in the City of Oxnard and Springville Drive interchange in the City of Camarillo also involve land acquisition that may involve local plan consistency determinations. Among these projects, the proposed Springville Drive project appears to potentially face the same issue regarding City versus County land use jurisdiction, depending upon the footprint of the proposed project at that location. The other two interchanges are located entirely within local municipal jurisdiction. It should also be noted that the cooperative Oxnard/Camarillo/Ventura Greenbelt combined ordinance also is intended to foster preservation of agricultural land among those communities.

To the extent that the Del Norte and Springville interchange projects foster conversion of agricultural land to transportation use, and further that such conversion is contrary to the objectives of local preservation ordinances, both municipal and County, they could be considered to be cumulatively in potential conflict with local land use plans. However, it should be noted that two factors mitigate against this finding. First, the amounts of land being converted in both cases is not large (e.g. less than 10 acres, nonetheless above local significance thresholds) and second, strong County preservation oversight remains in place to evaluate the nature of conversion. In the latter case, affirmative actions, to which may be attached protective measures pursuant to the underlying preservation ordinances and objectives, must be taken before the land conversion can occur. As a consequence, this is regarded as a potential cumulative impact for which existing processes are in place to resolve the potential impact to the satisfaction of the local land use plans that are in effect.

2.4.2.2 Growth

The affected area and related projects for this discussion are the same as for Land Use, above.

Construction activities would not produce cumulative impacts because they would not encourage or impede growth.

Both the U.S. 101/Del Norte Interchange Improvement Project and the other locally proposed interchange improvements are being implemented to respond to two needs: (1) correcting design and capacity deficiencies and (2) recognizing expected growth in traffic, both regionally and locally. The latter reason, in turn, is driven by two factors: (a) regional and interregional traffic

growth outside the control of local government but within the responsibility of Caltrans and (b) expected growth in local traffic volumes seeking to use the freeway.

As is discussed above under Land Use, implementation of the individual interchanges must be evaluated and found to be consistent with the operative local plans (i.e., Ventura County, cities of Oxnard and Camarillo). Assuming that such consistency is found, that finding would be based upon matching the improvements and their respective capacity with the timing of development that is also evaluated for its consistency with the local plans. For these reasons, implementation of the proposed project, in the context of the other nearby interchanges, is judged to not produce a cumulative impact regarding growth, but rather that growth is being controlled by local land planning.

2.4.2.3 Community Impacts

The area of effect for purposes of this discussion would include the communities of Oxnard and Camarillo and the adjacent Ventura County areas.

Construction activities would not have a substantial cumulative effect on communities because they would be confined to the immediate vicinity of the proposed project and therefore would relate to the communities in the immediately surrounding area; the Nyland Acres area, in particular. The adjacent interchange projects are sufficiently distant such that construction impacts occurring in those vicinities would not be felt in communities nearby, with the possible exception of traffic disruptions in the freeway segments between these communities. Since the construction activity would be focused on the interchanges and not the freeway main line, disruptions to main line traffic would likely dissipate a short distance beyond the affected interchange. For these reasons, there would not be more than a minor cumulative impact on communities during the construction period. General construction period Measures to Minimize Harm would reduce these effects, but in addition, the following mitigation measure is proposed:

CUM-C1: City of Oxnard and Caltrans staff should coordinate with the City of Camarillo to develop and implement a public information program to apprise local area residents and businesses of the timing and nature of construction activities associated with construction of the Del Norte Boulevard, Rice Avenue and Springville Drive interchanges.

Once the proposed project is operational, it would benefit the affected communities. Traffic flow would be improved for vehicles entering and exiting the freeway and as a result, traffic on local streets in the vicinity of the proposed project would also be handled more efficiently. This would translate into improved access for local residents and businesses. The same effects would accrue to the other adjacent interchanges that are being implemented. For these reasons, a beneficial cumulative effect on communities is determined.

2.4.2.4 Utilities and Emergency Services

The area of effect for purposes of this discussion would include the service areas of the variety of utilities that exist in the vicinity of the proposed project and also the areas served by local area emergency service providers.

Utilities that would potentially be affected by Del Norte construction activities would be confined to the immediate vicinity of the proposed project and its approach roads. To the extent

that such utilities may also be connected to or serve areas surrounding the adjacent interchange projects, it is possible that an additive effect could occur. Disruptions in service as changeovers are occurring could adversely affect adjacent service areas if connected and if construction activities are not properly planned and coordinated. This would constitute a moderate adverse cumulative impact. The following mitigation measure is proposed:

CUM-C2: The City of Oxnard and Caltrans construction public information program should incorporate a component advising local area residents and businesses of the timing and nature of potential utility disruptions.

The nearest fire station is located two miles to the southwest of the project site and the nearest police station is located approximately three and one-half miles northwest of the site. Emergency services, because of their distance from the proposed project and the availability of alternate routes to gain access to the freeway, should not experience undue delays. However, it is possible that construction at multiple interchange locations, particularly because they are adjacent interchanges, could make impair freeway access such that emergency service vehicles could experience some increase in their response times. It would therefore be prudent for the emergency service providers of the local communities to be collectively apprised of the overall construction processes affecting the three adjacent interchanges and also maintain interagency communication during this period. Emergency services providers would determine if alternate access routes are necessary and would identify those routes themselves. The following mitigation measure is proposed:

CUM-C3: Caltrans should convene a meeting of the Oxnard, Camarillo and Ventura County emergency service providers to inform them of the collective construction schedules for the Del Norte Boulevard, Rice Avenue and Springville Drive interchange projects and to establish a mechanism for effective communication among the affected parties during the overall construction period.

Once the proposed project is operational, as well as the adjacent interchanges, utilities would be restored and emergency service providers would enjoy improved access to and from the freeway as well as improved local street traffic conditions in the vicinities of those interchanges. Accordingly, a beneficial cumulative effect is determined for operational conditions.

2.4.2.5 Traffic and Transportation

The area of effect for purposes of this discussion would include the communities of Oxnard and Camarillo and the adjacent Ventura County areas.

Construction of the proposed project will involve closures of freeway lanes for periods ranging from two to six days. Such closures may occur up to 20 times during the projected 36-month construction period. Similar lane closures would be expected at each of the adjacent interchange projects. It is likely that at least two and perhaps all three of these interchange projects could have construction activities occurring at the same time. As a result, disruptions to normal daily use of the freeway system in this area would be expected, resulting in delays anticipated to be on the order of 15 minutes in each location. The adjacent interchange projects are sufficiently distant such that construction activity would be focused on the interchanges and not the freeway main line and therefore disruptions to main line traffic would likely dissipate a short distance

beyond the affected interchange. Inconveniences to access and mobility affecting local area residents and businesses in the larger community would, however, occur. This is considered a moderate cumulative impact. General construction period Measures to Minimize Harm would reduce these effects as much as practicable.

Once the proposed project is completed, as well as the adjacent interchanges, the affected communities would experience the benefits of improved access and traffic flow. The same effects would accrue to the other adjacent interchanges that are being implemented. For these reasons, a beneficial cumulative effect on traffic and transportation is determined. In the absence of such interchange improvements, adverse cumulative impacts would occur and worsen in the future.

2.4.2.6 Visual Impacts & Aesthetics

The affected area for purposes of this discussion would include the immediate viewshed which, due to the relatively flat topography in the area, would not extend more that a few hundred yards up- and down-stream of the proposed project and would not extend to the vicinity of the next interchanges to the west and east of the project location. The viewshed would also include the areas immediately to the north and south of the proposed project.

Construction activities would not result in adverse cumulative impacts because they would be confined to the immediate vicinity of their respective interchanges. There could be a perception of disruption to the otherwise orderly viewshed during the overall construction period, but this would be minor, of at all.

The proposed project would reconstruct and widen the existing bridge structure crossing over the freeway. The profile of the new structure would be somewhat higher than existing. The proposed project would also reconstruct the existing ramps to and from the freeway, introducing a new loop ramp in the northbound direction that currently does not exist. The U.S. 101/Del Norte interchange and ramps would be distinguishable as new, but would not differ so much so that its massing would be obviously different. The proposed project would remain consistent with the transportation function that is the dominant visual element in this vicinity. These same general changes to structures would occur at the adjacent interchange locations.

Once the Del Norte and other nearby interchange projects are completed, a cumulative appearance will be presented that will add to the sense of consistency and reinforce the transportation use of the freeway corridor. Should the development projects south of U.S. 101 come to fruition, they will likely result in above ground commercial buildings of perhaps two-to-four stories in height. The nature of the proposed new development uses would be consistent with the appearance of a freeway corridor and in fact are being proposed in part to take advantage of their accessibility in proximity to the freeway. As a consequence, no adverse cumulative effects on the visual appearance or aesthetics of the area are expected.

2.4.2.7 Cultural Resources

No previously identified historic or archaeological resources in the vicinity of the project site were identified during archival searches. No such resources were identified by local jurisdictions

and none were discovered as a result of field investigations. In the absence of such resources, adverse cumulative impacts could not occur.

2.4.2.8 Water Resources

The affected area for purposes of this discussion would include the area served by the Beardsley Channel and Revolon Slough, located in the Calleguas Creek watershed. This watershed is included in the 2002 Clean Water Act section 303(d) list of impaired waterways. Pollutants of concern generally consist of agricultural pesticides.

Construction activities associated with the Del Norte and Springville interchanges would not have cumulative effects on local hydrology or water quality, if appropriately managed. Construction activities would be confined to the immediate vicinity of the respective interchanges. Local ground water would be adequately protected from potential adverse effects associated with construction of foundation structures, above ground structures and roadway components of the projects by means of Best Management Practices (BMPs) and implementation of a Storm Water Prevention Pollution Plan (SWPPP).

The proposed U.S. 101/Del Norte Interchange Improvement Project would also not have a cumulative effect on local hydrology, floodplains or water quality once it becomes operational. The project would maintain existing drainage patterns and facilities, although some local unlined drainage channels may have to be realigned. No other changes in the local drainage system would occur. Both the Del Norte and Springville interchange projects would increase the amount of impervious surfaces in their respective areas, but these increases are considered minor in the context of existing drainage conditions and capacities. The Storm Water Data Report prepared for the Del Norte project proposes detention upstream of the storm drain system as an additional precaution.

The Del Norte project is located within areas of a FEMA-designated 100-year floodplain (Zones B and C, exhibiting less than one foot of ponded flooding). No construction would occur that would affect the local flood control channels; however, the construction of new structures would introduce additional minor amounts of impervious surface within the floodplain. The expected additional runoff during storm events is expected to be well within the capacity of the existing flood control channels.

For the above reasons, no adverse cumulative effects on hydrology or water quality are expected.

2.4.2.9 Geology and Soils

The affected area would include the immediate vicinity of the proposed project and affected portion of the freeway. Adjacent interchanges and nearby development are sufficiently distant so as to not be influenced by geology and soils effects associated with the project.

The proposed project is located in a seismically active area of southern California that is likely to be subjected to moderate to severe ground shaking. The project is also located within a potential liquefaction zone. Both seismic shaking and potential liquefaction can be effectively accommodated through appropriate design specifications. Since the project itself can be designed to accommodate the potential effects on structures associated with seismic activity and

further since both the adjacent interchanges and development south of the freeway would not be influenced by the proposed project, no cumulative impacts are expected.

2.4.2.10 Paleontology

The affected area would encompass the construction areas of the proposed project and the others noted as related projects. The area would also include the proposed developments to the south of U.S. 101 in the vicinity of the proposed project. A variety of paleontological resources are known to exist in southern Ventura County which includes this area.

Construction of the proposed projects could disturb paleontological resources. It is possible that such disturbance could also occur during construction of either adjacent interchanges, which may overlap with construction of the proposd project, or the proposed developments south of the freeway, which is less likely to overlap with the Del Norte construction. To the extent that such multiple construction projects encounter paleontological resources and to the extent that such resources have a common interest, it could be concluded that a potential additive cumulative impact during construction could occur. The likelihood of such an occurrence is not known and cannot be known until construction is underway. Adequate protections would be in place for both interchange projects to provide for the appropriate recovery of discovered resources; therefore, an adverse cumulative impact during construction is judged not to occur.

Once the Del Norte and adjacent interchanges are operational there would be no effect on paleontological resources.

2.4.2.11 Hazardous Waste/Materials

The affected area would encompass the construction areas of the proposed projects and the others noted as related projects. The area would also include the proposed developments to the south of U.S. 101 in the vicinity of the proposed project.

No hazardous waste sites in the vicinity of the Del Norte project were identified in the project research. It is not known if such sites were identified in the vicinity of the Springville or Rice Avenue sites, but even if such were to be the case, they would likely be confined to the immediate vicinity of those projects. The possible exception to this conclusion would be if there were a ground water contamination plume present, but this is not likely, based on current research done for purposes of the Del Norte project. Because of this, it is not expected that hazardous waste would be encountered during construction, except for pesticides present in the area soils and potential aerially deposited lead on or near the roadways. These potential occurrences would be managed using standard practices and therefore would not lead to cumulative impacts.

During construction of the Del Norte and adjacent interchanges, hazardous materials could be used and handled on-site. The storage and handling of such materials would be controlled by construction specifications and practices. No cumulative impacts are expected if these practices are followed.

Once the project becomes operational, hazardous materials would be transported along the freeway and on and off the freeway at the Del Norte and adjacent interchanges. Control of such

transport would be governed by the existing California Motor Vehicle Code and enforced by the California Highway Patrol. Adverse cumulative impacts are not expected.

2.4.2.12 Air Quality

The area of effect for purposes of this discussion would include the communities of Oxnard and Camarillo and the adjacent Ventura County areas.

Temporary air quality impacts would result from project construction activities and those associated with other interchanges that may be under construction at the same time as the proposed project. Criteria pollutants, including oxides of nitrogen, carbon monoxide and fugitive dust (potentially including micro-level particulates) would be generated by all highway construction activities. To the extent that construction schedules overlap, additive effects would occur, and therefore this would be considered a cumulative impact. Such impact would be temporary and would be controlled to the extent practicable by control measures prescribed by sound construction practices and as prescribed by the Ventura County Air Pollution Control District.

Once the Del Norte and adjacent interchanges are operational, traffic movements onto and off the freeway would be handled more efficiently than at present and this would result in reduced congestion and increased travel speeds, both of which effects would act to reduce motor vehicle emissions. Since the area interchanges would each improve these characteristics and net beneficial cumulative effect would result.

2.4.2.13 Noise

The affected area would encompass the construction areas of the proposed project and the others noted as related projects. The area would also include the proposed developments to the south of U.S. 101 in the vicinity of the proposed project.

During construction of the Del Norte and other adjacent interchanges, noise would be produced by construction equipment operating in the immediate vicinity of each interchange. In the case of the proposed project, on the north side of the freeway, the distance between the proposed project and nearest receptor is approximately 700 feet, which would be sufficient to naturally attenuate construction noise. Each of the other interchanges that could be under construction at the same time as the proposed project would also be producing construction-related noise in the same proportions and affecting receptors nearby to those projects. Irrespective of the impact at any one location, a cumulative impact would not result due to the large intervening distances between the various interchange projects.

Once the Del Norte project is operational, and the other interchanges as well, traffic noise would occur in both the vicinity of the interchanges and along the freeway main line between them. In the case of the proposed project, while interchange-related noise is not expected to exceed established abatement criteria, noise levels on the freeway main line is expected to exceed such criteria. Soundwall abatement is proposed to reduce this to an acceptable level for the Del Norte project. It is assumed that similar abatement will be proposed for the adjacent interchanges, if required. To the extent that expansion of the highway system produces more vehicular noise that exceeds the abatement threshold, it can be said that a cumulative noise impact results, affecting

more receptors as time goes on. However, abatement is typically available to reduce these impacts to below the abatement threshold. On balance, a cumulative impact is therefore judged not to occur.

2.4.2.14 Energy

The affected area for purposes of this discussion is generally southern California, wherein energy is consumed by motor vehicles on the region's highway system on a daily basis.

During construction, the Del Norte project, along with the adjacent interchange projects, will be consuming energy in construction equipment. Energy is also consumed in the production of materials and manufactured components used in the construction process. This collective energy consumption would largely involve fossil fuels although some use of electrical power is possible for some limited construction processes. The amounts of energy consumed by these construction projects, as well as the many others that are ongoing in southern California, can be substantial in some cases. This consumption is temporary, however, and therefore does not constitute an adverse cumulative impact.

2.4.2.15 Biological Resources

The affected area for purposes of this discussion is generally southern California, and Ventura County in particular, wherein biological resources of the variety found at the project site may also occur.

A biological survey done for purposes of the project revealed the presence of no listed species, but did note the low potential for burrowing owl and the presence of a red-tailed hawk nest in a eucalyptus tree in the project area. The likelihood of occupancy by burrowing owl is low, but an observation for presence would be conducted prior to construction. With regard to the red-tailed hawk nest, active nests are protected under the Migratory Bird Treaty Act, which would prohibit removal of the nest, if occupied, during construction.

Taking the above into account, there would not be a cumulative adverse impact on biological resources during the construction period. Once operational, the proposed project would also not contribute to an adverse long-term cumulative impact on biological resources.

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Pollutant	Federal Standard	2002	2003	2004	2005
Ozone (O_3)	(1-Hour)				
	Maximum Concentration (ppm)	0.09	0.08	0.08	0.08
	(8-Hour)				
	Maximum Concentration (ppm)	0.07	0.07	0.08	0.07
	Days > NAAQS (0.08 ppm)	0	0	0	0
Particulate Matter (PM_{10})	(24-Hour)				
	Maximum Concentration ($\mu g/m^3$)	100	127	60	54
	Days > NAAQS (150 $\mu g/m^3$)	0	0	0	0
	(Annual Average)				
	Annual Arithmetic Mean (50 $\mu g/m^3$)	28	31	28	25
	Annual Geometric Mean (20 $\mu g/m^3$)	29	n/a	29	26
Particulate Matter ($PM_{2.5}$)	(24-Hour)				
	Maximum Concentration ($\mu g/m^3$)	29	82	29	35
	Days > NAAQS (65 $\mu g/m^3$)	0	1 [b]	0	0
	3-year Average 98th Percentile ($\mu g/m^3$)[b]	n/a	30	28	27
	(Annual)				
	Annual Arithmetic Mean (15 $\mu g/m^3$)	13	12	12	11
Carbon Monoxide (CO)	(1-Hour)				
	Maximum Concentration (ppm)	1.7	7.2	2.1	n/a
	Days > NAAQS (35 ppm)	0	0	0	n/a
	(8-Hour)				
	Maximum Concentration (ppm)	1.2	3.5	1.5	n/a
Nitrogen Dioxide (NO_2)	(1-hour)				
	Maximum Concentration (ppm)	0.05	0.06	0.06	0.07
	Days > NAAQS (9 ppm)	0	0	0	0
	(Annual)				
	Annual Arithmetic Mean (0.053 ppm)	0.010	0.011	0.011	0.011
Sulfur Dioxide (SO_2)	(24-hour)				
	Maximum Concentration (ppm)	0.002	0.002	0.001	n/a
	Days > NAAQS (0.14 ppm)	0	0	0	n/a
	(Annual)				
	Annual Arithmetic Mean (0.03 ppm)	0.001	n/a	n/a	n/a

ppm= parts per million; $\mu g/m^3$= micrograms per cubic meter; AAM= Annual Arithmetic Mean; n/a= not available

[a]The new California 8-hour-average O_3 standard was adopted by CARB on April 28, 2005; therefore, the exceedance statistics are not applicable to before this date.

[b]Attainment condition for $PM_{2.5}$ is that the 3-year average of the 98th percentile of 24-hour concentrations at each monitor within an area must not exceed 65 $\mu g/m^3$.

Source: CARB, 2005

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However, in order to further demonstrate that localized CO impacts would not occur, a "hot spot" analysis was conducted for the interchange. In this analysis, for the purpose of providing a worst-case scenario, the local concentrations of CO at the intersections of Del Norte Boulevard and the US 101 Ramps, were projected for the No Build and Build Alternative 2 (tight diamond), to determine the potential for the localized CO impacts

(hotspots). Build Alternative 2 (tight diamond) is analyzed as the worst-case scenario because it would result in a lower LOS than Build Alternative 3 (Loop On-Ramp). Alternative 2 would result in an LOS E, compared to an LOS B that would result from Alternative 3. Alternative 3 would include an interchange configuration that adds a loop on-ramp for the northbound Del Norte Boulevard to US 101. The loop configuration would improve interchange operation by smoothing traffic flow and vehicle speeds, and by improving weave and merge operations. This would further reduce CO concentrations. Therefore, Build Alternative 2 (tight diamond) is analyzed as the worst-case scenario for CO analysis.

Local area CO concentrations were projected using the CALINE 4 traffic pollutant dispersion model, using peak-hour traffic volumes and conservative meteorological assumptions. Table 4 shows the projected CO concentrations at 10 feet from the study intersections. As indicated, 1–hour CO concentrations (model predicted concentrations plus the background CO concentration) under Alternative 2 (tight diamond) build conditions would range between 4.3 ppm and 4.6 ppm at the intersections. The build condition 8–hour CO concentrations (model predicted concentrations plus the background CO concentration) are anticipated to range between 2.4 ppm and 2.5 ppm. CO concentrations decrease as the distance from the intersection increases. Thus, sensitive receptors that are located away from the intersections would be exposed to lower CO concentrations. The projected values are well below the state 1–hour and 8–hour standards of 20 ppm and 9 ppm, respectively; thus, no long-term significant impacts from localized CO emissions (hot spots) would occur as a result of the proposed project.

Table 4. Year 2030 Localized Carbon Monoxide Concentrations

Intersection	1-hour Concentration (ppm)				8-hour Concentration (ppm)			
	No Build		Build Alternative 2		No Build		Build Alternative 2	
	Model Value	Total Conc.	Model Value	Total Conc.	Model Value	Total Conc.	Model Value	Total Conc.
Del Norte Boulevard/ Camino Avenue	0.8	**4.5**	–[a]	–[a]	0.3	**2.4**	–[a]	–[a]
Del Norte Boulevard/ US-101 NB Ramps	0.7	**4.4**	0.7	**4.3**	0.4	**2.5**	0.3	**2.4**
Del Norte Boulevard/ US-101 SB Ramps	0.9	**4.6**	0.9	**4.6**	0.4	**2.5**	0.4	**2.5**
State Standard	**20.0**				**9.0**			

Note: Total CO concentrations include background 1–hour and 8–hour concentrations of 3.7 and 2.1 ppm, respectively, based on average of three year maximum recorded data at the El Rio-Rio Mesa School monitoring station.

[a] The intersection was not analyzed for future conditions because it will be relocated further south to conform to Caltrans standards.

Source: Parsons, 2006.

Again, it should be noted that the CO concentrations for the preferred Alternative 3 would be lower than the projected values in Table 4 because the improved LOS resulting from the loop on-ramp configuration would further reduce CO concentrations beyond those that would result from Alternative 2.

CHAPTER 3 – CEQA EVALUATION

The proposed project is a joint project by the California Department of Transportation (Department) and the Federal Highway Administration (FHWA) and is subject to state and federal environmental review requirements. Project documentation, therefore, has been prepared in compliance with both the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). FHWA's responsibility for environmental review, consultation, and any other action required in accordance with NEPA and other applicable Federal laws for this project is being, or has been, carried out by the Department under its assumption of responsibility pursuant to 23 U.S.C. 327. The Department is the lead agency under CEQA and NEPA.

One of the primary differences between NEPA and CEQA is the way significance is determined. Under NEPA, significance is used to determine whether an EIS, or some lower level of documentation, will be required. NEPA requires that an EIS be prepared when the proposed federal action (project) *as a whole* has the potential to "significantly affect the quality of the human environment." The determination of significance is based on context and intensity. Some impacts determined to be significant under CEQA may not be of sufficient magnitude to be determined significant under NEPA. Under NEPA, once a decision is made regarding the need for an EIS, it is the magnitude of the impact that is evaluated and no judgment of its individual significance is deemed important for the text. NEPA does not require that a determination of significant impacts be stated in the environmental documents.
CEQA, on the other hand, does require the Department to identify each "significant effect on the environment" resulting from the project and ways to mitigate each significant effect. If the project may have a significant effect on any environmental resource, then an EIR must be prepared. Each and every significant effect on the environment must be disclosed in the EIR and mitigated if feasible. In addition, the CEQA Guidelines list a number of mandatory findings of significance, which also require the preparation of an EIR. There are no types of actions under NEPA that parallel the findings of mandatory significance of CEQA. This chapter discusses the effects of this project and CEQA significance.

3.1 Determining Significance Under CEQA

The U.S. 101/Del Norte Interchange Improvement Project project is subject to federal, as well as City of Oxnard, County of Ventura and state environmental review requirements because the City of Oxnard proposes the use of federal funds and/or the project requires a federal approval action. Project documentation, therefore, has been prepared in compliance with both the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). The City of Oxnard is the project proponent and a joint-lead agency under CEQA. Because of Federal funding, the FHWA is lead agency under NEPA, with the California Department of Transportation (The Department) acting as its agent and providing oversight for the NEPA process.

One of the primary differences between NEPA and CEQA is the way significance is determined. Under NEPA, significance is used to determine whether an EIS, or some lower level of documentation, will be required. NEPA requires that an EIS be prepared when the proposed federal action (project) *as a whole* has the potential to "significantly affect the quality of the

human environment." The determination of significance is based on context and intensity. Some impacts determined to be significant under CEQA may not be of sufficient magnitude to be determined significant under NEPA. Under NEPA, once a decision is made regarding the need for an EIS, it is the magnitude of the impact that is evaluated and no judgment of its individual significance is deemed important for the text. NEPA does not require that a determination of significant impacts be stated in the environmental documents.

CEQA, on the other hand, does require the Department to identify each "significant effect on the environment" resulting from the project and ways to mitigate each significant effect. If the project may have a significant effect on any environmental resource, then an EIR must be prepared. Each and every significant effect on the environment must be disclosed in the EIR and mitigated if feasible. In addition, the CEQA Guidelines list a number of mandatory findings of significance, which also require the preparation of an EIR. There are no types of actions under NEPA that parallel the findings of mandatory significance of CEQA. This chapter discusses the effects of this project and CEQA significance.

3.2 Discussion of Significant Impacts

3.2.1 Significant Environmental Effects of the Proposed Project

3.2.1.1 Visual/Aesthetics

A. Significant Environmental Effects of the Proposed Project

Significant impacts under CEQA would be the same as those discussed in section 2.1.7.

B. Unavoidable Significant Environmental Effects

There are no unavoidable significant, effects on visual resources associated with the proposed project.

C. Mitigation Measures

Mitigation measures under CEQA would be the same as those discussed in section 2.1.7.

3.2.1.2 Land Use

All information provided in Section 2.1.1 on the affected environment, applicable plans and policies, regulatory setting, and impact analysis is additionally pursuant to CEQA.

B. Significant Environmental Effects of the Proposed Project

Significant impacts under CEQA would be the same as those discussed in section 2.1.1.5.

C. Unavoidable Significant Environmental Effects

There are no unavoidable significant environmental effects to land use that would result from the proposed project. Future local agency consultation between the City of Oxnard, Ventura County, and Ventura LAFCO will determine the appropriate procedure to resolve changes in land use and jurisdictional issues.

D. Mitigation Measures

Mitigation is not required.

3.2.1.3 Farmland

All information provided in Section 2.1.2 on the affected environment, applicable plans and policies, agricultural regulatory setting, and impact analysis is additionally pursuant to CEQA. One additional, local, agricultural regulatory guideline and respective impact analysis not pertinent to NEPA is provided below.

A. Agricultural Regulatory Setting

The *Ventura County Initial Study Assessment Guidelines* contain threshold criteria for impacts to agricultural soils. The assessment guidelines state that any project that would result in the direct and/or indirect loss of soils designated *Prime, Statewide Importance, Unique or Local Importance* will have an impact, and that the direct and/or indirect loss of five or more acres of soils designated of *Statewide Importance* located in an area with a general plan designation of "*Agricultural*" is considered a significant impact (Ventura County, 2006).

The proposed project would not affect any land under a Williamson Act contract, or other farmland conservation or security zone contract. The proposed project is not subject to the City or County SOAR Ordinance.

B. Significant Environmental Effects of the Proposed Project

All three build alternatives would result in the conversion of *Farmland of Statewide Importance* to transportation infrastructure use, resulting in significant, unavoidable impacts. Section 2.1.2 Farmlands provides detailed discussion on this analysis and impact finding.

All three build alternatives would result in a conflict with existing agricultural zoning and general plan designation for County lands proposed for acquisition and conversion to transportation use, resulting in significant, unavoidable impacts. Section 2.1.2 provides detailed discussion on this analysis and impact finding.

Additionally, the amount of acreage proposed for acquisition to accommodate the proposed project would exceed the Ventura County Initial Study Assessment Guidelines significance threshold of five or more acres for *Farmland of Statewide Importance*. The Ventura County Initial Study Assessment Guidelines state that, "Any project that entails a General Plan Amendment and would result in the loss of agricultural soils that exceed the significance thresholds…would require an EIR." Thus, any of the Build Alternatives would result in significant impacts due to their an exceedance of the impact significance thresholds agricultural impacts.

Acquisition of farmland to accommodate each proposed build alternative would not render any parcel unviable for continued agricultural use. Nonetheless, conversion of protected agricultural land to nonagricultural use in support of the proposed project would result in adverse affects, as discussed in Section 2.1.2 Farmlands.

C. Unavoidable Significant Environmental Effects

All three build alternatives would result in the conversion of *Farmland of Statewide Importance* to transportation infrastructure use. The amount of such conversion would be sufficient to exceed the Ventura County thresholds for impact significance. This conversion cannot be avoided without also abandoning the proposed project. Therefore, the project results in a significant, unavoidable impact under CEQA.

D. Mitigation Measures

No mitigation measures have been identified at this time to eliminate significant impacts under CEQA. However, a minimization measure for the conversion of farmland to transportation use is discussed in Section 2.1.2.3.

3.2.1.4 Air Quality

A. Regulatory Environment

California Clean Air Act

The California Clean Air Act (CCAA) was enacted on September 30, 1988, and became effective January 1, 1989. The CCAA requires all areas of the state to achieve and maintain the California Ambient Air Quality Standards (CAAQS) by the earliest practicable date. Table 3-1 shows the CAAQS currently in effect for each of the criteria pollutants as well as the other pollutants recognized by the state. The CAAQS are more stringent than the National Ambient Air Quality Standards (NAAQS) for most of the criteria air pollutants. In addition, the CAAQS include standards for other pollutants recognized by the state. California has set standards for $PM_{2.5}$, sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. Moreover, on April 28, 2005, the California Air Resources Board (CARB) approved a new 8-hour-average ozone standard of 0.070 ppm, to further protect California's most vulnerable population (i.e., children) from the adverse health effects associated with ground-level ozone. The standard went into effect early 2006.

According to the CAAQS, Ventura County is classified as a "severe" nonattainment area for O_3, and nonattainment for $PM_{2.5}$ and PM_{10}. There is no nonattainment classification for $PM_{2.5}$ and PM_{10} for the state standards.

Ventura County Air Quality Management Plan

In accordance with the Ventura County General Plan and the Ventura County Administrative Supplement to the CEQA Guidelines, all County agencies, departments and special districts are instructed to utilize the Air Quality Assessment Guidelines as adopted and periodically updated by the Ventura County Air Pollution Control District (VCAPCD, or District).

VCAPCD prepared the 1991 Air Quality Management Plan (AQMP) in response to the CCAA. VCAPCD updated the AQMP in 1994 and has adopted a series of revisions to the 1994 AQMP to meet the CAAQS and NAAQS. The most recent AQMP revision is the *2004 AQMP Revisions*, which was adopted on April 13, 2004. The 1994 AQMP (together with the 1995, 1997 and 2004 AQMP Revisions) is the current AQMP for Ventura County. The current AQMP will be revised in 2007 to update emissions forecasts and incorporate air quality modeling and any needed control measures to achieve attainment with the new federal 8-hour ozone standard.

Table 3-1 – California Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards [a] Concentration
Ozone (O_3)	1 Hour 8 Hour	0.09 ppm (180 µg/m^3) 0.07 ppm (137 µg/m^3)
Respirable Particulate Matter (PM_{10})	24 Hour Annual Arithmetic Mean	50 µg/m^3 20 µg/m^3
Fine Particulate Matter ($PM_{2.5}$)	24 Hour Annual Arithmetic Mean	No Separate State Standard 12 µg/m^3
Carbon Monoxide (CO)	8 Hour 1 Hour	9.0 ppm (10mg/m^3) 20 ppm (23 mg/m^3)
Nitrogen Dioxide (NO_2)	Annual Arithmetic Mean 1 Hour	— 0.25 ppm (470 µg/m^3)
Sulfur Dioxide (SO_2)	Annual Arithmetic Mean 24 Hour 3 Hour 1 Hour	— 0.04 ppm (105 µg/m^3) — 0.25 ppm (655 µg/m^3)
Lead[b]	30 Day Average Calendar Quarter	1.5 µg/m^3 —
Visibility Reducing Particles	8 Hour	Extinction coefficient of 0.23 per kilometer- visibility of ten miles or more due to particles when relative humidity is less than 70 % Method: CARB Method V.
Sulfates	24 Hour	25 µg/m^3
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m^3)
Vinyl Chloride[b]	24 Hour	0.01 ppm (26 µg/m^3)

[a]California standards for ozone, carbon monoxide (except Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, suspended particulate matter—PM10, PM2.5, 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.

[b]The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

Source: California Air Resources Board, 2006.

Table 3-2 – Criteria Air Pollutants Data Summary – California Standards
(El Rio Air Monitoring Station)

Pollutant	California Standard	2002	2003	2004	2005
Ozone (O_3)	(1-Hour)				
	Maximum Concentration (ppm)	0.09	0.08	0.08	0.08
	Days > CAAQS (0.09 ppm)	0	0	0	0
	(8-Hour)				
	Maximum Concentration (ppm)	0.07	0.07	0.08	0.07
	Days > CAAQS (0.07 ppm)	0	0	n/a [a]	0
Particulate Matter (PM_{10})	(24-Hour)				
	Maximum Concentration ($\mu g/m^3$)	100	127	60	54
	Days > CAAQS (50 $\mu g/m^3$)	12	31	7	12
	(Annual Average)				
	Annual Arithmetic Mean (50 $\mu g/m^3$)	28	31	28	25
	Annual Geometric Mean (20 $\mu g/m^3$)	29	n/a	29	26
Particulate Matter ($PM_{2.5}$)	(24-Hour)				
	Maximum Concentration ($\mu g/m^3$)	29	82	29	35
	3-year Average 98th Percentile ($\mu g/m^3$)[b]	n/a	30	28	27
	(Annual)				
	Annual Arithmetic Mean (15 $\mu g/m^3$)	13	12	12	11
Carbon Monoxide (CO)	(1-Hour)				
	Maximum Concentration (ppm)	1.7	7.2	2.1	n/a
	Days > CAAQS (20 ppm)	0	0	0	n/a
	(8-Hour)				
	Maximum Concentration (ppm)	1.2	3.5	1.5	n/a
	Days > CAAQS (9.0 ppm)	0	0	0	n/a
Nitrogen Dioxide (NO_2)	(1-hour)				
	Maximum Concentration (ppm)	0.05	0.06	0.06	0.07
	Days > CAAQS (0.25 ppm)	0	0	0	0
	(Annual)				
	Annual Arithmetic Mean (0.053 ppm)	0.010	0.011	0.011	0.011
Sulfur Dioxide (SO_2)	(24-hour)				
	Maximum Concentration (ppm)	0.002	0.002	0.001	n/a
	Days > CAAQS (0.04 ppm)	0	0	0	n/a
	(Annual)				
	Annual Arithmetic Mean (0.03 ppm)	0.001	n/a	n/a	n/a

ppm = parts per million; $\mu g/m^3$= micrograms per cubic meter; AAM= Annual Arithmetic Mean; n/a= not available

[a]The new California 8-hour-average O_3 standard was adopted by CARB on April 28, 2005; therefore, the exceedance statistics are not applicable to before this date.

[b]Attainment condition for $PM_{2.5}$ is that the 3-year average of the 98th percentile of 24-hour concentrations at each monitor within an area must not exceed 65 $\mu g/m^3$.

Source: CARB, 2005.

B. Significant Environmental Effects of the Proposed Project

Construction Emissions

According to the VCAPCD *Ventura County Air Quality Assessment Guidelines*, projects producing oxides of nitrogen (NO_x) and reactive organic compound (ROC) emissions of 25 pounds per day or more, would be required to adopt mitigation measures (VCAPCD, 2003). The proposed project construction is expected to emit more than 25 lb per day of NO_x and ROC emissions. With implementation of the recommended mitigation measures, construction emissions for the project will have a less than significant impact.

C. Mitigation Measures

The District (VCAPCD) does not have significance thresholds for construction emissions. However, since Ventura County is an ozone nonattainment area, projects producing oxides of nitrogen (NO_x) and reactive organic compounds (ROC) emissions of 25 lb per day or more, would be required to adopt mitigation measures (VCAPCD, 2003). The proposed project construction is expected to emit more than 25 lb per day of NO_x and ROC emissions; therefore, the following mitigation measures are recommended to reduce construction-related emissions:

AQ-C1: Reduce engine exhaust emissions by implementing when feasible the following measures:

- ***Minimize equipment idling time;***
- ***Maintain equipment engines in good condition and in proper tune as per manufacture's specifications;***
- ***Where feasible, lengthen the construction period during smog season (May through October) to minimize the number of vehicles and equipment operating at the same time;***
- ***Use alternative-fueled construction equipment such as compressed natural gas (CNG)-, or electric-powered equipment, if feasible;***
- ***Turn off equipment when not in use for longer than five minutes;***
- ***Use "retrofit technology" on existing diesel engines and vehicles, if feasible.***

AQ-C2: Reduce fugitive dust emissions by implementing when feasible the following measures:

- ***The area disturbed by clearing, grading, earth moving, or excavation operations should be minimized to prevent excessive amounts of dust.***
- ***Pre-grading/excavation activities should include watering the area to be graded or excavated before commencement of grading or excavation operations. Application of water (preferably reclaimed, if available) should be provided sufficiently to minimize fugitive dust during grading activities;***

- ***Fugitive dust produced during grading excavation, and construction activities should be controlled by the following activities:***
  - ***All trucks should be required to cover their loads as required by California Vehicle code §23114;***
  - ***All graded and excavated material, exposed soil areas, and active portions of the construction site, including unpaved on-site roadways, should be treated to prevent fugitive dust. Treatment should include, but not limited to, periodic watering, application of environmentally-safe stabilization material, and/or roll-compaction as appropriate. Watering should be done as often as necessary and reclaimed water should be used whenever possible;***
- ***Graded and/or excavated inactive areas of the construction site should be monitored by the contractors at least weekly for dust stabilization. Soil stabilization methods, such as water and roll-compaction, and environmentally-safe dust control materials, should be periodically applied to portions of the construction site that are inactive for over four days;***
- ***Signs should be posted on-site, limiting traffic to 15 miles per hour or less.***
- ***During periods of high winds (i.e., wind speed sufficient to cause fugitive dust to impact adjacent properties), all clearing, grading, earth moving, and excavation operations should be curtailed to the degree necessary to prevent fugitive dust created by on-site activities and operations from being a nuisance or hazard, either off-site or on site. The site superintendent/supervisor should use his/her discretion in conjunction with the VCAPCD in determining when winds are excessive;***
- ***Adjacent streets and roads should be swept at least once per day, preferably at the end of the day, if visible soil material is carried over to adjacent streets and roads;***
- ***Personnel involved in grading operations, including contractors and subcontractors, should be advised to wear respiratory protection in accordance with California Division of Occupational Safety and Health regulations.***

D. Unavoidable Significant Adverse Impacts

There are no significant unavoidable adverse impacts associated with air quality.

3.2.1.5 Biological Resources

A. Regulatory Environment

At the state level, wetlands and waters are regulated primarily by the Department of Fish and Game (CDFG) and the Regional Water Quality Control Boards (RWQCB). Sections 1600-1607 of the Fish and Game Code require any agency that proposes a project that will substantially divert or obstruct the natural flow of or substantially change the bed or bank of a river, stream, or lake to notify CDFG before beginning construction. If CDFG determines that the project may substantially and adversely affect fish or wildlife resources, a Lake or Streambed Alteration Agreement will be required. CDFG jurisdictional limits are usually defined by the tops of the

stream or lake banks, or the outer edge of riparian vegetation, whichever is wider. Wetlands under jurisdiction of the federal government may or may not be included in the area covered by a Streambed Alteration Agreement obtained from the CDFG.

The regulatory requirements for CESA can be found at California Fish and Game Code, Section 2050, et. seq. CESA emphasizes early consultation to avoid potential impacts to rare, endangered, and threatened species and to develop appropriate planning to offset project caused losses of listed species populations and their essential habitats. The CDFG is the agency responsible for implementing CESA. Section 2081 of the Fish and Game Code prohibits "take" of any species determined to be an endangered species or a threatened species. Take is defined in Section 86 of the Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." CESA allows for take incidental to otherwise lawful development projects; for these actions an incidental take permit is issued by CDFG. For projects requiring a Biological Opinion under Section 7 of the Federal ESA, CDFG may also authorize impacts to CESA species by issuing a Consistency Determination under Section 2080.1 of the Fish and Game Code.

Department projects are also subject to the Native Plant Protection Act, found at Fish and Game Code, Section 1900-1913, and the California Environmental Quality Act, Public Resources Code, Sections 2100-21177.

State laws and regulations pertaining to wildlife include the following:

- California Environmental Quality Act
- Sections 1601 – 1603 of the Fish and Game Code
- Section 4150 and 4152 of the Fish and Game Code

B. Significant Environmental Effects of the Proposed Project

As discussed in Section 2.3 there are no natural biological communities, wildlife corridors, wetlands, streambeds, or sensitive habitat in the project area and therefore no significant environmental effect s to these types of biological resources. There are no California special status plants or animals in the project area.

C. Unavoidable Significant Environmental Effects

There are no unavoidable significant environmental effects associated with the construction or operation of the project.

D. Mitigation Measures

Mitigation measures under CEQA would be the same as those discussed in section 2.3.

3.2.1.6 Cultural Resources

A. Regulatory Setting

The phrase "cultural resources," as used in this document, refers to all historical and archaeological resources, regardless of significance. State regulations dealing with cultural resources include:

California Environmental Quality Act

"Historical resources" are described under the California Environmental Quality Act (CEQA), and in *California Public Resources Code* (*PRC*) Section 5024.1, which established the California Register of Historical Resources (California Register). Historical resources are defined as: a resource listed in, or determined eligible for listing in, the California Register... in a local register of historical resources..., or deemed significant pursuant to criteria set forth in subdivision (g) of Section 5024.1, [are] … presumed to be historically or culturally significant for purposes of this section, unless the preponderance of the evidence demonstrates that the resource is not historically or culturally significant (*PRC* §21084.1).

California Register of Historical Resources

Under *PRC* §5024.1, the California Register was established to serve as an authoritative guide to the state's significant historical and archaeological resources. In order for a property to be considered eligible for listing in the California Register, it must be found by the State Historical Resources Commission to be significant under at least one of the following four criteria; if the resource: (1)is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage; (2) is associated with the lives of persons important in our past; (3) embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual or possesses high artistic values; (4) has yielded, or may be likely to yield, information important in prehistory or history.

B. Significant Effects of the Proposed Project

Under CEQA, it is necessary to evaluate proposed projects for the potential to cause significant effects on historical resources. CEQA equates a "substantial adverse change" in the significance of an historical resource with a significant effect on the environment (*PRC* §21084.1). If a proposed project could be expected to result in substantial adverse change in an historical resource, environmental clearance for the project would require mitigation measures to reduce impacts. Thresholds of "substantial adverse change" are established in *PRC* §5020.1 as: demolition, destruction, relocation, or alteration activities that would impair the significance of the historic resource. Material impairment occurs when a project results in demolition, or materially alters in an adverse manner, the physical characteristics that convey a property's historic significance, or is the reason for that property's inclusion in an official register of historic resources (*PRC* §15064.5 (b) (2.)).

All the built environment properties within the APE were found to meet the criteria for Section 106 Programmatic Agreement Attachment 4, thus none of the properties required further evaluation. No properties within or nearby the project APE are listed in or have been determined eligible for listing in the National or California registers, none are designated California Points of Historical Interest or California Historical Landmarks. Because no historical resources are within the proposed project area, no effects, as defined in CEQA are expected to result from construction or operation of the project.

The ASR found no surface evidence of historical or prehistoric archaeological resources within the APE. No further archaeological work should be necessary, unless project plans are modified to include areas that were not surveyed for this project.

C. Unavoidable Significant Effects

The proposed project would have no unavoidable significant effects on cultural resources.

D. Mitigation Measures

Because no cultural resources are expected to be affected by construction or implementation of the proposed project, no avoidance, minimization or mitigation is necessary. If cultural resources are discovered during construction, the mitigation presented in Section 2.1.8 would apply.

3.2.1.7 Hazardous Waste/Materials

A. Significant Environmental Effects of the Proposed Project

Significant impacts under CEQA would be the same as those discussed in section 2.2.4.

B. Unavoidable Significant Environmental Effects

There are no unavoidable significant environmental effects associated with the construction or operational hazardous waste or materials, assuming implementation of the mitigation measures discussed in section 2.2.4.

C. Mitigation Measures

Mitigation measures under CEQA would be the same as those discussed in section 2.2.4.

3.2.1.8 Water Resources

A. Significant Environmental Effects of the Proposed Project

Significant impacts under CEQA would be the same as those discussed in sections 2.2.1.

B. Unavoidable Significant Environmental Effects

There are no unavoidable significant environmental effects associated with the construction or operational hazardous waste or materials, assuming implementation of the mitigation measures discussed in section 2.2.1.

C. Mitigation Measures

Mitigation measures under CEQA would be the same as those discussed in section 2.2.1.

3.2.1.9 Noise

A. Significant Environmental Effects of the Proposed Project

Significant impacts under CEQA would be essentially the same as those discussed in section 2.2.6. The Department's *Traffic Noise Analysis Protocol for New Highway Construction and Reconstruction Projects, October 1998* has, as one component, defining a noise impact as a substantial in noise level (defined as an increase of 12 dBA or more), in addition to the federal abatement threshold. For purposes of CEQA, the substantial increase component is equivalent to the CEQA threshold for impact significance.

B. Unavoidable Significant Environmental Effects

There are no unavoidable significant environmental effects associated with the construction or operational noise impacts, assuming implementation of the mitigation measures discussed in section 2.2.6.

C. Mitigation Measures

Mitigation measures under CEQA would be the same as those discussed in section 2-2.6.

3.2.1.10 Climate Change

A. Regulatory Setting

While climate change has been a concern since at least 1988, as evidenced by the establishment of the United Nations and World Meteorological Organization's Intergovernmental Panel on Climate Change (IPCC), the efforts devoted to greenhouse gas Greenhouse gases related to human activity include: Carbon dioxide, Methane, Nitrous oxide, Tetrafluoromethane, Hexafluoroethane, Sulfur hexafluoride, HFC-23, HFC-134a*, and HFC-152a*. (GHG) emissions reduction and climate change research and policy have increased dramatically in recent Years. In 2002, with the passage of Assembly Bill 1493 (AB 1493), California launched an innovative and pro-active approach to dealing with GHG Emissions and climate change at the state level. AB 1493 requires the Air Resources Board (ARB) to develop and implement regulations to reduce automobile and light truck GHG emissions; these regulations will apply to automobiles and light trucks beginning with the 2009 model year.

On June 1, 2005, Governor Arnold Schwarzenegger signed Executive Order S-3-05. The goal of this Executive Order is to reduce California's GHG emissions to: 1) 2000 levels by 2010, 2) 1990 levels by the 2020 and 3) 80% below the 1990 levels by the year 2050. In 2006, this goal was further reinforced with the passage of Assembly Bill 32 (AB 32), the Global Warming Solutions Act of 2006. AB 32 sets the same overall GHG emissions reduction goals while further mandating that ARB create a plan, which includes market mechanisms, and implement rules to achieve "real, quantifiable, cost-effective reductions of greenhouse gases." Executive Order S-20-06 further directs state agencies to begin implementing AB 32, including the recommendations made by the state's Climate Action Team.

Climate change and GHG reduction is also a concern at the federal level; however, at this time, no legislation or regulations have been enacted specifically addressing GHG emissions reductions and climate change.

B. Affected Environment

An individual project does not generate enough greenhouse gas emissions to significantly influence global climate change. Global climate change is a cumulative impact; a project participates in this potential impact through its incremental contribution combined with the cumulative increase of all other sources of greenhouse gases.

The Department and its parent agency, the Business, Transportation, and Housing Agency, have taken an active role in addressing GHG emission reduction and climate change. Recognizing that 98 percent of California's GHG emissions are from the burning of fossil fuels and 40 percent

of all human made GHG emissions are from transportation, the Department has created and is implementing the *Climate Action Program at Caltrans* (December 2006).

One of the main strategies in the Department's Climate Action Program to reduce GHG emissions is to make California's transportation system more efficient. The highest levels of carbon dioxide from mobile sources, such as automobiles, occur at stop-and-go speeds (0-25 miles per hour) and speeds over 55 mph. Relieving congestion by enhancing operations and improving travel times in high congestion travel corridors will lead to an overall reduction in GHG emissions.

The U.S. 101/Del Norte Boulevard Interchange Improvement Project would help reduce long queues and alleviate global climate change concerns by reducing carbon dioxide emissions, a major greenhouse gas. The current configuration of the interchange creates long queues and delays at the ramp intersections and does not have the capacity to carry 2030 projected traffic volumes. This project would provide congestion relief by eliminating geometric deficiencies and non-standard features at the interchange. Traffic signals will be installed at the ramp intersections where there are currently stop signs and improve traffic operations by reconfiguring the on/off ramps.

The Department recognizes the concern that carbon dioxide emissions raise for climate change. However, modeling and gauging the impacts associated with an increase in GHG emissions levels, including carbon dioxide, at the project level is not currently possible. No federal, state or regional regulatory agency has provided methodology or criteria for GHG emission and climate change impact analysis. Therefore, the Department is unable to provide a scientific or regulatory based conclusion regarding whether the project's contribution to climate change is cumulatively considerable.

3.3 Mitigation Measures for Significant Impacts Under CEQA

In order to reduce potential impacts resulting from implementation of the proposed project, (as discussed in Chapters 2 and 3), a range of mitigation measures has been proposed. A summary of these mitigation measures, which will be made a part of project implementation, follows.

3.3.1 Land Use

No mitigation is required.

3.3.2 Farmland

No mitigation measures have been identified at this time to eliminate significant impacts under CEQA. However, the following minimization measure is proposed to lessen the impacts associated with the permanent conversion of farmland:

F-1: Land replacement, conservation easements, and land banking will be explored with the Ventura County Agricultural Commissioner's Office. Replacement land, if available, will be determined in consultation with the City of Oxnard, Ventura County, and the theVentura County Agricultural Commissioner's Office.

3.3.3 Growth

No mitigation is required.

3.3.4 Community Impacts

No mitigation measures are required to reduce significant impacts under CEQA. However, the following mitigation measures are proposed to reduce impacts that were not found significant under CEQA:

COM-C1: Public information program will be implemented to inform area residents of scheduled construction activities and provide for two-way dialogue regarding impacts and their resolution.

3.3.5 Utilities/Emergency Services

U-C1: Work affecting utilities will be coordinated with utility providers in the first stages of construction.

The following mitigation measures are also proposed to reduce impacts that were not found significant under CEQA:

- U-C2: Caltrans will develop and implement a demolition waste recycling program.
- Caltrans will coordinate with emergency service providers.

3.3.6 Traffic and Transportation

T-C1: Caltrans will prepare and implement a Transportation Management Plan (TMP).

3.3.7 Visual/Aesthetics

No mitigation measures are required to reduce significant impacts under CEQA. However, the following mitigation measures are proposed to reduce impacts that were not found significant under CEQA:

- ***V/A-1: Arborist's Tree Report will be prepared Replacements trees will be planted at a ratio to be determined by the city. City of Oxnard Parks and Recreation Department or City Council to approve removal of mature trees.***
- ***V/A-2: Landscaping to be provided in keeping with City and County landscape standards. Replacement planting will consist of standard Caltrans highway planting. "The Scenic Route" design guidelines will be incorporated into project design.***
- ***V/A-3: Roadway and lighting design will minimize the light and glare at Nyeland Acres.***

3.3.8 Cultural Resources

CR-C1: If buried cultural resources are encountered during construction, work will halt for evaluation by a qualified archaeologist. If human remains are exposed during construction,

no further disturbance shall occur until the County Coroner has made the necessary findings pursuant to Public Resources Code 5097.98.

3.3.9 Water Resources

- ***WQ-C1: Prepare and implement SWPPP containing appropriate BMPs.***
- ***WQ-C2: Dewatering, if necessary, would be conducted locally. Dewatering effluent would be tested for contaminants as specified by the RWQCB. Contaminated effluent would be disposed of in accordance with applicable regulations.***
- ***WQ-C3: Temporary erosion control procedures will be used.***

The following mitigation measures are also proposed to reduce impacts that were not found significant under CEQA:

- ***HYD–1: During project design, location hydraulic studies will be performed and hydraulic modeling will be conducted. A hydraulic report summarizing the results of this analysis will be submitted for review by the local agencies listed in the Flood Insurance Rate Maps [FIRMs].***
- ***WQ-1: BMPs to be implemented to reduce pollutant discharge. Examples include infiltration and detention devices, detention devices, biofiltration, and/or gross solids removal. Hydroseeding and landscaping will minimize erosion and reduce runoff.***

3.3.10 Geology & Soils

No mitigation measures are required to reduce significant impacts under CEQA. However, the following mitigation measures are proposed to reduce impacts that were not found significant under CEQA:

GEO-C1: Caltrans will prepare and comply with the SWPPP and NPDES permit conditions. Erosion control measures will be implemented.

3.3.11 Paleontology

No mitigation measures are required to reduce significant impacts under CEQA. However, the following mitigation measures are proposed to reduce impacts that were not found significant under CEQA:

PAL-C1: If encountered, a qualified paleontologist will develop a program to mitigate for impacts to non-renewable resources.

3.3.12 Hazardous Waste/Materials

No mitigation measures are required to reduce significant impacts under CEQA. However, the following mitigation measures are proposed to reduce impacts that were not found significant under CEQA:

- ***HAZ-C1: Areas where soil may be disturbed shall be tested for ADL. Contractor will be required to manage excavated soils in accordance with all pertinent laws and regulations. A Remedial Actions Options Report may be completed.***
- ***HAZ-C2: Soil samples will be analyzed for pesticides; handling and disposal options will be evaluated. A Remedial Actions Options Report.***

3.3.13 Air Quality

- ***AQ-C1: Reduce engine exhaust emissions by implementing appropriate control measures.***
- ***AQ-C2: Reduce fugitive dust emissions by implementing appropriate control measures.***

3.3.14 Noise

- ***N-1: Sound walls to be constructed along property line of affected properties.***

The following mitigation measures are also proposed to reduce impacts that were not found significant under CEQA:

- ***N-C1: Noise control measures will be implemented or considered, including early construction of long-term soundwalls, newer equipment, and temporary noise barriers(if warranted).***
- ***N-C2: Caltrans and the City will consider implementing a noise monitoring program. Local noise ordinances will be observed.***

3.3.15 Energy

No mitigation is necessary.

3.3.16 Natural Communities

No mitigation is necessary.

3.3.17 Wetlands & Waters of the U.S.

No mitigation is necessary.

3.3.18 Plant Species

No mitigation is necessary.

3.3.19 Animal Species

- ***BIO-C1: A pre-construction survey of the eucalyptus trees will be performed to determine the presence of active nests. Construction phasing and/or location of activity will avoid disturbance during the breeding season.***

- ***BIO-C2: A pre-construction survey for burrowing owls will be conducted.***

3.3.20 Threatened and Endangered Species

No mitigation is necessary.

3.3.21 Invasive Species

BIO-C3: Topsoil will be removed to a depth of 14 inches and stockpiled for subsequent use as fill material.

3.3.22 Cumulative Impacts

No mitigation measures are required to reduce significant impacts under CEQA. However, the following mitigation measures are proposed to reduce impacts that were not found significant under CEQA:

- ***CUM-C1: Caltrans and City of Oxnard (in cooperation with City of Camarillo) to implement public information program for Rice, Del Norte and Springville interchanges.***
- ***CUM-C2: Public information program should include information regarding utility work.***
- ***CUM-C3: Caltrans (in cooperation with local jurisdictions) would meet with local emergency service providers prior to beginning construction.***

CHAPTER 4 – COMMENTS AND COORDINATION

4.1 Agency Coordination

An early agency consultation meeting for the proposed project was held on April 17, 2006 with representatives from the following stakeholder organizations: City of Oxnard Planning Deparment, County of Ventura Planning Division, County of Ventura Public Works Transportation Department, and County of Ventura Agricultural Commissioner's Office, and Parsons. This meeting was held with the intent to namely discuss potential impacts to agricultural land, associated jurisdictional involvement, and applicable significance thresholds and project approval requirements.

4.2 Public Comments

A Public Scoping period was conducted beginning on February 13, 2007 and concluded on March 15, 2005. A public open house was held on February 22, 2007. Two members of the public attended the meeting. One attendee raised the concern that a Native American monitor should be present during project earthwork activities. Another attendee voiced positive support for the project. A summary of comments received during the scoping period is provided in Appendix F.

A *Notice of Availability* was published and copies were distributed to a list of responsible and trustee agencies, as well as parties known to have an interest in the project, as shown in Chapter 6.

A public hearing/open house has been scheduled for Thursday, October 4, 2007. The public comment period officially began on September 4, 2007, and will end on October 15, 2007.

Locations for public review of the EA/DEIR are as follows:

Caltrans
District 7 offices
100 So. Main Street
Los Angeles, CA
Contact: Carlos Montez
(213) 897-9116

City of Oxnard
305 West Third Street
Oxnard, CA 93030
Contact: Ralph Alamillo
(805) 385-8341

City of Oxnard
Main Library
251 South A Street
Oxnard, CA 93030

CHAPTER 5 – LIST OF PREPARERS

Petersen, Gary, Senior Project Manager, Masters in Urban Planning, University of Southern California (USC) M.S. Business Administration, University of California, Los Angeles (UCLA) B.S. Civil Engineering, University of California, Los Angeles (UCLA) A.A., East Los Angeles College; 30 years environmental planning experience. Contribution: Project Manager

Behmanesh, Nasrin, Principal Engineer, Ph.d, University of Southern California, Los Angeles (UCLA); 15 years environmental engineering experience. Contribution: air quality analysis.

Luc, Thanh, Senior Supervising Engineer, B.S., Mechanical Engineering, California State Polytechnic University, Pomona; 16 years conducting and managing noise analyses for CEQA/NEPA environmental documents and construction projects. Contribution: noise impact analysis and abatement design.

McNulty, Brynna, Environmental Planner, B.A., University of California, Santa Cruz (UCSC); 6 years environmental planning experience. Contribution: document coordination, technical oversight, community impacts, land use, agricultural land.

Mercer, Annette, Environmental Planner, M.S. Resource Management, University of Washington; B.A. Physiology, University of California, San Diego (UCSD); 16 years environmental planning experience. Contribution: aesthetics, traffic, biological resources.

Moeur, John E., Principal Scientist, Ph.D., University of Georgia; 16 years applied ecological analyses experience, 12 years prior academic research and teaching. Contribution: evaluation of biotic resources.

Schnapp, Angela, Environmental Engineer, B.S., Nuclear Engineering, University of Illinois at Urbana-Champaign, M.S., Environmental Engineering, University of Illinois at Urbana-Champaign; 12 years environmental engineering experience. Contribution: document coordination, technical oversight.

Smith, Francesca, Senior Architectural Historian, B.A. Political Science, The College of Charleston (SC), MS Real Estate Development, Columbia University in the City of New York; 20 years of environmental planning experience. Contribution: cultural resources.

CHAPTER 6 – DISTRIBUTION LIST

The following officials, agency representatives and interested parties have received either a copy of the draft environmental document or a notice informing them of its availability.

Federal Elected Officials

Congresswoman Lois Capps
Senator Barbara Boxer
Senator Diane Feinstein

State Elected Officials

State Senator Sheila Kuehl, 23rd District
Assembly Member Pedro Nava, 35th District

Local Elected Officials

Ventura County Supervisors

Steve Bennett, District 1
Linda Parks, District 2
Kathy Long, District 3
Peter C. Foy, District 4
John K. Flynn, District 5

City of Oxnard

Mayor Dr. Thomas E. Holden

City of Camarillo

Mayor Jan McDonald

City of Ventura

Mayor Carl E. Morehouse

City of Port Hueneme

Mayor Maricela P. Morales

Government Agencies

Federal

U.S. Fish & Wildlife Service
U.S. Army Corps of Engineers – Los Angeles District
National Resources Conservation Service
U.S. Environmental Protection Agency

State

Office of Planning and Research, State Clearinghouse
Air Resources Board
Department of Fish and Game, Region 5
California Coastal Commission

Regional

Southern California Association of Governments
South Coast AQMD
Southern California Regional Rail Authority
Amtrak
Metropolitan Water District

Ventura County

Agricultural Commissioner's Office
Ventura County Transportation Commission
County Clerk (Notice of Preparation only)
Planning Department
Ventura County APCD
Main Library
Watershed Protection District
El Rio Municipal Advisory Council
Ventura County LAFCO
South Coast Area Transit
Ventura County Cultural Heritage Board
Regional Water Quality Control Board
Public Works
Transportation Department
Environmental & Energy Resources

Local Jurisdictions

City of Oxnard

City Council
Traffic Engineering & Services
Water Division
Del Norte Regional Recycling and Transfer Station
City Manager

Wastewater Division
Building & Engineering Services
Environmental Resources
Fire Department
Police Department
City Clerk
Rio School District

City of Camarillo

Community Development Department

City of Ventura

Community Development Department

City of Port Hueneme

Community Development Department

Other Interested Parties

Southern California Edison Co.
The Gas Company
Adelphia
Verizon Communications
Hiji Investment Company
Ventura County Archaeological Society
Ventura County Bike Coalition
Farm Bureau of Ventura County

Native American Representatives

Santa Ynez Tribal Elders Council
Richard Angulo
Santa Ynez Band of Mission Indians
Charles Cooke
Beverly Salazar Folkes
Randy Guzman-Folkes
William Steven Miller
Patrick Tumamait
Owl Clan
Charles S. Parra
Julie Lynn Tumamait
Chief Mark Steven Vigil

Appendices

APPENDIX A

CEQA CHECKLIST

US 101/Del Norte Boulevard Interchange Improvement Project

Project Location

The project site is located in the County of Ventura (County), at the border of the County and City of Oxnard (City), at the Del Norte Boulevard interchange at United States Highway 101 (US 101). A project site location map is provided as Attachment 1. A map showing the City and County jurisdictional boundaries in the project vicinity is provided as Attachment 2.

Project Site

The project site consists of the US 101/Del Norte Boulevard interchange and an area of approximately 17.3 acres to the north of the interchange located within unincorporated Ventura County, in addition to an approximately 14.8-acre area south of the interchange located within the City. The portions of the project site located north and south of the interchange are predominantly active agricultural lands.

The existing Del Norte Boulevard interchange at US 101 is a diamond interchange. The overpass crossing currently provides two 11.8-foot (ft) wide lanes of traffic, a 4.3-ft wide shoulder in each direction, and a 5.6-ft wide sidewalk on the west side. Del Norte Boulevard is located to the south of US 101, and it terminates at the interchange. Del Norte Boulevard provides 4 lanes of traffic, 6.0-ft-wide shoulders, and a raised median. The interchange overpass crossing connects Del Norte Boulevard with Ventura Boulevard, which is located north of the interchange. Ventura Boulevard begins at a location approximately 69.0 ft from the beginning of the curb return to the existing interchange northbound on-ramp, curves north and then westerly, and parallels US 101 to the north. Ventura Boulevard is a 2-lane arterial road in the project area, and it provides access to US 101 from uses north of the freeway.

At a location approximately 33.0 ft from the beginning of the curb return of the southbound Del Norte Boulevard interchange on-ramp, Del Norte Boulevard connects with Camino Avenue, a collector street that serves as a frontage road paralleling the south side of US 101 to the east of the interchange. Camino Avenue provides access to a commercial/light manufacturing development called Camino Real Industrial Plaza, located just south of US 101, and east of the US 101-Del Norte Boulevard interchange.

To the north and south sides of US 101, there is a narrow strip of sloped, open land located between US 101 and the existing on- and off-ramps, and beneath the overpass. The slopes are landscaped with shrubbery and immature ornamental trees.

Del Norte Boulevard serves as a north/south connection, providing access to and from US 101, as well as connecting uses south of US 101 with uses north of US 101 via Ventura Boulevard.

Ventura Boulevard begins at the US 101/Del Norte Boulevard overpass, and it continues west providing access from US 101 to the Nyeland Acres neighborhood. US 101 is nominally a north-south highway on the United States Highway System that runs east-west through the project area and connects the County with Los Angeles County. US 101 is classified as an urban principal arterial freeway whose purpose is to provide international, interstate, interregional, and intraregional travel (i.e., commute and noncommute) and goods movement.

Adjacent Uses

The project site is located in a primarily agricultural area. Other land uses in the project area include a small neighborhood called Nyeland Acres, which is comprised of residential and commercial uses located to the northwest of the project site, and an industrial park called Camino Real Industrial Plaza, with commercial and light industrial development, located to the southeast of the project site.

Background, Purpose, and Need

This bridge replacement and interchange improvement project is designed to eliminate existing geometric deficiencies, improve traffic operations, and provide capacity for existing and projected traffic using the interchange. The configuration of the existing US 101/Del Norte Boulevard overpass has insufficient capacity for existing and forecasted traffic. Del Norte Boulevard south of the interchange has four lanes of traffic for through movements, but at the overpass, it has only two nonstandard width lanes. Long queues and delays occur at the US 101/ Del Norte Boulevard ramp intersections, which are controlled by stop signs. The situation is expected to worsen with future traffic growth. The US 101/Del Norte Boulevard interchange is the last of five interchanges located on US 101 within the City that the City plans to improve to accommodate future freeway widening and eliminate geometric deficiencies.

Project Description

Four alternatives have been proposed – a no build alternative and three build alternatives, which are proposed to meet the project purpose and need. The three build alternatives (Alternatives 2, 3 and 4) involve reconfiguration of the US 101/Del Norte Boulevard interchange northbound on-/off-ramps and adjoining collector streets (i.e., Ventura Boulevard and Camino Avenue), bridge/overpass replacement, and addition of auxiliary lanes and a noise abatement wall. These three alternatives would also provide the following safety enhancements:

- The existing nonstandard lanes on the Del Norte Boulevard overcrossing would be replaced to provide standard lane widths, shoulders, and bridge clear width.
- The Del Norte Boulevard overcrossing would be replaced to provide standard vertical clearance over the freeway.

- An auxiliary lane leading to the southbound off-ramp would be added.
- Standard corner sight distances would be provided at the off-ramps.
- Standard horizontal and vertical sight distances would be provided.
- Standard sidewalk and curb ramps would be provided on both sides of the overcrossing and approaches.
- The proposed overcrossing would provide standard Type 26 concrete barrier.
- The proposed improvements would accommodate the large truck wheel paths of a Surface Transportation Assistance Act (STAA) semi-trailer vehicle.
- Traffic signals would be provided at the Del Norte Boulevard/US 101 ramp intersections.
- Standard intersection spacing would be provided between the southbound ramp intersection and the Camino Avenue intersection.
- Driver visibility would be improved by providing street lighting at the freeway ramps, Del Norte Boulevard, and the overcrossing.

Project Alternatives

Four project alternatives have been identified. Alternative 1 (No Build) proposes no physical improvements to the interchange. Alternatives 2, 3 and 4 (Tight Diamond, Loop On-Ramp and Modified Loop On-Ramp, respectively) include the safety enhancements described above, in addition to reconfiguration of the interchange. Alternative 2 (Tight Diamond) proposes the reconstruction of the US 101/Del Norte Boulevard interchange, including replacement of the overcrossing, in a tight diamond configuration. Alternative 3 (Loop On-Ramp) proposes the reconfiguration and reconstruction of the US 101/Del Norte Boulevard interchange, including replacement of the overcrossing to the US 101 northbound direction in a loop on-ramp configuration. Alternative 4 (Modified Loop On-Ramp) proposes the same improvements as Alternative 3 to the Del Norte Boulevard and Camino Avenue southbound on- and off-ramps, and would include a northbound loop on-ramp as proposed in Alternative 3. However, in comparison to Alternative 3, Alternative 4 would eliminate the direct northbound on-ramp at the northwest quadrant of the interchange. Proposed site plans for Alternatives 2, 3 and 4, are provided as Attachments 3, 4 and 5, respectively.

<u>Alternative 1 (No Build)</u>

Alternative 1 would maintain the current configuration of the interchange. The existing overpass would remain as two lanes and would not accommodate the future traffic demand and freeway widening. In addition, the nonstandard features (i.e., lanes on the Del Norte Boulevard overcrossing, corner sight distances, horizontal and vertical sight distances, and sidewalk and

curb ramps) would not be corrected. The congestion currently experienced at this location would not be alleviated and would deteriorate with time. There are no construction or right-of-way (ROW) costs associated with this alternative.

Alternative 2 (Tight Diamond Build)

Alternative 2 would replace the existing overpass with one that would provide 5 lanes of traffic (two 12-ft through lanes in each direction and one 14-ft back-to-back left-turn lane), 8-ft shoulders (sufficient to accommodate a Class II bikeway), and 5-ft sidewalks on both sides of the bridge. Attachment 3 shows the site plan for Alternative 2. The on- and off-ramps in both directions of travel would be realigned to accommodate the proposed future freeway widening, improve sight distances, and facilitate truck movements. An auxiliary lane would be added leading to the southbound off-ramp. Camino Avenue, a local connector road to the south of US 101, would be realigned further south to provide the California Department of Transportation (Caltrans) standard 525-ft separation distance between the point of access control and the local street system. Ventura Boulevard, which is located north of the existing northbound on-ramp to US 101, would also be realigned slightly to the north. Additional ROW from predominately agricultural properties north of US 101 would be required to accommodate Alternative 3, in addition to some agricultural property south of US 101 and small ROW acquisition from a County-owned parcel north of US 101, and the Camino Real Industrial Plaza located south of US 101.

This alternative would generally satisfy the project purpose and need, but it would not accommodate the northbound on-ramp traffic volumes.

Alternative 3 (Loop On-Ramp Build)

Alternative 3 would provide the same improvements as Alternative 2 to the Del Norte Boulevard and Camino Avenue southbound on- and off-ramps, but it would add a northbound loop on-ramp. Attachment 4 shows the site plan for Alternative 3. The northbound on-ramp would be aligned slightly more to the south than proposed in Alternative 2. Accordingly, the Alternative 3 northbound on- and off-ramps and Ventura Boulevard would be realigned further to the north than proposed in Alternative 2. Camino Avenue would be realigned as proposed in Alternative 2. The same ROW areas south of US 101 proposed in Alternative 2 would be required to accommodate Alternative 3. In addition to the ROW acquisition needed to accommodate Alternative 2, additional ROW from within the County-owned parcel and agricultural properties north of US 101 would be required to accommodate Alternative 3.

Alternative 4 (Modified Loop On-Ramp Build)

Alternative 4 is the preferred alternative based on improved geometry and safety compared with Alternatives 2 and 3. Alternative 4 would provide the same improvements as Alternative 3 to the Del Norte Boulevard and Camino Avenue southbound on- and off-ramps, and would include a northbound loop on-ramp as proposed in Alternative 3. However, in comparison to Alternative 3, Alternative 4 would eliminate the direct northbound on-ramp at the northwest quadrant of the interchange. This alternative would also provide for an improved connection of Ventura Boulevard with Del Norte Boulevard by eliminating differential design speed along these contiguous routes, thereby improving safety at the intersection in comparison to Alternative 3. The northbound on-ramp is not required as the Level of Service (LOS) at the intersection without the ramp attains acceptable LOS for both the AM and PM peak hour traffic periods.

Similar to Alternative 3, the northbound on-ramp would be aligned slightly more to the south than proposed in Alternative 2. Accordingly and similar to Alternative 3, Ventura Boulevard and the northbound on- and off-ramps of Alternative 4 would be realigned further to the north than proposed in Alternative 2. Camino Avenue would be realigned as proposed in Alternatives 2 and 3. The same right-of-way areas south of US 101 proposed in Alternative 2 and 3 would be required to accommodate Alternative 4.

The site plan for Alternative 4 is provided in Attachment 5. In comparison to Alternative 3, less right-of-way of the agricultural properties north of US 101 would be required to accommodate Alternative 4, and additional right-of-way of the County-owned parcel located north of US 101 and south of Ventura Boulevard would be required to accommodate Alternative 4.

ENVIRONMENTAL SIGNIFICANCE CHECKLIST

The checklist that follows identifies physical, biological, social, and economic factors that might be affected by the proposed project. In many cases, background studies performed in connection with the projects indicate no impacts. A NO IMPACT answer in the last column reflects this determination. Where there is a need for clarifying discussion, the discussion is included in Section VI following the checklist. The words "significant" and "significance" used throughout the following checklist are related to CEQA, not NEPA, impacts.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
I. AESTHETICS – Would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☒	☐	☐
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐
II. AGRICULTURE RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☒	☐	☐	☐
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☒	☐	☐	☐
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?	☒	☐	☐	☐
III. AIR QUALITY – Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☒	☐	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☒	☐	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☒	☐	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES – Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☒	☐	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒
V. COMMUNITY RESOURCES – Would the project:				
a) Cause disruption of orderly planned development?	☐	☐	☐	☒
b) Be inconsistent with a Coastal Zone Management Plan?	☐	☐	☐	☒
c) Affect lifestyles or neighborhood character or stability?	☐	☐	☒	☐
d) Physically divide an established community?	☐	☐	☐	☒
e) Affect minority, low-income, elderly, disabled, transit-dependent, or other specific interest group?	☐	☒	☐	☐
f) Affect employment, industry, or commerce, or require the displacement of businesses or farms?	☐	☒	☐	☐
g) Affect property values or the local tax base?	☐	☐	☒	☐
h) Affect any community facilities (including medical, educational, scientific, or religious institutions, ceremonial sites, or sacred shrines)?	☐	☐	☒	☐
i) Result in alterations to waterborne, rail, or air traffic?	☐	☐	☐	☒
j) Support large commercial or residential development?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
k) Affect wild or scenic rivers or natural landmarks?	☐	☐	☐	☒
l) Result in substantial impacts associated with construction activities (e.g., noise, dust, temporary drainage, traffic detours, and temporary access, etc.)?	☐	☒	☐	☐
VI. CULTURAL RESOURCES – Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐
VII. GEOLOGY AND SOILS – Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☒	☐

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
VIII. HAZARDS AND HAZARDOUS MATERIALS – Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☒	☐	☐
h) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☒
IX. HYDROLOGY AND WATER QUALITY – Would the project:				
a) Violate any water quality standards or waste discharge requirements?	☐	☒	☐	☐
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒	☐

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	☒	☐
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	☒	☐
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐
f) Otherwise substantially degrade water quality?	☐	☒	☐	☐
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☒	☐
i) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☒	☐
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒
X. LAND USE AND PLANNING – Would the project:				
a) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☒	☐	☐	☐
b) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒
XI. MINERAL RESOURCES – Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	☒
XII. NOISE – Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☒	☐	☐	☐

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☒	☐	☐
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
XIII. POPULATION AND HOUSING – Would the project:				
a) Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
XIV. PUBLIC SERVICES – Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?	☐	☐	☐	☒
Police protection?	☐	☐	☐	☒
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other public facilities?	☐	☐	☒	☐

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
XV. RECREATION –				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒
XVI. TRANSPORTATION/TRAFFIC – Would the project:				
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	☐	☐	☒	☐
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	☐	☐	☒	☐
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
e) Result in inadequate emergency access?	☐	☐	☒	☐
f) Result in inadequate parking capacity?	☐	☐	☒	☐
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	☐	☐	☐	☒
XVII. UTILITIES AND SERVICE SYSTEMS – Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒
XVIII. MANDATORY FINDINGS OF SIGNIFICANCE –				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☒	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☒	☐	☐	☐

DISCUSSION OF CEQA CHECKLIST RESPONSES

I. AESTHETICS

Would the project:

a) Have a substantial adverse effect on a scenic vista?

Less than significant impact. There are no identified scenic vistas within the project area according to both the Ventura County General Plan Resource Appendix and the Open Space/Conservation Element of the City of Oxnard General Plan. There are scenic views of distant hills to the north and east of the project site. These views would not be degraded by the proposed project. There are no views of the ocean from the project site. The proposed project would not adversely affect a scenic vista.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic building within a state scenic highway?

Less than significant impact with mitigation incorporated. The project site is not designated as part of the State or County Scenic Highway System. All of US 101 within the City of Oxnard's Sphere of Influence has been designated as a County-eligible scenic highway according to both the County and City General Plans. The Ventura County General Plan Resource Appendix notes that whenever designated scenic routes are constructed or improved, design standards taken from the State publication, *The Scenic Route*, must be incorporated into project design.

The proposed build alternatives may require the removal of up to approximately 30 large eucalyptus trees located along the south side of US 101, east and west of Del Norte Boulevard. These trees are located within the City limits, inside Caltrans ROW. Based on the nonlinear distribution of these trees and review of historic aerial photos, these eucalyptus trees do not represent a historic windrow (EDR, 2005a). The proposed project may also require the removal of some immature ornamental oak trees located in the shoulder area northeast of the interchange within unincorporated Ventura County. These ornamental oaks were planted recently and do not meet the girth standard of 9.5 inches for protection under the Ventura County Non-Coastal Zoning Ordinance.

The City of Oxnard Landscape Standards, adopted by Resolution 9301, recognizes mature trees as significant visual resources and regulates the removal and planting of trees within City limits. According to the City of Oxnard Landscape Standards, Section 4, Preservation of Existing Trees, trees in a healthy condition shall be protected and preserved, and removal of trees with a height of 6 ft or more shall not be removed unless authorized in writing by the City of Oxnard Parks and Recreation Department or City Council. An Arborist's Tree Report is required by the City to determine the health and economic appraised value of existing trees to be removed or displaced by a proposed project. The City requires that the appraised economic value, as determined by the Arborist's Tree Report, be restored in the form of new tree sizes for the project, in addition to meeting the City's minimum tree size of a 24-inch box.

Therefore, in the event that the proposed project would remove one or more trees with a height of 6 ft or more, an Arborist's Tree Report must be prepared by a certified arborist approved by the City. Based on the appraised value, mitigation measures would be determined that would reduce the visual impact from the removal of these trees. In addition, appropriate plant landscaping in keeping with City and County landscape standards would be incorporated to mitigate for the loss of existing landscaped areas within both the City and County.

Incorporation of "The Scenic Route" design guidelines into project design and compliance with City and County landscape standards would minimize aesthetic impacts resulting from the proposed project. To mitigate the loss of mature trees resulting from the proposed project, the City would prepare an Arborist's Tree Report to submit to the City of Oxnard Parks and Recreation Department or City Council. Authorization by the City of Oxnard Parks and Recreation Department or City Council would be obtained before removal of any mature tree. Incorporation of this mitigation would mitigate impacts resulting from the loss of mature trees to a less than significant impact. With incorporation of this mitigation, the proposed project would not significantly impact scenic resources within a scenic highway.

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

Less than significant impact. The proposed project involves the reconfiguration of an existing freeway interchange, and it would not substantially alter or degrade the visual character or quality of the project site and surroundings. Furthermore, proposed project design and construction management practices would adhere to design standards taken from the State publication *The Scenic Route* and direction of the City of Oxnard Parks and Recreation Department or City Council regarding removal of mature trees. Therefore, the proposed project would not result in significant impacts to the visual character or quality of the existing project site and surroundings.

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

Less than significant impact. The proposed project would upgrade the existing US 101/Del Norte Boulevard interchange, which is already subject to light and glare. Enhanced roadway lighting would be required, thus increasing nighttime lighting in the area. The increase in nighttime lighting would not be substantial enough to affect homes northwest of the project area in the Nyeland Acres community, or any other uses in the project vicinity. Furthermore, light and glare would be managed through appropriate design and construction standards. No significant light or glare impacts would result from the proposed project.

II. AGRICULTURE RESOURCES

Would the project:

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

Potentially significant impact. The proposed project would result in the conversion of Farmland of Statewide Importance to transportation infrastructure use. Proposed Build Alternative 2 would result in the acquisition of approximately 253,955 square feet (sq ft) (approximately 5.8 acres) of farmland, including 181,646 sq ft (approximately 4.1 acres) of farmland south of US 101 and approximately 74,052 sq ft (approximately 1.7 acres) of farmland north of US 101. Proposed Build Alternative 3 would result in the acquisition of approximately 591,547 sq ft (approximately 13.6 acres) of farmland, including 209,088 sq ft (approximately 4.8 acres) of farmland south of US 101 and approximately 378,974 sq ft (approximately 8.7 acres) of farmland north of US 101. Proposed Build Alternative 4 would result in the acquisition of approximately 579,350 sq ft (approximately 13.3 acres) of farmland, including 209,088 sq ft (approximately 4.8 acres) of farmland south of US 101 and approximately 371,132 sq ft (approximately 8.5 acres) of farmland north of US 101. All of the farmland that would be acquired is identified as Farmland of Statewide Importance by the California Department of Conservation Farmland Mapping and Monitoring Program (FMMP). Therefore, potentially significant impacts to farmland would result from the proposed project, and they must be further analyzed in the EA/EIR.

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

Potentially significant impact. The proposed project would not impact any land under a Williamson Act contract, or other farmland conservation or security zone contract.

The farmland located south of US 101 that would be acquired to accommodate the proposed project is located within the City, and it is designated *Business and Research Park* and zoned *Business and Research Park (BRP*) (City of Oxnard, 2004a). This farmland and adjacent areas are planned for development into a business park as part of the City of Oxnard Draft Sakioka Farms Specific Plan (City of Oxnard, 2004b). Acquisition of this land to support the proposed project would not be in conflict with agricultural land use and zoning designations. However, proposed acquisition of agricultural land north of US 101 (up to approximately 8.7 acres) may constitute a significant impact because this land is protected for agricultural use. The farmland located north of US 101 is designated *Agricultural (40-acre minimum)* and zoned *Agricultural Exclusive (AE)* by the County. This land is also designated as part of the Oxnard/Camarillo/ Ventura Greenbelt (Ventura County, 2004). The Oxnard/Camarillo/Ventura Greenbelt is intended to protect open space and agricultural lands, and to reassure property owners located within these areas that lands will not be converted to agriculturally incompatible uses.

The City will prepare a Farmland Conversion Impact Study to estimate property acquisition and loss of farmland impacts, and applicable mitigation. An amendment to the Ventura County General Plan Amendment (GPA) may be required as a result of the proposed conversion of designated agricultural land to transportation use. The project may conflict with Ventura County

General Plan goals and policies to preserve agricultural land, and approval by the County Board of Supervisors and Local Agency Formation Commission (LAFCO) may be necessary to grant the City permission to acquire land for purposes of the proposed project. It may be necessary to obtain a General Plan Determination of Consistency from the County Planning Division. Inconsistency of the proposed project with existing agricultural land use and zoning designations, and the need for a GPA, will be analyzed in the EA/EIR for the proposed project.

c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?

Potentially significant impact. Acquisition of farmland to accommodate the proposed project could impact the viability of remaining or adjacent agricultural properties. A Farmland Conversion Impact Study is anticipated to be necessary to estimate property acquisition costs, loss of farmland impacts, and mitigation. This potential impact will be analyzed in the EA/EIR for the proposed project.

III. AIR QUALITY

Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan?

Less than significant impact. In accordance with the Ventura County General Plan and the Ventura County Administrative Supplement to the CEQA Guidelines, all County agencies, departments, and special districts are instructed to utilize the Air Quality Assessment Guidelines as adopted and periodically updated by the Ventura County Air Pollution Control District (VCAPCD).

VCAPCD prepared the 1991 Air Quality Management Plan (AQMP) in response to the California Clean Air Act (CCAA). The 1991 Plan elaborated on information contained in the 1982 and 1987 AQMPs. It also included new and modified control measures designed to move Ventura County further toward achieving state clean air standards. VCAPCD updated the AQMP in 1994 and has adopted a series of revisions to the 1994 AQMP to meet the California Ambient Air Quality Standards (CAAQS) and National Ambient Air Quality Standards (NAAQS).

The most recent AQMP revision is the *2004 AQMP Revisions*, which was adopted on April 13, 2004. The 1994 AQMP (together with the 1995, 1997, and 2004 AQMP Revisions) is the current AQMP for Ventura County. The current AQMP will be revised in 2007 to update emissions forecasts and incorporate air quality modeling and any needed control measures to achieve attainment with the new federal 8-hour ozone standard.

Since the proposed project involves reconfiguration of an existing freeway interchange and would not have growth-inducing effects, the proposed project would not result in an increase in vehicle miles traveled (VMT) and the associated pollutant emissions within the South Central Coast Air Basin (SCCAB). Furthermore, operation of the proposed project is intended to improve traffic operations; therefore, it is not expected to conflict with the VCAPCD AQMP or any other air quality management plan. It is unlikely that construction of the proposed project

would create pollutant emissions that would conflict with the VCAPCD AQMP; however, this will be analyzed further in the EA/EIR for the proposed project.

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Less than significant impact with mitigation. Since the proposed project involves reconfiguration of an existing freeway interchange and would not have growth-inducing effects, the proposed project would not result in an increase in VMT and the associated pollutant emissions. Therefore, operation of the proposed project is not anticipated to substantially contribute to an existing or projected air quality violation.

Construction of the proposed project would temporarily increase pollutant emissions; however, this increase would be temporary, and it is not anticipated to result in an exceedance of the state or federal air quality standard. Furthermore, implementation of mitigation measures would reduce impacts to a less than significant level. Analysis of construction emissions will be conducted as part of the EA/EIR for the proposed project to determine impacts and applicable mitigation measures in compliance with the VCAPCD *Ventura County Air Quality Assessment Guidelines*.

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

Less than significant impact with mitigation. *See responses III.a and III.b.*

Ventura County is an ozone nonattainment area, and according to the VCAPCD *Ventura County Air Quality Assessment Guidelines,* projects producing oxides of nitrogen (NO_x) and reactive organic compound (ROC) emissions of 25 pounds per day or more, would be required to adopt mitigation measures (VCAPCD, 2003).

Analysis of construction emissions will be conducted as part of the EA/EIR for the proposed project to determine if the proposed project would result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment and identify applicable mitigation measures in compliance with the VCAPCD *Ventura County Air Quality Assessment Guidelines*.

d) Expose sensitive receptors to substantial pollutant concentrations?

Less than significant impact with mitigation. *See response III.b.*

Sensitive receptors in the project area include residents of the Nyeland Acres community (located approximately 0.125-mile northwest of the project alignment), and patrons of two churches, one located in Nyeland Acres and one located in the Camino Real Industrial Plaza (located approximately 0.125-mile southeast of the project alignment). Operation of the proposed project is not anticipated to increase pollutants; therefore, it would not expose sensitive receptors to substantial pollutant concentrations.

Analysis of construction emissions will be conducted as part of the EA/EIR for the proposed project to identify potential impacts to sensitive receptors and applicable mitigation measures in compliance with the VCAPCD *Ventura County Air Quality Assessment Guidelines*.

e) Create objectionable odors affecting a substantial number of people?

Less than significant impact. Uses that are typically a source of odor complaints (i.e., agriculture uses, food processing and chemical plants, composting refineries, landfills, and other uses) are not part of this project. Operation of the proposed project would not introduce objectionable odors. During project construction, activities such as paving may entail the application of asphalt, which may produce discernible odors typical of most construction sites. It is unlikely that such odors would reach residents of the Nyeland Acres community or patrons of nearby churches, given the distance between the project site and these uses. Even so, such odors would be a temporary source of nuisance because construction is temporary and intermittent in nature, and such odors would not be considered a significant environmental impact.

IV. BIOLOGICAL RESOURCES

Would the project:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Less than significant with mitigation incorporated. The project could have potentially significant impacts on species listed by the California Department of Fish and Game (CDFG) or the United States Fish and Wildlife Service (USFWS). A search of existing records kept by the California Natural Diversity Data Base (CNDDB) (CDFG, 2005; United States Geological Survey quadrangles Camarillo and Oxnard) identified 13 special-status wildlife species and 10 special-status plant species with the potential to occur in the project area. A site reconnaissance survey by a qualified biologist confirmed that none of the plant communities listed in the CNDDB is present at the project site (Parsons, 2005a). Preliminary site surveys identified invasive alien plant species, which would require best management practices (BMPs) to prevent their spreading during construction. The biological survey confirmed that the potential for the occurrence of special-status plant and animal species at the project site is low, with the exception of the burrowing owl. The biological survey identified neither live burrowing owls nor evidence of recent, prior occupation at the project site or in the immediate project vicinity (Parsons, 2005a). However, sloped banks of a large drainage ditch located southeast of the interchange afford general habitat features suitable for burrowing owls. A preconstruction burrowing owl survey is required mitigation to ensure that impacts to any burrowing owls resulting from the proposed project would be avoided.

US 101/Del Norte Boulevard Interchange Project: List of Species to be Evaluated

Type	Scientific Name	Common Name	Federal, State, or Other Status	CNPS
Plant Community	NA	Southern Coast Live Oak Riparian Forest	NA	NA
	NA	Southern Coastal Salt Marsh	NA	NA
	NA	Southern Riparian Scrub	NA	NA
	NA	Southern Sycamore Alder Riparian Woodland	NA	NA
	NA	Coastal and Valley Freshwater Marsh	NA	NA
Plant	*Astragalus pycnostachyus var. lanosissimus*	Ventura Marsh milk-vetch	FE, SE	1B
	Calochortus plummerae	Plummer's mariposa lily	NA	1B
	Cordylanthus maritimus ssp. maritimus	salt marsh bird's-beak	FE, SE	1B
	Delphinium parryi ssp. blochmaniae	dune larkspur	NA	1B
	Dudleya blochmaniae ssp. blochmaniae	Blochman's dudleya	NA	1B
	Dudleya verityi	Verity's dudleya	FT	1B
	Eriogonum crocatum	Conejo buckwheat	State Rare	1B
	Lasthenia glabrata ssp. coulteri	Coulter's goldfields	1B	NA
	Senecio aphanactis	rayless ragwort	2	NA
	Texosporium sancti-jacobi	woven-spored lichen	NA	NA
Reptile	*Emys (=Clemmys) marmorata pallida*	Southwestern pond turtle	CSC	NA
	Phrynosoma coronatum (blainvillei)	Coast (San Diego) horned lizard	CSC	NA
Bird	*Athene cunicularia*	burrowing owl	CSC	NA
	Coccyzus americanus occidentalis	western yellow-billed cuckoo	SE	NA
	Eremophila alpestris actia	California horned lark	CSC	NA
	Passerculus sandwichensis beldingi	Belding's savannah sparrow	SE	NA
	Riparia riparia	bank swallow	ST	NA
	Sterna antillarum browni	California least tern	FE, SE	NA
	Vireo bellii pusillus	least Bell's vireo	FE, SE	NA
Insect	*Cicindela hirticollis gravida*	sandy beach tiger beetle	NA	NA
	Danaus plexippus	monarch butterfly	NA	NA
Fish	*Eucyclogobius newberryi*	tidewater goby	FE, CSC	NA
	Gila orcutti	arroyo chub	CSC	NA

FE	*Federally listed as endangered.*
FT	*Federally Threatened.*
SE	*State listed as endangered.*
ST	*State listed as threatened.*
CSC	*California Special Concern species designated by CDFG that recognizes species with declining population levels, limited ranges, and/or continuing threats that make them vulnerable to extinction.*
State Rare	*Listed as rare under the Native Plant Protection Act.*
CNPS List 1B	*Plants rare, threatened, or endangered in California and elsewhere.*
CNPS List 2	*Plants rare, threatened, or endangered in California, but more common elsewhere.*
NA	*Not applicable.*
	Source: (CNDDB, 2005 and CNPS, 2005)

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

No impact. The drainage ditch at the site does not provide riparian habitat. There are no riparian habitats or other sensitive natural communities in the project area.

c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

No impact. The project site is not part of a federally designated wetland, and it is not designated as a sensitive environment by the City or County (City of Oxnard, 2004a; Smith, 2005).

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Less than significant impact with mitigation. A biological reconnaissance survey of the project site located an active red-tailed hawk's (*Buteo jamaicensis*) nest in a eucalyptus tree in the southwestern quarter of the interchange. Destruction of active raptor nests, or eggs not yet hatched therein, would contravene provisions of the Migratory Bird Treaty Act of 1918, and parallel safeguards established under §3503 of the California Fish and Game Code. To avoid impacts to migratory birds in compliance with the aforementioned regulations, construction activities that would destroy the active nest or disrupt reproduction of red-tailed hawks must be undertaken outside the nesting season, which includes courtship through fledging. Potentially significant impacts to these species caused by proposed project demolition and construction can be addressed through avoidance mitigation, a monitoring program, or other mitigation; and they will be further evaluated in the EA/EIR prepared for the proposed project.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

No impact. The proposed build alternatives may require the removal of up to approximately 30 large eucalyptus trees located along the south side of US 101, east and west of Del Norte Boulevard. These trees are located within the City limits, inside Caltrans ROW. Based on the nonlinear distribution of these trees and review of historic aerial photos, these eucalyptus trees do not represent a historic windrow (EDR, 2005a). The proposed project may also require the removal of some immature ornamental oak trees located in the shoulder area northeast of the interchange within unincorporated Ventura County. These ornamental oaks were planted recently and do not meet the girth standard of 9.5 inches for protection under the Ventura County Non-Coastal Zoning Ordinance.

The proposed project would not remove or damage a historic windrow or any special-status trees. The project site does not contain any biological resources subject to a local ordinance or policy. Therefore, there would be no related impacts.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No impact. There is no habitat conservation plan or natural community conservation plan in place for the project area; therefore, there would be no related impacts (City of Oxnard, 2004a; Smith, 2005).

V. COMMUNITY RESOURCES

Would the project:

a) Cause disruption of orderly planned development?

No Impact. All agricultural land within City limits and south of US 101 is designated for urban development, including the land currently in agricultural use within the project alternative footprints. The City of Oxnard 2020 General Plan designates these properties for *Business and Research Park* and *Light Industrial* use. Two major development plans for this area are proposed at this time: (1) the Sakioka Farms Specific Plan and (2) the Camino Real Business Park (Power Machinery) Specific Plan. The Sakioka Farms Specific Plan proposes 300 acres of industrial uses and 100 acres of business and research uses between Rice Avenue and Del Norte Boulevard, south of the Del Norte Boulevard interchange. The Camino Real Business Park Specific Plan proposes 40 acres of similar uses for the area east of Del Norte Boulevard and south of US 101. Both specific plans are currently undergoing environmental review prior to being considered for adoption. The proposed project would not disrupt any of this planned development and would, in fact, better accommodate the traffic flow associated with it.

The project area located north of US 101 is predominately unincorporated Ventura County, and it includes active agriculture and a cohesive, mixed residential/commercial neighborhood called Nyeland Acres. There is no major development proposed in Nyeland Acres or the surrounding agricultural land (Smith, 2005). The majority of land in this area is agricultural, and it is protected under County land use and zoning designations, the Oxnard-Camarillo Greenbelt, and it is subject to the Save Open Space and Agricultural Resources (SOAR) Ordinance that requires a public vote for any future urban uses.

Therefore, the proposed project would not disrupt or cause any changes to an existing community plan, specific plan, or other planned development.

b) Be inconsistent with a Coastal Zone Management Plan?

No impact. The project area is not located in a coastal zone.

c) Affect lifestyles or neighborhood character or stability?

Less than significant impact. The proposed project is expected to benefit the project area with reduced traffic congestion, reduced traffic delay, and improved mobility. Access to and from US 101 and to uses south of US 101 would improve for Nyeland Acres community members as a result of the proposed project. Temporary circulation and access impacts may result during the

construction phase of the proposed project; however, these impacts (discussed in Section XVI Transportation/Traffic) would not substantially affect lifestyles or neighborhood character and stability. The proposed project is not expected to introduce substantial changes in noise levels or air quality (discussed in Sections III and VI, respectively) that would affect the Nyeland Acres neighborhood character. The proposed project would not result in significant impacts to lifestyles or neighborhood character and stability.

d) Physically divide an established community?

No Impact. The proposed project involves reconfiguration of an existing freeway interchange, and it would not divide an established community.

e) Affect minority, low-income, elderly, disabled, transit-dependent, or other specific interest group?

Less than significant impact with mitigation. The Nyeland Acres community contains two mobile home communities, which are often home to elderly, disabled, and low-income people. Furthermore, a cursory review of census tracts in the project area suggests that the project area has minority and low-income residents. For these reasons, potential environmental justice impacts to a low-income or minority population that could result from the proposed project will be analyzed in a Community Impact Analysis and in the EA/EIR for the proposed project. It is likely that such impacts would be confined to project construction-related noise and air quality, for which adequate mitigation would be available.

f) Affect employment, industry, or commerce, or require the displacement of businesses or farms?

Less than significant impact with mitigation. No businesses would be displaced by the proposed project. The proposed project would involve acquisition of active farmland, which has the potential to affect farms. A Farmland Conversion Impact Study will be necessary to estimate property acquisition and loss of farmland impacts, and applicable mitigation. Economic impacts resulting from the displacement of farmland will be analyzed in the EA/EIR for the proposed project. Due to the amount of land to be acquired and the size of the affected agricultural properties, it is unlikely that the land acquisition needed to support the proposed project would result in the displacement of a farm or entire agricultural parcel. Implementation of mitigation identified from the Farmland Conversion Impact Study is anticipated to reduce related impacts to a less than significant level.

An approximate 0.1 acre ROW acquisition of the Camino Real Industrial Plaza is anticipated to accommodate the proposed realignment of Camino Avenue proposed as part of Alternatives 2, 3, and 4, respectively. This ROW acquisition would occur at the northwest corner of the property, at the location of a parking lot serving the current business. This acquisition may require as mitigation the provision of additional property for parking or the slight realignment of existing driveway and parking facilities, the impacts of which will be analyzed in the EA/EIR for the proposed project. These impacts are not anticipated to significantly affect the business operating at the subject property, or any adjacent businesses.

In addition a slight ROW acquisition of up to approximately 0.1 acre may be required along the perimeter of a County-owned parcel located in between the US 101 and Ventura Boulevard, immediately adjacent and northwest of the US 101. This ROW acquisition would be minor, and would not displace any operations at the property or otherwise significantly affect operations on the property. Significant impacts are not anticipated from acquisition of this property.

g) Affect property values or the local tax base?

Less than significant impact. Any taking of agricultural property would result in a diminution of the existing tax base. It is unlikely that the proposed project would significantly affect the local tax base given the size of the agricultural property that would be acquired to accommodate the proposed project; however, a Farmland Conversion Impact Study will be prepared to estimate property acquisition impacts. Substantial impacts to property values would not occur.

h) Affect any community facilities (including medical, educational, scientific, or religious institutions, ceremonial sites, or sacred shrines)?

Less than significant impact. Four places of worship are located in the project area. The Nyland Acres Community Church, Channel Islands Bible College and a Jehovah's Witnesses hall are located centrally in Nyeland Acres, approximately 0.75-mile west of the project site. The Gold Coast Church is located off Camino Avenue in the Camino Real Industrial Plaza, approximately 0.125-mile southeast of the project site. Significant impacts to these churches are not anticipated; however, such impacts will be evaluated in the EA/EIR for the proposed project.

i) Result in alterations to waterborne, rail, or air traffic?

No impact. The proposed project would not alter waterborne or air traffic.

j) Support large commercial or residential development?

No impact. The proposed project is intended to provide capacity for existing and projected traffic with consideration of proposed urban development in the project area, namely within the City. The proposed project is not part of a large commercial or residential development, nor would it impede any such future development.

k) Affect wild or scenic rivers or natural landmarks?

No impact. There are no wild or scenic rivers currently designated in the project area according to the National Wild and Scenic Rivers online database (http://www.nps.gov/rivers/wildriverslist.html#ca).

l) Result in substantial impacts associated with construction activities (e.g., noise, dust, temporary drainage, traffic detours, and temporary access, etc.)?

Less than significant with mitigation incorporated. Construction of future projects would result in localized disruptions to surrounding communities and commuters during the construction period. These impacts would be typical for roadway improvement projects, and all

necessary mitigation measures would be implemented to reduce these construction impacts to the level of less than significant.

VI. CULTURAL RESOURCES

Would the project:

a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5.

No Impact. A review of the following lists revealed that no previously identified historic resources are located within the project footprint or project vicinity: National Register of Historic Places (National Register, 2005), California Register of Historical Resources (California Register, 2005), California Points of Historical Interest (2005), California Historical Landmarks (2005) and the California Historic Resources Inventory (CHRIS, December 22, 2005) (Parsons, 2006a). Furthermore, no local resources identified as historic by the City or County are located within the project footprint or vicinity (Hocking, 2006). The US 101/Del Norte Boulevard overpass is not listed on the Caltrans Historic Bridge Inventory. A records search with the South Central Coastal Information Center of the California Historic Resources Information System (SCCIC) within a 1-mile radius from the project site revealed that 11 previous built environment evaluations have been made for National Register eligibility within a 1-mile radius of the proposed project. None of those previous evaluations identified project properties that were historically significant. A field survey of the project site and surrounding properties conducted by a Senior Architectural Historian revealed no significant historic resources (Parsons, 2006b). Therefore, the proposed project would not cause a substantial adverse change to a historic resource.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5.

Less than significant impact with mitigation incorporated: A qualified archaeologist conducted a pedestrian survey of the project footprint (excluding the actual paved US 101 Highway and other roads) and an approximate 10- to 20-ft buffer surrounding the project footprint. No archaeological resources were identified or recorded as a result of the pedestrian cultural resources survey (Parsons, 2005b).

No previously recorded archaeological resources were identified as a result of records searches conducted by SCCIC in March 2005 and April 2006. A records search with SCCIC, located at California State University, Fullerton, was conducted to identify all previously conducted archaeological resource studies and all previously recorded archaeological resources within a 0.5-mile area of the project site. The records search revealed that 32 previously conducted archaeological surveys have been completed within 1-mile of the project site. Eight of these archaeological surveys covered the project site. The records search revealed the presence of one prehistoric archaeological site (recorded as site CA-Ven-13) within a 1-mile radius of the project site. This site consists of one primary flake and a large cobble of cryptocrystalline material. Also identified in close proximity to these resources were shell fragments of chiton. This site was recorded in 1965 as ephemeral, and it has not been subjected to further study to determine the extent or condition. Although the site has not been evaluated for National Register eligibility, it

is outside of the project footprint and vicinity, and it would not be affected or impacted by the proposed project.

Additionally, a records search of the Native American Heritage Commission (NAHC) sacred land files failed to indicate the presence of known Native American cultural resources in the immediate project area. As part of that correspondence, NAHC provided a list of Native American contacts that may have knowledge of potential cultural resources related to Native American culture in the project area. On January 29, 2006, letters were sent via U.S. mail regarding the proposed project to each Native American contact in the list provided by the NAHC. No additional information to indicate the presence of archaeological resources in the project area was received through correspondence with the Native American contacts.

A review of historic United States Geological Survey (USGS) topographic maps of the project site and surrounding area for the years 1904, 1947, 1949-1967, 1951, and 1950-1967 (EDR, 2005b) and review of historic aerial photographs of the project site and surrounding area for the years 1938, 1945, 1959, 1964, 1977, 1989, 1994, and 2002 (EDR, 2005a) reveal that the project site and vicinity has undergone considerable ground disturbance over the past 60 years from both agricultural and urban infrastructure uses. Previous ground disturbance at the project site indicates a low to very low likelihood of intact subsurface archaeological resources present at the site. Furthermore, the project area is located along the Santa Clara River drainage, a region that has undergone significant erosion due to the Santa Clara River. The erosion and agricultural practices within the project area indicate a low probability of archaeological resources present within the project area.

In the unlikely event that buried archaeological materials are encountered during project construction, work would be stopped in the area of the find until a qualified archaeologist can evaluate the nature and significance of the find. Implementation of this mitigation measure would reduce any potential impacts to archaeological resources to a less than significant level.

c) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature.

Less than significant with mitigation incorporated. The project site lies within the Oxnard Plain of the Transverse Ranges Physiographic and Geomorphic Province. A wide variety of paleontological resources are known to exist in the south half of the County (Ventura County, 2005a). The diverse geology of the Transverse Ranges encompasses many different kinds of fossil organisms. A records search conducted at the SCCIC of the California Historical Resources Information System located at California State University, Fullerton, revealed no paleontological sites within a 1-mile radius of the project site.

However, paleontological resources could be disturbed by project construction earth-moving activities. In the unlikely event that buried paleontological resources are encountered during project construction, work would be stopped in the area of the find until a qualified paleontologist can evaluate the nature and significance of the find. Implementation of this mitigation measure would reduce any potential impacts to paleontological resources to a less than significant level.

d) Disturb any human remains, including those interred outside of formal cemeteries.

Less than significant impact with mitigation incorporated. There are no known human remains or burial grounds at or near the project site. A record search of the NAHC sacred land files failed to indicate the presence of known Native American cultural resources or human remains in the immediate project area. The probability of encountering human remains during project construction is low.

In the unlikely event of the discovery of human remains during project construction, work in the vicinity of the discovery would be halted in the area of concern and the Ventura County Coroner would be obtained to determine the nature of the remains (e.g., recent, historic, or prehistoric), and appropriate consultation and recommendations for treatment. The County Coroner will notify the NAHC if the remains are of Native American origin. The County Coroner, Native American group representatives, and a qualified archaeologist obtained by the City and Caltrans would determine the proper handling and necessary removal and reburial activities in compliance with CEQA Guidelines 15064.5(d) and the California Health and Safety Code 7050.5. Incorporation of this mitigation measure would result in less than significant impacts to human remains.

VII. GEOLOGY AND SOILS

Would the project:

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

No impact. The project site is not located within the boundaries of an Alquist-Priolo Earthquake Fault Zone (Hart and Bryant, 1999), and no evidence of active faulting was observed during a preliminary investigation of the subject site conducted by Diaz Yourman & Associates in support of a Preliminary Foundation Report for the proposed project. The Preliminary Foundation Report concluded that an additional field investigation to locate active fault traces was not deemed necessary for the project site. The proposed project would not expose people or structures to risks involving rupture of an earthquake fault.

ii) Strong seismic ground shaking?

Less than significant impact. The project site is located in a seismically active area of southern California that is likely to be subjected to moderate to severe ground shaking (Diaz Yourman & Associates, 2006). Published earthquake fault zone maps pertaining to the project area indicate that the project site is located approximately 0.43-mile south of the Simi-Santa Rosa - Northridge Hills Fault. This fault is officially classified by the State of California as active, meaning that surface rupture has occurred along these faults within about the last 11,000 years (Hart and Bryant, 1999). A listing of historical earthquakes published by the National Earthquake Information Center (2004) indicates that the largest earthquake occurring within a radius of approximately 62 miles of the project site was a 7.7 magnitude, 1952 earthquake located

approximately 52 miles to the northeast. More recently, the Magnitude 6.8 Northridge Earthquake in 1994 occurred approximately 33 miles southeast of the site.

The proposed project involves reconfiguration of an existing freeway interchange that would incorporate seismic design requirements identified in a geotechnical study prepared for the proposed project. The proposed project would improve the existing freeway overcrossing, and it would not increase the risk from strong seismic ground shaking.

iii) Seismic-related ground failure, including liquefaction?

Less than significant impact. The project site is located within the potential liquefaction zone on the State of California Geological Survey seismic hazard zone map (Diaz Yourman & Associates, 2006). The Preliminary Foundation Report prepared for the proposed project found that the upper approximately 59 ft (excluding the top 5 ft) of soil at the project site are susceptible to liquefaction during an earthquake.

The proposed project involves reconfiguration of an existing freeway interchange that would incorporate seismic design requirements specific to the liquefaction potential identified in a geotechnical study prepared for the proposed project. The proposed project would improve the existing freeway overcrossing, and it would not increase the risk from liquefaction at the project site. Therefore, there would be no significant impacts resulting from liquefaction.

iv) Landslides?

No impact. The project site is not within an earthquake-induced landslide zone (Diaz Yourman & Associates, 2006). The proposed project would not result in an increased risk from landslides.

b) Result in substantial soil erosion or the loss of topsoil?

Less than significant impact. Construction of the proposed project would result in ground surface disruption during excavation, grading, and trenching that would create the potential for soil erosion. The size of the proposed project is greater than 1-acre; therefore, the City would prepare and comply with a Storm Water Pollution Prevention Plan (SWPPP) and a National Pollutant Discharge Elimination System (NPDES) permit, which would include erosion control measures to mitigate the loss of topsoil.

The proposed project involves reconfiguration of an existing freeway interchange, and it would not result in a substantial loss of topsoil. Compliance with the aforementioned plan and associated erosion control measures permit regulations would minimize impacts related to soil erosion to less than significant.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

Less than significant impact. The proposed project involves reconfiguration of an existing freeway interchange that would incorporate seismic design requirements specific to the liquefaction and lateral spreading potential identified in a geotechnical study prepared for the

proposed project. The project site is not in an area subject to risk of landslide, subsidence, or collapse (Diaz Yourman & Associates, 2006). Lateral loads have been calculated for the proposed overpass and interchange, and project construction would be designed to resist lateral earth pressures and avoid lateral spreading, subsidence, and collapse. The project site is not within an earthquake-induced landslide zone (Diaz Yourman & Associates, 2006). The proposed project would improve the existing freeway overcrossing, and it would not increase the risk from liquefaction at the project site. Therefore, there would be no significant impacts resulting from liquefaction, lateral spreading, subsidence, or collapse.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

Less than significant impact. The proposed project involves reconfiguration of an existing freeway interchange that would incorporate design requirements of a geotechnical study prepared for the proposed project, which would address the potential risk from any expansive soils.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

Less than significant impact. The project would not incorporate the use of septic systems or wastewater disposal systems; therefore, there would be no related impacts.

VIII. HAZARDS AND HAZARDOUS MATERIALS

Would the project:

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less than significant impact. The project itself would not pose a significant hazard to the public through the routine transport, use, or disposal of hazardous materials; however, vehicles carrying hazardous materials may use US 101 and the US 101/Del Norte Boulevard interchange as part of a routine transport route.

The proposed project involves improvement to an existing freeway interchange, and it would not result in increased traffic or increased use of the freeway and interchange for the routine transport, use, and disposal of hazardous materials. Therefore, the proposed project would not create a significant hazard related to the routine transport, use, and disposal of hazardous materials.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Less than significant impact. The project itself would not create a significant hazard to the public or the environment through reasonably foreseeable upset or accident conditions involving the release of hazardous materials into the environment; however, the use of US 101 and the

US 101/Del Norte Boulevard interchange as a potential route for the transport of hazardous materials could potentially be the site of an accident involving the release of hazardous materials into the environment.

The proposed project involves improvement of an existing freeway interchange, and it would not increase the use of US 101 and the US 101/Del Norte Boulevard interchange as a potential route for transport of hazardous materials. The proposed project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

No impact. The proposed project itself would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25-mile of any existing or proposed school.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

No impact. An Initial Site Assessment (ISA) prepared for this project documents all known hazardous waste and material sites within and at various distances from the project site (Parsons, 2005c). Sixty-two (62) sites within American Society for Testing and Materials (ASTM) E 1527-00 Standard search distances from the project site are identified in environmental databases. No hazardous materials sites were identified within the project footprint. Identified sites within the immediate vicinity of the project site have been investigated and determined to not present a hazard or "recognized environmental concern" (REC), as defined by ASTM.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

Less then significant impact. According to the Ventura County General Plan Hazards Index, the project site lies within 2 miles of the Camarillo Airport within an identified Accident Potential Zone (APZ) (Ventura County, 2005b). The proposed project involves reconfiguration of an existing freeway interchange and would not introduce any new impacts related to safety hazards associated with an airport. As discussed in Section XVI Traffic/Transportation, the proposed project would require a City and County-approved Transportation Management Plan (TMP) that would address potential alternative routes, detour routes, and emergency access that may be used during construction.

f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

No impact. The proposed project is not located within the vicinity of a private airstrip; therefore, no associated safety hazards would result.

g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Less than significant impact with mitigation. Although project construction may result in temporary increased traffic congestion due to lane closures, the project would not impair implementation of or physically interfere with any adopted emergency response plan or emergency evacuation plan, as discussed in Section XVI Traffic/Transportation.

The proposed project would require development of a City and County-approved TMP that would address potential alternative routes, detour routes, and emergency access that may be used during construction. Implementation of the TMP would mitigate impacts to emergency response and evacuation plans.

h) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

No impact. The proposed project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires as the entire project area lies along established roadways or within agricultural land.

IX. HYDROLOGY AND WATER QUALITY

Would the project:

a) Violate any water quality standards or waste discharge requirements?

Less than significant impact with mitigation incorporated. Project construction would involve demolition of structures, cut and fill earthwork, asphalt paving, bridge construction, retaining wall construction, site clearing, and landscaping. Each of these construction activities can have deleterious effects on the surrounding watershed and streams if stormwater and non-stormwater pollution controls are not in place during the time of construction. Because the project would disturb more than 1-acre of land, an SWPPP would be required per Section 402(p) of the Water Quality Protection Act of 1987. The SWPPP will identify construction-related BMPs for water pollution control.

Secondly, construction within the project area could disturb stocks of pollutants in the soils adjacent to the interchange that are attributable to decades of accepted agricultural practices. Such pollutants could enter the water by way of the Beardsley Channel and/or the downstream Revolon Slough, which ultimately flows into Calleguas Creek. However, considering the proposed acreage that would be converted to freeway use from agricultural use as a proportion of the entire watershed of Calleguas Creek, any additional pollutants created from soil disturbance would constitute an immeasurably small increase above the total maximum daily loads (TMDLs) for Calleguas Creek (Parsons, 2005d). None of the stream reaches upstream would be affected. Furthermore, any such increases would be transitory, ending after construction completion.

Potential pollutants found on the freeway and adjacent streets that could enter the channels that ultimately discharge into Calleguas Creek include heavy metals; organic compounds, including

petroleum hydrocarbons; sediments; trash; debris; oil; and grease. Concentrations of such pollutants are generally highest during the "first flush" of an initial rain storm, after which concentration levels decrease rapidly. Incorporation of permanent BMPs, including infiltration devices, detention devices biofiltration swales or strips, or gross solids removal devices, into the onsite drainage system would result in an improvement in water quality from the street runoff before it enters into the offsite storm drain/channel system.

The receiving water bodies are not considered high risk for municipal or domestic water supply. Total suspended solids (TSS) are of concern, however. Potential pollutant sources for TSS include runoff from cut and fill slopes and other areas where the ground is disturbed. Incorporation of temporary construction BMPs, which will be described in the SWPPP, during project construction should minimize the effect of this pollutant discharge.

The proposed project would not violate any water quality standards or waste discharge requirements. Project compliance with Section 402(p) of the Water Quality Protection Act of 1987, including preparation and implementation of an approved construction SWPPP, would mitigate potential water quality impacts to a less than significant level.

b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?

Less than significant impact. The proposed project would not utilize local groundwater. The local groundwater table may be reached during earthwork as part of project construction; however, this would involve minimal contact and would not substantially interfere with groundwater recharge or supplies. The proposed project would not create a net deficit in aquifer volume or a lowering of the groundwater table level.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?

Less than significant impact. The project site lies approximately 0.5-mile east of Beardsley Wash (referred to as the Beardsley Channel), and stormwater from the project site flows to Beardsley Channel. Immediately north of the project site is a drainage lateral referred to as the Nyeland Drain, which diverts flows to the Beardsley Channel just upstream of the US 101/Del Norte Boulevard interchange. The proposed project area is protected from offsite runoff by these channels.

After crossing the freeway, the Beardsley Channel conveys storm flow and surface runoff southwesterly toward the Revolon Slough, which is located approximately 1.7 miles south of the site. Flow from the Revolon Slough ends up in Calleguas Creek and ultimately in the Pacific Ocean.

The proposed project would not substantially alter the existing drainage pattern of the site or area, and it would not alter the course of any of the aforementioned waterways. The proposed project would result in less than significant impacts to the existing drainage of the project area.

d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

Less than significant impact. The proposed project would result in a minor increase in impervious surface in the project area, as it involves reconfiguration of an existing freeway interchange. The proposed project would result in minor localized increases in urban runoff. Since the flood zones located at the edge of the project area are designated shallow, and since no construction is anticipated within the offsite drainage/flood control channels, no significant impacts to the floodplain water surface are expected as a result of the proposed project. The proposed project would result in an insignificant increase in peak flow in the overall flood control channels, and it would not create an increase in the rate or amount of surface runoff in a manner that would result in flooding.

e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

Less than significant impact. The proposed project would result in a minor increase in impervious surface in the project area, as it involves reconfiguration of an existing freeway interchange. The proposed project would result in minor localized increases in urban runoff. Due to the lag time between the peak runoff from major tributaries (i.e., Beardsley Wash and Revolon Slough) and that from the freeway runoff, the peak flow from the freeway would have substantially subsided by the time the watershed peak occurs (Parsons, 2005d). This, coupled with the minor increase in impervious surface, would result in an insignificant increase in peak flow in the overall flood control channels as a result of this project.

f) Otherwise substantially degrade water quality?

Less than significant with mitigation incorporated. As discussed above in response XI.a, the proposed project would include implementation of construction and permanent operations BMPs to protect water quality.

Construction-related mitigation would include the following: An SWPPP would be prepared identifying construction-period BMPs to reduce water quality impacts. The SWPPP would be prepared in accordance with current City and County standards. The SWPPP would emphasize: (1) standard temporary erosion control measures to reduce sedimentation and turbidity of surface runoff from disturbed areas; (2) personnel training; (3) scheduling and implementation of BMPs throughout the various construction phases and during various seasons; (4) identification of BMPs for non-stormwater discharge, such as fuel spills; and (5) mitigation and monitoring throughout the construction period.

In the event that groundwater is encountered during construction, dewatering would be conducted locally. Dewatering effluent would be tested for contaminants as specified by the Regional Water Quality Control Board (RWQCB). Contaminated effluent would be disposed of in accordance with applicable federal, state, and local regulations.

During construction, temporary erosion control procedures would be used, such as the placement of mulch on all disturbed areas, fiber rolls along slopes, silt fences at the boundaries of the construction site, stabilized construction entrances and exits equipped with tire washing capability, and check dams placed strategically to reduce flow velocity and to filter flows in defined drainage-ways.

Operational, permanent mitigation would include the following: BMPs would be designed and implemented to reduce the discharge of pollutants from the storm drain system to the maximum extent practicable. Treatment BMPs would mainly consist of infiltration devices, detention devices biofiltration swales or strips, and/or gross solids removal devices. Incorporation of hydroseeding and appropriate landscaping would be proposed to minimize erosion and reduce total runoff. To minimize sedimentation, energy dissipation devices, channel lining, rounding and flattening slopes, and incorporation of retaining walls would be considered during design. A Long Form Storm Water Data Report providing detailed descriptions of proposed design pollution prevention BMPs, permanent treatment BMPs, temporary construction BMPs, and maintenance BMPs has been prepared and approved for the proposed project.

g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

No impact. The proposed project does not include housing.

h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?

Less than significant impact. The project site is situated on the boundary of a 100-year and 500-year flood zone (EDR, 2005b). The northeastern portion of the project site is located within a 100-year flood zone, and the remainder of the property is located within a 500-year flood zone. The portion of the project located within the 100-year flood zone is minimal, and this portion of the flood zone is designated Zones B and C floodplain, which are areas exhibiting less than 1-ft of ponded flooding and areas outside the 100-year flood zone but within the 500-year flood zone, respectively (Parsons, 2005d). The flood zones located at the edge of the project area are designated shallow, and the proposed project would not impede or redirect flood flows.

i) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?

Less than significant impact. The Beardsley Channel is located approximately 0.5-mile east of the project site, routing storm flow and surface runoff southwesterly toward the Revolon Slough located approximately 1.7 miles south of the site. Flow from the Revolon Slough ends up in Calleguas Creek and ultimately in the Pacific Ocean. The project footprint does not intersect with a flood control channel, and the project site is situated on the boundary of a 100-year and

500-year flood zone, in an area of the floodplain designated as shallow. The project site is not located near a levee or dam, and it would not be subject to flooding as a result of a failure of a levee or dam.

j) Inundation by seiche, tsunami, or mudflow?

No impact. The proposed project is not located in an area subject to seiche, tsunami, or mudflow.

X. LAND USE AND PLANNING

Would the project:

a) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

Potentially significant impact. As discussed in Section II, the farmland located south of US 101 that would be acquired to accommodate the proposed project is located within the City, and it is designated *Business and Research Park* and zoned *Business and Research Park (BRP*) (City of Oxnard, 2004a). This farmland and adjacent areas are planned for development into a business park as part of the City of Oxnard Draft Sakioka Farms Specific Plan (City of Oxnard, 2004b). Acquisition of this land to support the proposed project would not be in conflict with agricultural land use and zoning designations.

However, proposed acquisition and conversion of up to approximately 8.7 acres of agricultural land north of US 101 may constitute a significant impact because this land is protected for agricultural use. The farmland located north of US 101 is designated *Agricultural (40-acre minimum)* and zoned *Agricultural Exclusive (AE)* by the County. This land is also designated part of the Oxnard/Camarillo/Ventura Greenbelt (Ventura County, 2004). The Oxnard/Camarillo/ Ventura Greenbelt is intended to protect open space and agricultural lands, and to reassure property owners located within these areas that lands will not be converted to agriculturally incompatible uses.

A Farmland Conversion Impact Study will be necessary to estimate property acquisition costs, loss of farmland impacts, and mitigation. An amendment to the Ventura County GPA may be required as a result of the proposed conversion of designated agricultural land to transportation use. The project may conflict with Ventura County General Plan goals and policies to preserve agricultural land, and approval by the County Board of Supervisors and LAFCO may be necessary to grant the City permission to acquire land for purposes of the proposed project. It may be necessary to obtain a General Plan Determination of Consistency from the County Planning Division. The potential for inconsistency of the proposed project with existing agricultural land use and zoning designations, and the need for a GPA, will be analyzed in the EA/EIR for the proposed project.

b) Conflict with any applicable habitat conservation plan or natural community conservation plan?

No impact. There is no habitat conservation plan or natural community conservation plan in place for the project area; therefore, there would be no related impacts (City of Oxnard, 2004; Smith, 2005).

XI. MINERAL RESOURCES

Would the project:

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

No impact. There are no active mineral mining operations or mapped mineral resources located within the project area that the proposed project would make unavailable.

b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

No impact. A portion of the Santa Clara Avenue oil and gas field overlaps the Nyeland Acres community to the northwest of the project site. According to the City of Oxnard General Plan, there are approximately 21 oil and gas wells located within the Santa Clara Avenue Field, but none would be affected by the project.

XII. NOISE

Would the project result in:

a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Potentially significant impact. The proposed project involves reconfiguration of an existing freeway interchange and would not generate noise levels in excess of standards established in the City of Oxnard and Ventura County General Plans or respective noise ordinances.

Project construction noise would be temporary and intermittent, and it is not expected to be substantial enough to exceed noise standards. However, a noise study will be conducted to more accurately assess the potential impacts and recommend any mitigation measures, and this analysis will be included in the EA/EIR for the proposed project.

b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

Less than significant impact. The proposed project involves reconfiguration of an existing freeway interchange, and proposed project operation would not generate excessive groundborne vibration or noise levels. Project construction would likely result in groundborne vibration and noise; however, this would be temporary and is not anticipated to be great enough to significantly affect nearby uses. However, potential impacts resulting from excessive groundborne vibration or

groundborne noise levels will be analyzed in a noise study and included in the EA/EIR for the proposed project.

c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

Less than significant impact with mitigation. The proposed project involves reconfiguration of an existing freeway interchange, realigning the existing northbound on-ramp, and the realignment of Ventura Boulevard closer to Nyeland Acres residents. It is unlikely that the realignment of Ventura Boulevard would create a permanent increase in ambient noise for these residents; however, this will be analyzed in the noise study and EA/EIR for the proposed project. Mitigation for any adverse, permanent increase in noise levels would be provided, as necessary, to reduce any significant noise impacts to Nyeland Acres residents.

d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Less than significant impact. Project construction noise would be temporary and intermittent, and it is not expected to be substantial enough to exceed noise standards. Therefore, less than significant impacts are anticipated.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

No impact. The proposed project is a freeway interchange improvement project, and it would not locate people within an airport land use plan or otherwise expose them to aircraft-related noise. The project site is located approximately two miles from the Camarillo Airport; however according to the Ventura County General Plan Hazards Appendix, it is not located within any identified noise zone for the airport.

f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

No impact. The project is not in the vicinity of a private airstrip. The proposed project is a freeway interchange improvement project that involves reconfiguration of an existing interchange, and it would not expose them to aircraft-related noise.

XIII. POPULATION AND HOUSING

Would the project:

a) Induce substantial population growth in an area, either directly (e.g. by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?

No impact. The proposed project would not directly induce population growth. The proposed project would not create long-term employment or otherwise indirectly induce population growth. The proposed project is intended to accommodate expected future population growth and development in the area.

b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

No impact. The proposed project would not displace housing or require the construction of housing elsewhere.

c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

No impact. Construction and operation of the proposed project would not displace housing. Therefore, no replacement housing or any other mitigation measures would be required.

XIV. PUBLIC SERVICES

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services (i.e., fire protection, police protection, schools, parks, other public facilities)?

Less than significant impact. The Nyeland Acres Lift Station, a County-owned wastewater lift station, is located on a County-owned parcel between Ventura Boulevard and US 101, shown in Attachment 3. Adjacent to the lift station on the same parcel is a facility operated by the County General Services Agency (GSA) that was once associated with the lift station and now serves as a storage facility (Hearne, 2005). This facility includes two storage buildings and a vehicle parking area, and it is enclosed with a chain-link fence. The County currently rents this property to a tree-trimming business. Access to the Nyeland Acres Lift Station and adjacent tree-trimming properties would remain open during project construction and following construction. Proposed acquisition of up to approximately 0.1 acre of this property, as proposed with Alternatives 2, 3 and 4, would not significantly affect the public services provided by this facility. There are no other governmental facilities located within the project vicinity.

The proposed project could potentially result in short-term impacts on emergency response times during construction. Coordination with emergency services providers and the development of a TMP would minimize this impact, as discussed in Section XVI, Transportation/Traffic.

Construction and operation of the proposed project is anticipated to result in significant impacts to public services.

XV. RECREATION

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

No impact. There are no public recreational facilities associated with this project. The closest parks are West Village Park and Thompson Park, which are located approximately 2 miles southwest of the project site within the City. There is a recreational clubhouse located within the privately owned Sunshine Manor Mobile Home Park at 2725 Ventura Boulevard, west of the project site. Also, there is a locally notable Santa Claus statue located within a privately maintained park in the Nyeland Acres neighborhood northwest of the project site. None of these resources would be affected by the proposed project.

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

No impact. The project does not include construction or expansion of recreation facilities.

XVI. TRANSPORTATION/TRAFFIC

Would the project:

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

Less than significant impact. The proposed project is intended to reduce traffic congestion and delays, as well as eliminate existing geometric deficiencies at the interchange by accommodating the projected increase in traffic volumes. The proposed project would not increase vehicle trips or the volume-to-capacity ratio on roads (Parsons, 2005a). Thus, operation of the proposed project would ultimately have beneficial effects on existing and future traffic.

Temporary increases in traffic load on certain streets may result during project construction; however, this impact would be temporary, and preparation of a TMP would minimize such impacts to a less than significant level. It is anticipated that detour routes specified in the TMP would divert southbound vehicles to the US 101/Rice Avenue interchange, located approximately 0.5-mile west of the US 101/Del Norte Boulevard interchange. The US 101/Rice Avenue interchange provides direct between US 101 and the Nyeland Acres community. Increased congestion at the US 101/Rice Avenue interchange may occur during this time; however, the congestion would be temporary and would not substantially impair circulation or emergency response times in Nyeland Acres or the larger study area. Access to US 101 for northbound and southbound vehicles would remain available at all times, either via the US 101/ Del Norte Boulevard or nearby US 101/Rice Avenue interchanges. Therefore, although temporary congestion may occur along detour routes, these impacts would be temporary and would be anticipated to last approximately 1 month; therefore, they would not result in significant impacts to street system capacity and traffic loads.

b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?

Less than significant impact. Traffic analysis of the existing facility, based on 2005 traffic volumes, indicates that several of the intersections at the interchange are currently operating at very poor levels of service. Preliminary traffic analysis based on projected 2030 traffic volumes indicates that the levels of service at all of the intersections at the interchange will worsen to very poor levels of service (Parsons, 2005a).

The proposed project is intended to reduce traffic congestion and delays by accommodating the projected increase in traffic volumes and eliminating existing geometric deficiencies at the interchange. Thus, operation of the proposed project would ultimately have beneficial effects on existing levels of service.

Temporary decreased levels of service may result during project construction; however, the impact of decreased levels of service at some intersections would be temporary, and preparation of a TMP, as described in Section XVI.a, would minimize such impacts to a less than significant level.

c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

No impact. The project would not involve air traffic.

d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

No impact. The proposed project is intended to eliminate existing geometric deficiencies, and it would be designed to meet Caltrans standards, creating beneficial effects. The proposed project would not increase hazards due to a design feature.

e) Result in inadequate emergency access?

Less than significant impact. Operation of the proposed project would result in improved access for emergency response services. Proposed project construction would occur in stages so that the US 101/Del Norte Boulevard interchange would not be closed at any time during construction, with staggered closure of the southbound on- and off-ramps expected to last approximately 1 month. The proposed project TMP would address potential alternative routes, detour routes, and emergency access that may be used during construction. Coordination with emergency service providers and the development of the TMP would minimize circulation and access impacts during project construction to a less than significant level.

f) Result in inadequate parking capacity?

Less than significant impact. The proposed project would not substantially change existing parking facilities in the project area. A ROW acquisition of between 0.1 and 0.036 acres in size is anticipated to accommodate the proposed realignment of Camino Avenue, proposed as part of Alternatives 2 and 3. This ROW acquisition would occur at the northwest corner of the Camino

Real Industrial property, at the location of a parking lot serving the current business. This acquisition may require as mitigation the provision of additional property for parking or the slight realignment of existing driveway and parking facilities, the impacts of which will be analyzed in the EA/EIR for the proposed project. The proposed project would not result in inadequate parking capacity.

g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?

No impact. The Del Norte Boulevard approach south of Camino Avenue contains a City-designated bike lane. The proposed shoulder width of this stretch of Del Norte Boulevard would meet the Caltrans recommendation for shoulder width for bicycle use. The proposed project would accommodate future plans to create the bike lane. There are no other adopted policies, plans, or programs supporting alternative transportation within the project vicinity City of Oxnard. 2004c).

XVII. UTILITIES AND SERVICE SYSTEMS

Would the project:

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

No impact. The proposed project involves the reconfiguration of an existing freeway interchange, and it does not involve wastewater treatment or related facilities. In the event that groundwater is encountered during construction, dewatering would be conducted locally. Dewatering effluent would be tested for contaminants as specified by the Los Angeles RWQCB. Contaminated effluent would be disposed of in accordance with applicable federal, state, and local regulations. The proposed project would not exceed wastewater treatment requirements of the Los Angeles RWQCB, and any discharges would be covered under a Los Angeles RWQCB NPDES permit.

b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

No impact. The proposed project involves the reconfiguration of an existing freeway interchange, and it does not involve water or wastewater facilities, or create the need for an expansion of existing facilities.

c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Less than significant impact. The proposed project would include structural BMPs designed and implemented to reduce the discharge of pollutants from the storm drain system to the maximum extent practicable. A Long Form Storm Water Data Report has been prepared for the proposed project. It provides detailed descriptions of proposed design pollution prevention

BMPs, permanent treatment BMPs, temporary construction BMPs, and maintenance BMPs, and will be approved by the Caltrans District/Regional Design Storm Water Coordinator, a designated Landscape Representative and a designated Maintenance Representative. This approval process ensures that stormwater issues are recorded and addressed throughout the planning and design phase. The construction of new storm drain facilities would be in compliance with the conditions of a general NPDES permit that RWQCB issued to Caltrans for highway construction projects. Therefore, the proposed project would not result in significant impacts to stormwater drainage facilities.

d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

No impact. The proposed project involves the reconfiguration of an existing freeway interchange, and it would not affect water supplies.

e) Result in determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

No impact. The proposed project alternatives involve the reconfiguration of an existing freeway interchange, and they would not affect wastewater treatment facilities.

f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

Less than significant impact. Construction and demolition activities for the proposed project would generate a substantial amount of solid waste. In compliance with Assembly Bill (AB) 939, the County has developed a Countywide Solid Waste Disposal Plan called the Countywide Integrated Waste Management Plan, which was adopted in 2000. Accordingly, Caltrans will develop a demolition waste recycling program to reduce the amount of waste to be disposed of in landfills. Construction waste from the project would be brought to the Del Norte Regional Recycling and Transfer Station (located at 111 S. Del Norte Boulevard). Non-recyclable solid waste would be taken from the transfer station to the Tolland Road or Simi Valley Landfill. The Tolland Road Landfill, located off of Highway 126 between Santa Paula and Fillmore, is permitted to receive waste through year 2027 (Haden, 2006). The Simi Valley landfill, located at 2801 Madera Road, is permitted to receive waste through year 2034 (Tignack, 2006). These facilities would accommodate solid waste generated from construction of the proposed project.

g) Comply with federal, state, and local statutes and regulations related to solid waste?

No impact. The project would comply with federal, state, and local statutes related to solid waste. No significant impacts would result.

XVIII. MANDATORY FINDINGS OF SIGNIFICANCE

a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or

animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Less than significant impact with mitigation incorporated. Due to the highly urbanized nature of the project area, the project would not have an impact on the habitat or population level of fish or wildlife species; threaten a plant or animal community; or impact the range of a rare or endangered plant or animal (see *Section IV*). The proposed project would result in the removal of existing trees on the site. Implementation of avoidance mitigation, a monitoring program, or other mitigation is expected to avoid significant impacts to any native or migratory birds nesting in onsite trees.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

Less than significant impact. There are no known projects in the study corridor that would create any undue cumulative impacts.

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Potentially significant impact. The proposed project would not involve the displacement of any residences, commercial, or otherwise developed properties. The proposed project would require partial takes of agricultural land alongside US 101 to the north and south. The City would compensate all affected property owners at fair market value for the acquisition of their property, in compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970. Nonetheless, the loss of active farmland protected by zoning and the Oxnard/ Camarillo/Ventura Greenbelt may result in significant impacts.

Additionally, as discussed previously in this Initial Study, the project could potentially result in environmental effects that may cause adverse effects on human beings with regard to air quality and noise. As a result, impacts could be potentially significant, and these issues shall be studied further in the EIR.

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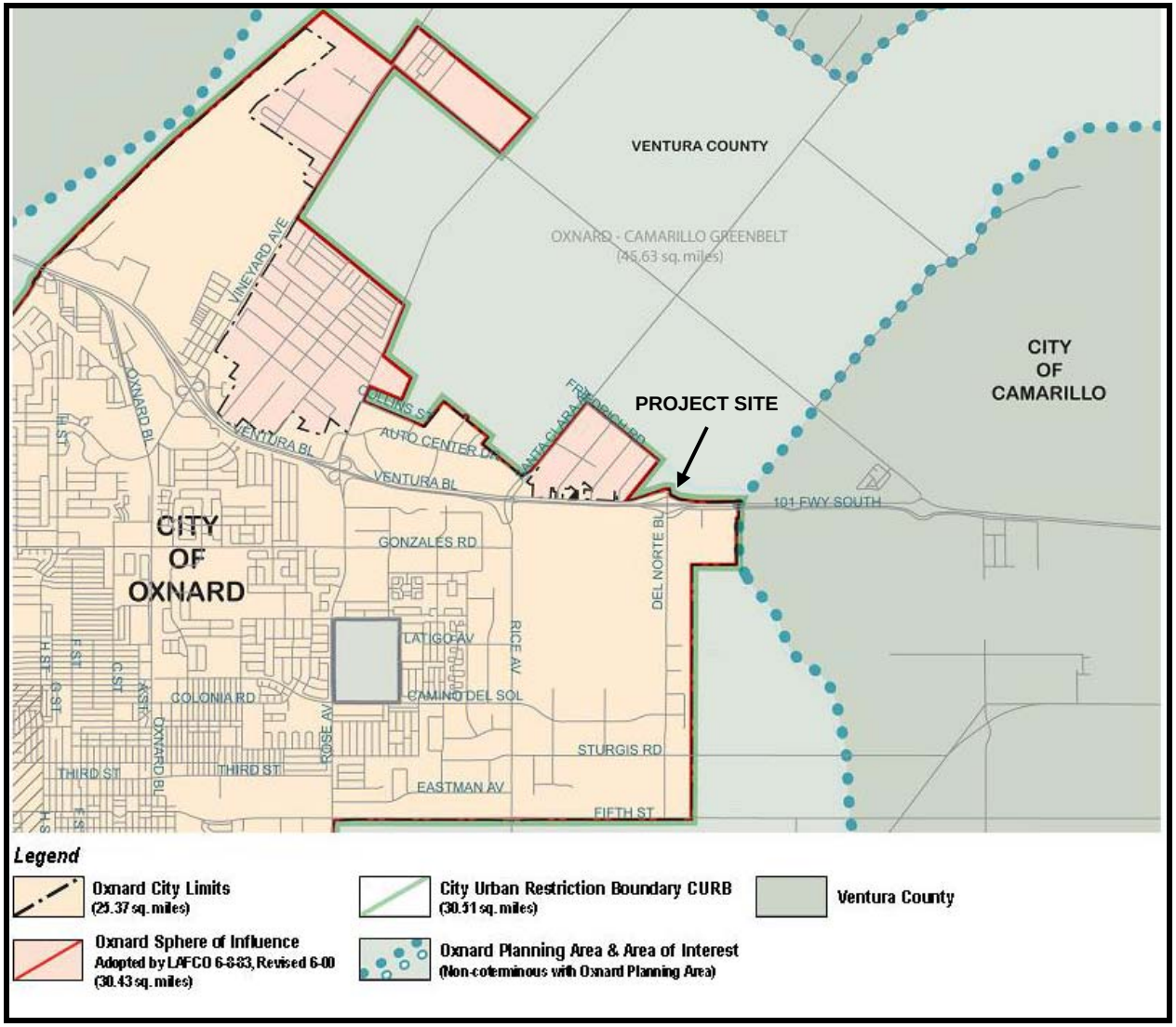
ATTACHMENT 1

PROJECT SITE LOCATION

US 101/DEL NORTE BOULEVARD INTERCHANGE
IMPROVEMENT PROJECT
LOCATION MAP

ATTACHMENT 2

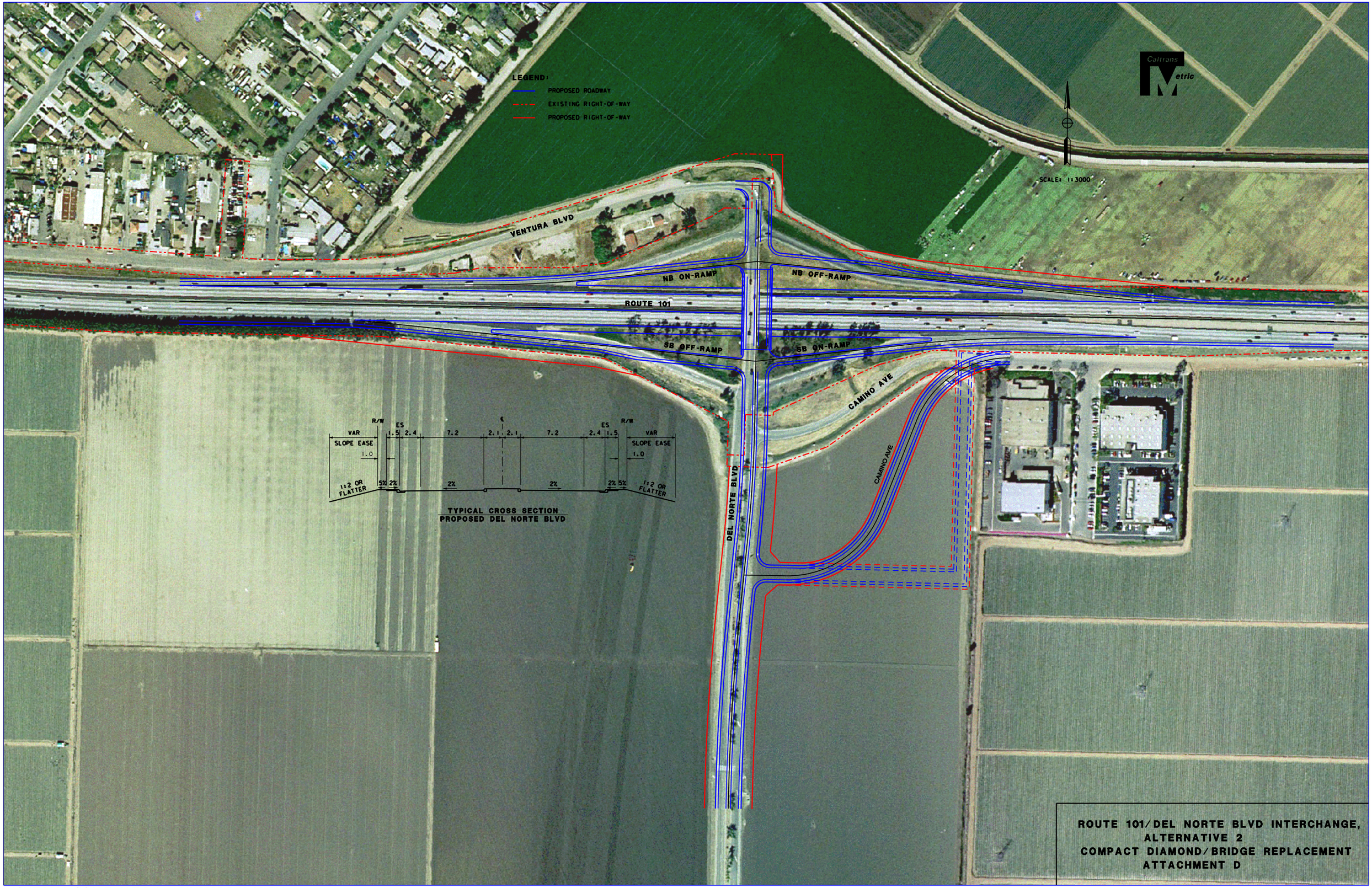
PROJECT SITE JURISDICTIONAL BOUNDARIES



US 101 / DEL NORTE BOULEVARD INTERCHANGE IMPROVEMENT PROJECT
JURISDICTIONAL BOUNDARIES MAP

ATTACHMENT 3

ALTERNATIVE 2 SITE PLAN



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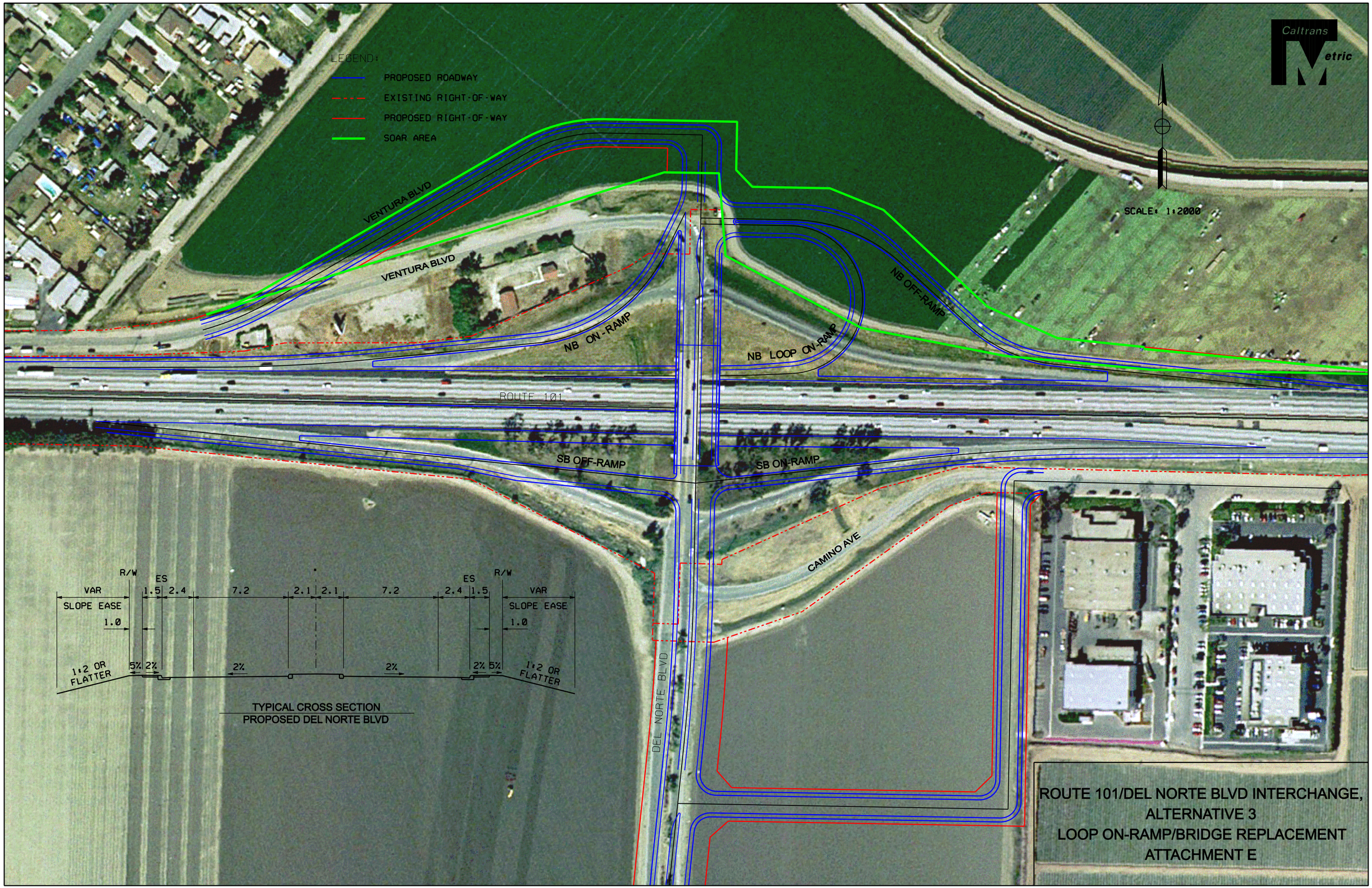
ATTACHMENT 4

ALTERNATIVE 3 SITE PLAN


Caltrans
Metric
LEGEND:
PROPOSED ROADWAY
EXISTING RIGHT-OF-WAY
PROPOSED RIGHT-OF-WAY
SOAR AREA
SCALE: 1:2000
VENTURA BLVD
VENTURA BLVD
NB ON-RAMP
NB LOOP ON-RAMP
NB OFF-RAMP
ROUTE 101
SB OFF-RAMP
SB ON-RAMP
CAMINO AVE
DEL NORTE BLVD
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VAR
SLOPE EASE
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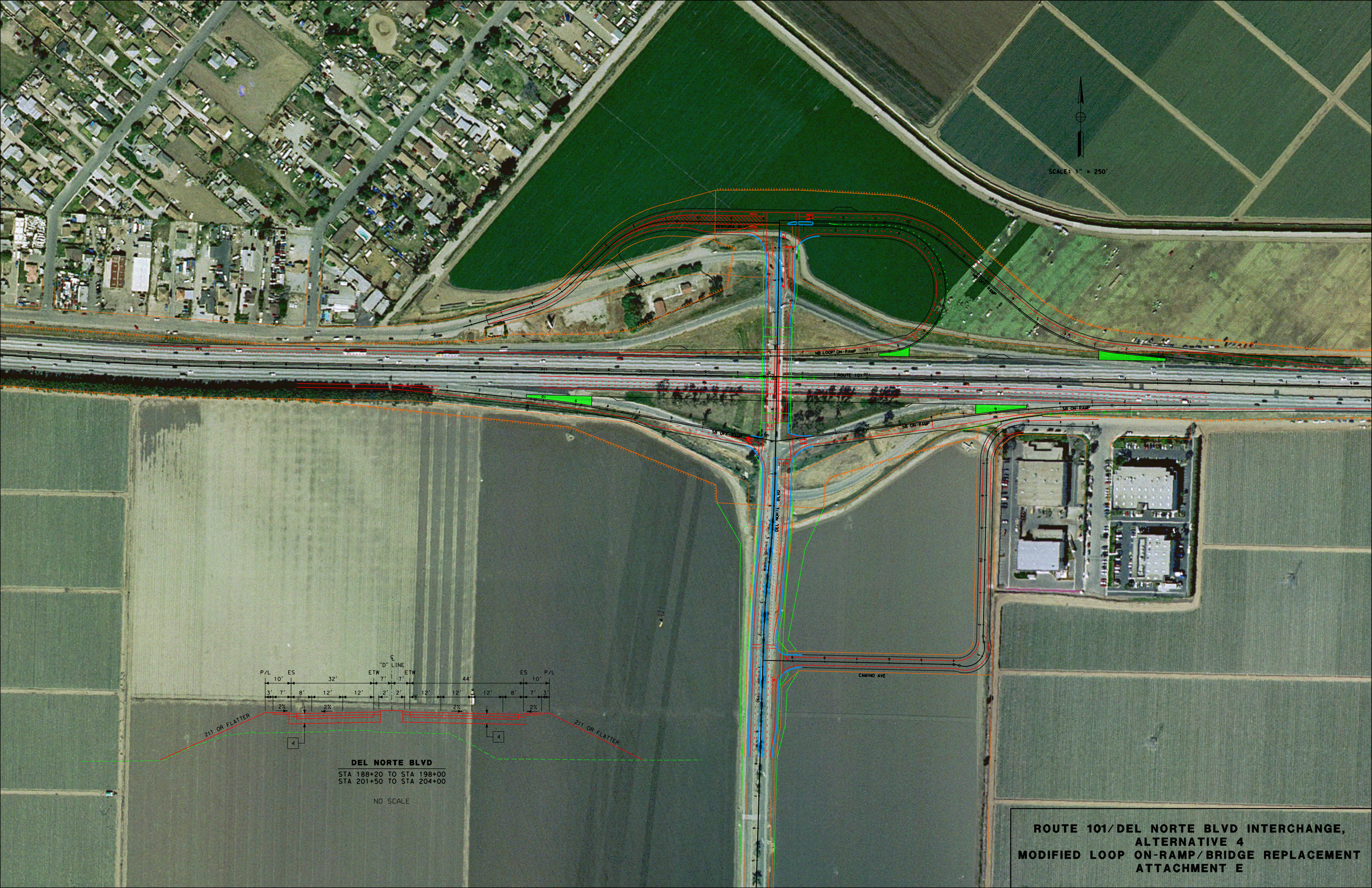
TYPICAL CROSS SECTION
PROPOSED DEL NORTE BLVD
ROUTE 101/DEL NORTE BLVD INTERCHANGE,
ALTERNATIVE 3
LOOP ON-RAMP/BRIDGE REPLACEMENT
ATTACHMENT E

ATTACHMENT 5

ALTERNATIVE 4 SITE PLAN



ROUTE 101/DEL NORTE BLVD INTERCHANGE,
ALTERNATIVE 4
MODIFIED LOOP ON-RAMP/BRIDGE REPLACEMENT
ATTACHMENT E

APPENDIX B
FARMLAND CONVERSION IMPACT RATING

United States Department of Agriculture

NRCS

Natural Resources Conservation Service
3380 Somis Road
P. O. Box 260
Somis, CA 93066
(805) 386-4489

May 11, 2007

Department of Transportation
District 7
100 Main Street, Suite 100
Los Angeles, CA 90012-3606

Dear Mr. Montez:

Please find enclosed a copy of the following:

1) Form AD-1006, Farmland Conversion Impact Rating
2) Soils Map for Project Area
3) Documentation for Parts IV and V of the AD-1006 form.

AD-1006 Documentation for Parts IV and V

Del Norte/US 101 Interchange Project **Alternative 2**

Soil Symbol	Category	Acres	Storie Index	Weighted Average
Cc	STATEWIDE	0.3	40	12
Cd	STATEWIDE	4.73	42	198.66
Ce	STATEWIDE	0.3	42	12.3
Pa	STATEWIDE	0.5	40	20
	TOTALS:	5.83		242.96

Part IV C: Acres to be converted/acres farmland in county **x** 100 = 5.83/ 132,124 X 100 = **0.004**
Part V: Relative Value of Farmland: 242.96/ 5.83 = **41.67**

Del Norte/US 101 Interchange Project **Alternative 3**

Soil Symbol	Category	Acres	Storie Index	Weighted Average
Cc	STATEWIDE	0.3	40	12
Cd	STATEWIDE	12.48	42	524.16
Ce	STATEWIDE	0.3	42	12.6
Pa	STATEWIDE	0.5	40	20
	TOTALS:	13.58		568.76

Part IV C: Acres to be converted/acres farmland in county **x** 100 = 13.58/ 132,124 X 100 = **0.01**
Part V: Relative Value of Farmland: 568.76/13.58 = **41.88**

Del Norte/US 101 Interchange Project **Alternative 3**

Soil Symbol	Category	Acres	Storie Index	Weighted Average
Cc	**STATEWIDE**	**0.3**	**40**	**12**
Cd	**STATEWIDE**	**12.2**	**42**	**512.4**
Ce	**STATEWIDE**	**0.3**	**42**	**12.6**
Pa	**STATEWIDE**	**0.5**	**40**	**20**
	TOTALS:	**13.3**		**557**

Part IV C: Acres to be converted/acres farmland in county **x** 100 = 13.3/ 132,124 X 100 = **0.01**
Part V: Relative Value of Farmland: 557/13.3 = **41.88**

If you have any questions, please feel free to contact me.

Sincerely,

Brooks Engelhardt
District Conservationist
USDA-NRCS

U.S. Department of Agriculture

FARMLAND CONVERSION IMPACT RATING

PART I *(To be completed by Federal Agency)*	Date Of Land Evaluation Request 4/25/07
Name Of Project Del Norte/US 101 Interchange Project	Federal Agency Involved FHWA/Caltrans
Proposed Land Use Transportation	County And State Ventura County, CA
PART II *(To be completed by NRCS)*	Date Request Received By NRCS 4/30/07

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 110,951	Average Farm Size 156
Major Crop*(s)* Irrigated cropland	Farmable Land In Govt. Jurisdiction Acres: 132,124 % 11		Amount Of Farmland As Defined in FPPA Acres: 111, 845 % 10
Name Of Land Evaluation System Used California Storie Index	Name Of Local Site Assessment System none		Date Land Evaluation Returned By NRCS

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	5.8	13.6	13.3	
B. Total Acres To Be Converted Indirectly				
C. Total Acres In Site	5.8	13.6	13.3	0.0
PART IV *(To be completed by NRCS)* Land Evaluation Information				
A. Total Acres Prime And Unique Farmland	0.0	0.0	0.0	
B. Total Acres Statewide And Local Important Farmland	5.8	13.6	13.3	
C. Percentage Of Farmland In County Or Local Govt. Unit To Be Converted	0.0	0.0	0.0	
D. Percentage Of Farmland In Govt. Jurisdiction With Same Or Higher Relative Value				
PART V *(To be completed by NRCS)* Land Evaluation Criterion Relative Value Of Farmland To Be Converted *(Scale of 0 to 100 Points)*	42	42	42	0

PART VI *(To be completed by Federal Agency)* Site Assessment Criteria *(These criteria are explained in 7 CFR 658.5(b)*	Maximum Points	Site A	Site B	Site C	Site D
1. Area In Nonurban Use	15	11	15	13	
2. Perimeter In Nonurban Use	10	7	10	8	
3. Percent Of Site Being Farmed	10	0	0	0	
4. Protection Provided By State And Local Government	20	20	20	20	
5. Distance From Urban Builtup Area	15	0	0	0	
6. Distance To Urban Support Services	15	0	0	0	
7. Size Of Present Farm Unit Compared To Average	10	10	10	10	
8. Creation Of Nonfarmable Farmland	10	0	0	0	
9. Availability Of Farm Support Services	5	5	5	5	
10. On-Farm Investments	20	10	20	18	
11. Effects Of Conversion On Farm Support Services	10	2	5	3	
12. Compatibility With Existing Agricultural Use	10	5	7	5	
TOTAL SITE ASSESSMENT POINTS	160	70	92	82	0
PART VII *(To be completed by Federal Agency)*					
Relative Value Of Farmland *(From Part V)*	100	42	42	42	0
Total Site Assessment *(From Part VI above or a local site assessment)*	160	70	92	82	0
TOTAL POINTS *(Total of above 2 lines)*	260	112	134	124	0

Site Selected:	Date Of Selection	Was A Local Site Assessment Used? Yes ☐ No ☒

Reason For Selection:

(See Instructions on reverse side)

This form was electronically produced by National Production Services Staff

Clear Form

Form AD-1006 (10-83)

ATTACHMENTS

Form 1006 Question #	Score			Comments
	Alt 2	Alt 3	Alt 4	
1. How much land is in non-urban use within a radius of 1.0 mile from where the project is intended?	11	15	13	-Alts 2 & 4 range from 70%-84% of non-urban Land is within a 1mile radius. -Alt 3 is 90% or greater of non-urban land is within a 1 mile radius -Areas indicated green on the attached figure represent existing non-urban land use
2. How much of the perimeter of the site borders on land in non-urban use?	7	10	8	-Alts 2 & 4 range from 65%-81% of the perimeter bordering land is non-urban -Alt 3 is 90% or greater of the perimeter bordering land is non-urban -Both are indicated in the attached figure
3. How much of the site has been farmed more than five of the last ten years?	0	0	0	-Entire site is approximately 70 acres. Existing farmland within the site was calculated and the total percent of the site, which has been farmed more than five years, is less than 20%.
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?	20	20	20	-The property north of U.S. 101 is part of the Oxnard/Camarillo/Ventura Greenbelt, intended to protect open space and agricultural lands. This land is also designated and zoned by the County for agricultural use. -The property south of U.S. 101 is designated and by the City as *Business and Research Park*, and is part of a Specific Plan for urban development.
5. How close is the site to an urban built-up area?	0	0	0	-Adjacent to a business park south of U.S. 101, and located within ½ mile of the Nyeland Acres residential community -The distance from the perimeter of the site to an urban area is less than 760ft.
6. How close is the site to water lines, sewer lines and/or other local facilities and services whose capacities and design would promote nonagricultural use?	0	0	0	-Adjacent to a business park south of U.S. 101, and located within ½ mile of the Nyeland Acres residential community -All of the services exists within ½ mile of the site.

7. Is the farm unit(s) containing the site (before the project) as large as the average-size farming unit in the county?	10	10	10	The average size farm in Ventura County in 2002 was 143 acres. The following size parcels would experience land acquisition as a result of the project: <u>North of U.S. 101</u> 35.3 acre parcel-8.7 acre acquisition 74.3 acre parcel-<1.0 acre acquisition -Substantial conversion of agricultural land is occurring on one parcel north of U.S. 101, and the 35.3 acre parcel is approximately 25% of the average farm size. <u>South of U.S. 101</u> 202.8 acre parcel-3.4 acre acquisition 26.4 acre parcel-<1.0 acre acquisition 40.6 acre parcel-<1.0 acre acquisition -Substantial conversion of agricultural land is occurring on one parcel south of U.S. 101 and the 202.8 acre parcel is approximately 70% larger that the average farm size
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?	0	0	0	-The proposed project would acquire only land needed to accommodate the proposed transportation facilities, and remainder agricultural land would remain in agricultural use. -The proposed project involves reconfiguration of an existing freeway interchange that abuts agricultural land. The proposed project would not introduce new land uses to the project area.
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?	5	5	5	-The proposed project would not eliminate access to adjacent farmland parcels, or remove any existing farmland support services. -All of the required farmland support services will still be available
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?	10	20	18	-An important agricultural infrastructure is present and the site will continue to be used for farming after the project is constructed. The amount of On-Farm Investment is higher because of the agricultural infrastructure. The parcels north of U.S. 101 are in strawberry production and the parcels south of U.S. 101 grow green, leafy, low-lying vegetables.

11. Would the project at this site, by converting farmland to nonagricultural use, reduce the support 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?	2	5	3	There would be some reduction in demand for support services if the site is converted to non-agricultural use.
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 the surrounding farmland to nonagricultural use?	5	7	5	The proposed project is tolerable of existing agricultural use of surrounding farmland. The project would not introduce new land uses or incompatibility issues to the project area.

US 101/DEL NORTE BOULEVARD INTERCHANGE
IMPROVEMENT PROJECT
LOCATION MAP

Soils Map

Date: 5/10/2007

Customer(s): US 101/Del Norte Interchange

District: VENTURA COUNTY RESOURCE CONSERVATION DISTRICT

Field Office: SOMIS SERVICE CENTER

Agency: NRCS

Assisted By: Ellen H James

Legend

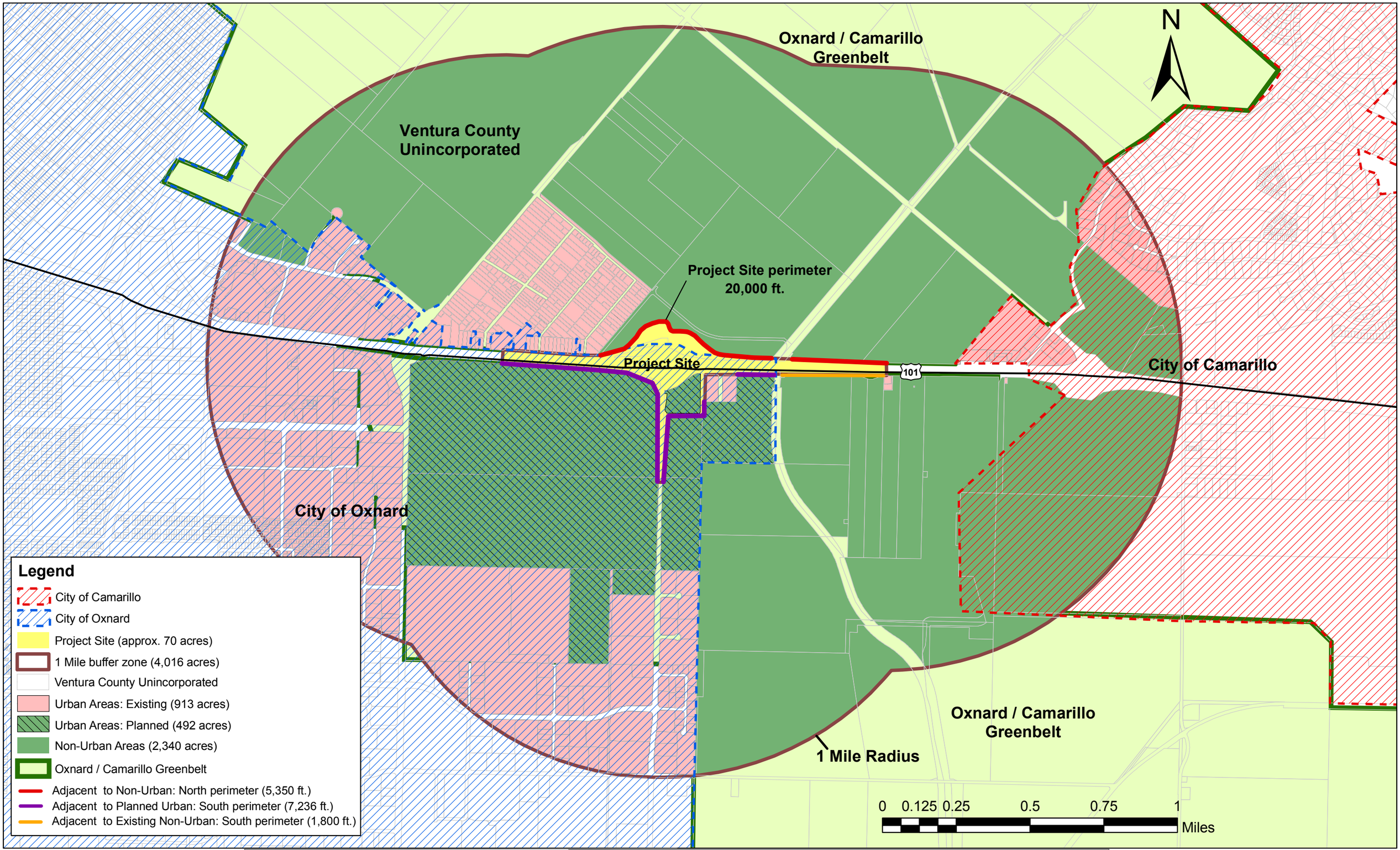
Soils Map

MUSYM

- Cc
- Cd
- Ce
- Hm
- Pa
- FPPA
- Road

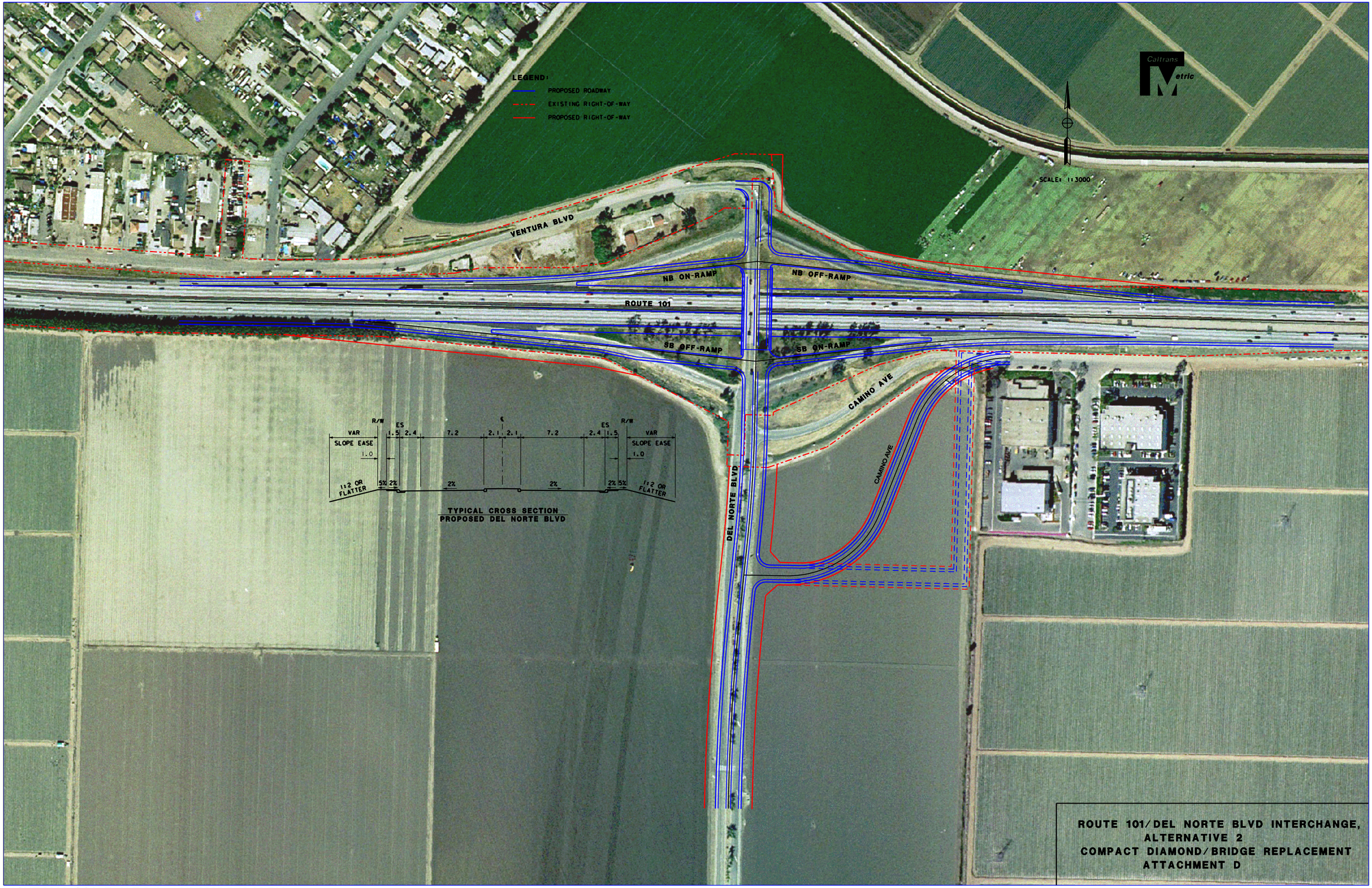
290 0 290 580 870 1,160 Feet

Scale: 1: 6,000



U.S. 101/Del Norte Interchange Improvement Project- Urban Areas Map

April 2007



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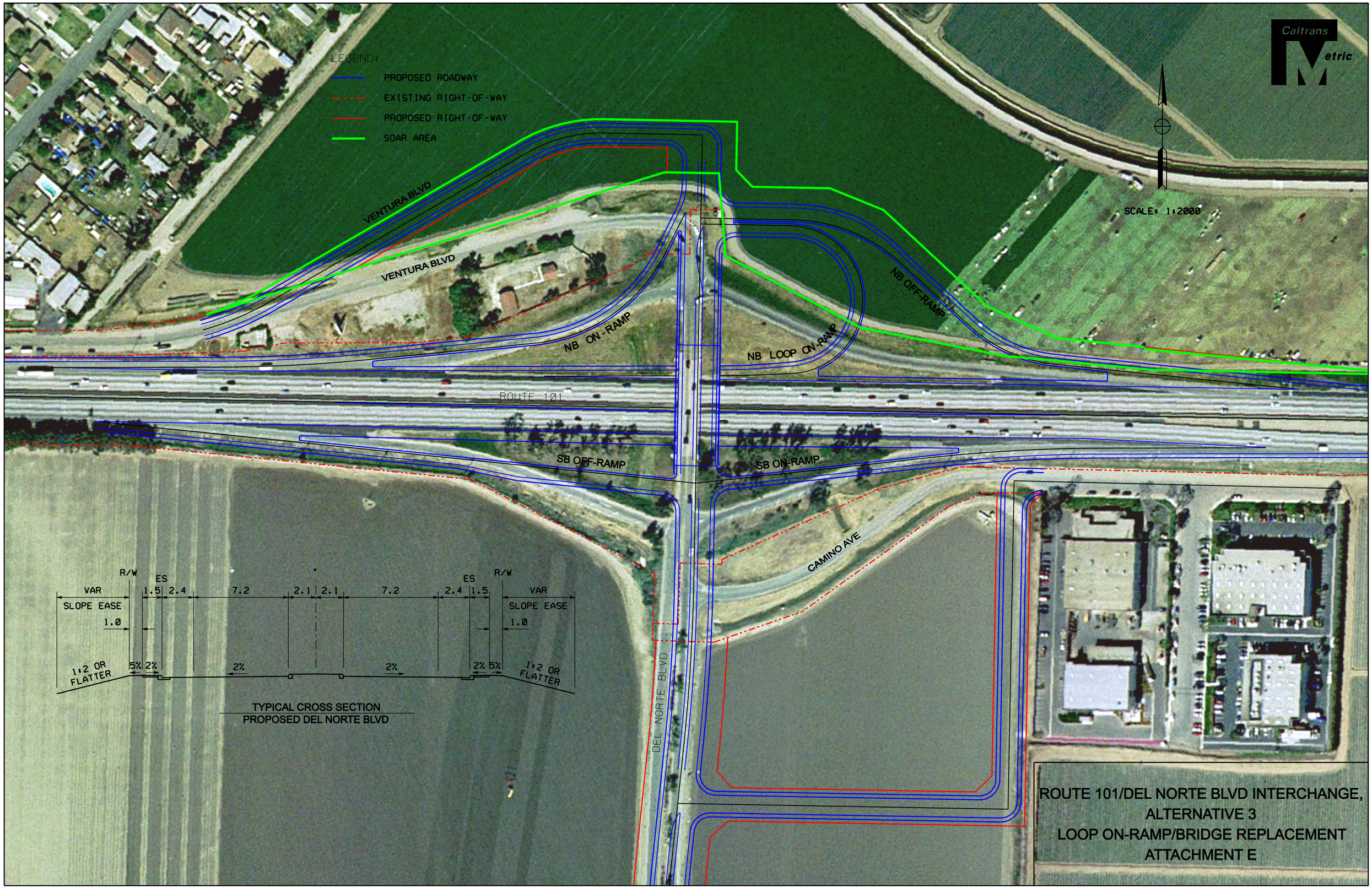
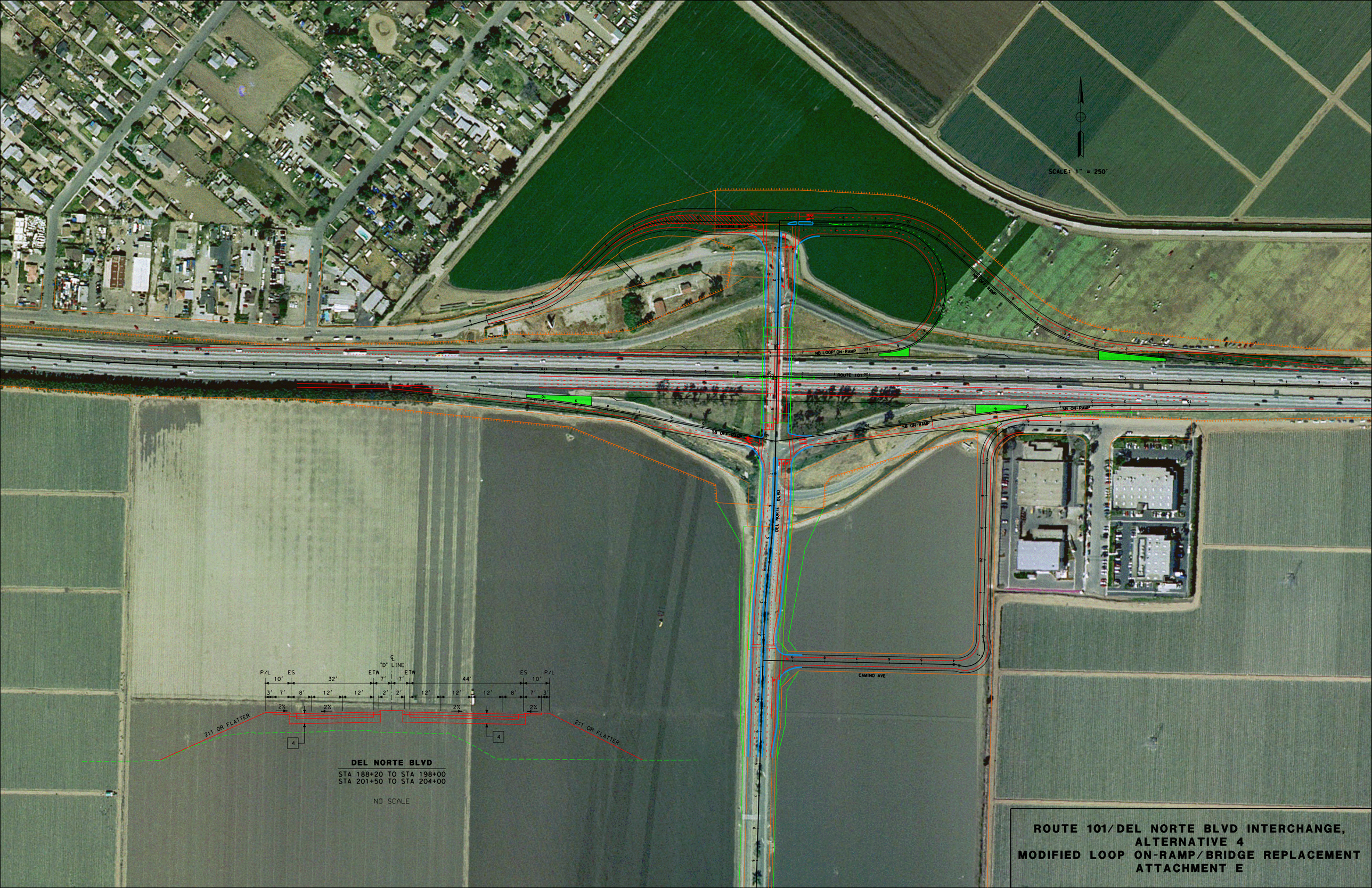

Caltrans
Metric
LEGEND:
PROPOSED ROADWAY
EXISTING RIGHT-OF-WAY
PROPOSED RIGHT-OF-WAY
SOAR AREA
SCALE: 1:2000
VENTURA BLVD
VENTURA BLVD
NB ON-RAMP
NB LOOP ON-RAMP
NB OFF-RAMP
ROUTE 101
SB OFF-RAMP
SB ON-RAMP
CAMINO AVE
DEL NORTE BLVD
R/W
ES
VAR
SLOPE EASE
1.0
1.5
2.4
7.2
2.1
2.1
7.2
2.4
1.5
ES
R/W
VAR
SLOPE EASE
1.0
1:2 OR FLATTER
5%
2%
2%
2%
2%
5%
1:2 OR FLATTER
TYPICAL CROSS SECTION
PROPOSED DEL NORTE BLVD
ROUTE 101/DEL NORTE BLVD INTERCHANGE,
ALTERNATIVE 3
LOOP ON-RAMP/BRIDGE REPLACEMENT
ATTACHMENT E



ROUTE 101/DEL NORTE BLVD INTERCHANGE,
ALTERNATIVE 4
MODIFIED LOOP ON-RAMP/BRIDGE REPLACEMENT
ATTACHMENT E

APPENDIX C

SECTION 4(F) EVALUATION

APPENDIX C – SECTION 4(f) EVALUATION

Section 4(f) of the Department of Transportation Act of 1966, codified at 49 USC § 303, declares that "[i]t is the policy of the United States Government that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites."

Section 4(f) specifies that "[t]he Secretary [of Transportation] may approve a transportation program or project . . . requiring the use of publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, state, or local significance, or land of an historic site of national, state, or local significance (as determined by the federal, state, or local officials having jurisdiction over the park, area, refuge or site) only if –

(1) there is no prudent and feasible alternative to using that land; and

(2) the program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use."

Section 4(f) further requires consultation with the Department of Interior and, as appropriate, the involved offices of the Department of Agriculture and the Department of Housing and Urban Development, and relevant state and local officials, in developing transportation projects and programs which use lands protected by Section 4(f).

The proposed project is a transportation project that may receive federal funding and/or discretionary approvals through the U.S. Department of Transportation (i.e., the Federal Highway Administration (FHWA)); therefore, documentation of compliance with Section 4(f) is required.

This Section 4(f) evaluation has been prepared in accordance with the FHWA/FTA regulations for Section 4(f) compliance codified at 23 CFR §771.135. Additional guidance has been obtained from the FHWA Technical Advisory T 6640.8A (1987), FHWA Section 4(f) Policy Paper (1987), FHWA Western Resource Center Section 4(f) Checklist (1997), and FHWA California Division Environmental Checklist – "Draft" Environmental Documents (1998).

The proposed project does not have publicly owned parks, recreation areas, wildlife or waterfowl refuges, or cultural resources of national, state or local significance located in the project vicinity. Accordingly, Section 4(f) does not apply to the U.S. 101/Del Norte Boulevard Interchange Improvement Project.

APPENDIX D
TITLE VI POLICY

DEPARTMENT OF TRANSPORTATION
OFFICE OF THE DIRECTOR
1120 N STREET
P. O. BOX 942873
SACRAMENTO, CA 94273-0001
PHONE (916) 654-5266
FAX (916) 654-6608
TTY (916) 653-4086

Flex your power!
Be energy efficient!

January 14, 2005

TITLE VI
POLICY STATEMENT

The California Department of Transportation under Title VI of the Civil Rights Act of 1964 and related statutes, ensures that no person in the State of California shall, on the grounds of race, color, national origin, sex, disability, and age, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity it administers.

WILL KEMPTON
Director

APPENDIX E

NOTICE OF PREPARATION & INITIATION OF STUDIES

(Pending)

NOTICE OF PREPARATION/
NOTICE OF INITIATION OF STUDIES

DATE: February 13, 2007

TO: State Clearinghouse
Federal & State Responsible Agencies

Other interested parties

FROM: City of Oxnard
305 West Third Street
Oxnard, CA 93030

Caltrans
District 7
Environmental Branch
100 So. Main Street
Los Angeles, CA 90012

SUBJECT: ***U.S. 101/Del Norte Boulevard Interchange Improvement Project Notice of Preparation (NOP)/Notice of Initiation of Studies (NOIS)***

This NOP/NOIS is to inform you that the California Department of Transportation (Caltrans) will act as the liaison on behalf of the Federal Highway Administration (FHWA) under the National Environmental Policy Act (NEPA). Caltrans, in cooperation with the City of Oxnard (City), will serve jointly as the lead agency under the California Environmental Quality Act (CEQA), and FHWA serves as the lead agency under NEPA. The County of Ventura (County) serves as a Responsible Agency under CEQA. A combined Environmental Assessment (EA)/Environmental Impact Report (EIR) under NEPA and CEQA respectively, will be prepared for the project.

The City, in cooperation with Caltrans/FHWA, proposes to reconfigure the existing United States Highway 101 (U.S. 101)/Del Norte Boulevard Interchange, located in the City, to accommodate planned future freeway widening and to eliminate geometric deficiencies at the interchange. The proposed project would require the acquisition of unincorporated County property that is in use as farmland, in addition to minor ROW acquisition from an adjacent County-owned parcel located northwest of the interchange, and a commercial/industrial park located southeast of the interchange. Four alternatives are under consideration, including the No Build Alternative, as follows:

Alternative 1 – No Build Alternative: This alternative would maintain the current configuration of the U.S. 101/Del Norte Boulevard Interchange. The existing overcrossing would remain as two lanes and would not accommodate the expected future traffic demand and planned widening of the freeway mainline. In addition, existing nonstandard features would not be corrected. The congestion currently experienced at this location would not be alleviated and would deteriorate with time. There are no construction or right-of-way (ROW) costs associated with this alternative.

Alternative 2 – Compact Diamond: This alternative would replace the existing overcrossing with one that would provide 5 lanes of traffic (two 12-foot [ft] through lanes in each direction and one 14-ft back-to-back left-turn lane), 8-ft shoulders (sufficient to accommodate a Class II bikeway), and 5-ft sidewalks on both sides of the bridge. The on- and off-ramps in both directions of travel would be realigned to accommodate the proposed future freeway widening, improve sight distances, and facilitate truck movements. An auxiliary lane would be added leading to the southbound off-ramp. Camino Avenue, a local connector road to the south of U.S. 101, would be realigned further south to provide the Caltrans standard 525-ft separation distance between the point of access control and the local street system. Ventura Boulevard, which is located north of the existing northbound on-ramp to U.S. 101, would also be realigned slightly to the north.

Alternative 3 – Loop On-Ramp: This alternative would provide the same improvements as Alternative 2 to the Del Norte Boulevard and Camino Avenue southbound on- and off-ramps, and it would add a northbound loop on-ramp. The northbound on-ramp would be aligned slightly more to the south than

proposed in Alternative 2. Ventura Boulevard and the northbound on- and off-ramps would be realigned accordingly, further to the north than proposed in Alternative 2.

Alternative 4 – Modified Loop On-Ramp: This alternative would provide the same improvements as Alternative 3 to the Del Norte Boulevard and Camino Avenue southbound on- and off-ramps, and would include a northbound loop on-ramp as proposed in Alternative 3. However, in comparison to Alternative 3, Alternative 4 would eliminate the direct northbound on-ramp at the northwest quadrant of the U.S. 101/Del Norte Boulevard Interchange. This alternative would also provide for an improved connection of Ventura Boulevard with Del Norte Boulevard by eliminating differential design speed along these contiguous routes. The northbound on-ramp is not required as the Level of Service (LOS) at the intersection without the ramp attains acceptable LOS for both the AM and PM peak hour traffic periods.

In comparison to Alternative 3, less right-of-way of the agricultural properties north of U.S. 101 would be required to accommodate Alternative 4, and additional right-of-way of the County-owned parcel located north of U.S. 101 and south of Ventura Boulevard would be required to accommodate Alternative 4. The same right-of-way areas south of U.S. 101 proposed in Alternative 2 and 3 would be required to accommodate Alternative 4. Alternative 4 is the preferred alternative based on improved geometry and safety compared with Alternatives 2 and 3. The site plan for Alternative 4 is provided in Attachment 5.

Purpose of the NOP/NOIS:

This NOP/NOIS is to inform you that Caltrans is initiating technical studies to examine the potential for environmental impacts associated with the proposed project. The results of these studies will be reported in the EA. Also, the City intends to prepare an EIR for the proposed project, also based on the technical studies noted above. Based on information obtained to date, it is expected that the alternatives may affect the following environmental factors; therefore, they will be analyzed in the environmental document: land use and planning; agricultural resources; cultural resources; biological resources; noise; air quality; hazards and hazardous materials; community and environmental justice; and water quality/drainage.

To Responsible and Trustee Agencies:

We need to know the applicable permit and/or environmental review statutory requirements of your agency and the scope and content of environmental information that is germane to your agency's statutory responsibilities in conjunction with the proposed project. Your agency will need to use the EA/EIR when considering your permit or other required approval. 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. Please provide us with the name and pertinent information for a contact person in your agency.

To Interested Parties:

We need to know the issues that you feel should be addressed in the EA/EIR and the range of alternatives that should be considered.

Scoping Meeting:

A scoping meeting will be held on the following date, and will provide an opportunity for comment:

Date:	Tuesday, February 27, 2007
Time:	4:30 p.m. to 7:30 p.m. (formal presentation at 6:00 p.m.)
Place:	Del Norte Regional Recycling & Transfer Center Education Room 111 S. Del Norte Boulevard Oxnard, CA 93030

Written Comments:

Please direct your written responses to either of the parties named below:

Ralph Alamillo	Carlos Montez
Project Manager	Senior Environmental Planner
City of Oxnard	Caltrans
305 West Third Street	100 So. Main Street
Oxnard, CA 93030	Los Angeles, CA 90012
(805) 385-8341	(213) 897-9116

Your input on this project by March 15, 2007 is greatly appreciated.

If you have any questions, please contact Ralph Alamillo at (805) 385-8341 (e-mail: **ralph.alamillo@ci.oxnard.ca.us**).

2/9/07
Date

Ralph Alamillo
Project Manager

APPENDIX F

SCOPING COMMENTS SUMMARY

APPENDIX F – SCOPING COMMENTS SUMMARY

U.S. 101/Del Norte Interchange Project NOP & NOI Comments				
Respondent	**Date**	**Summary of Comments**	**EA/EIR Reference**	**Response to Comment**
Kim Uhlich, Ventura County LAFCO	2/22/07	Add the requirement for the City of Oxnard (City) to file an application for reorganization with the Ventura Local Agency Formation Commission (LAFCO) to annex the portion of the project area outside of the City's boundaries and simultaneously detach the same area from the Ventura County Resource Conservation District and the Ventura County Fire Protection District.	Land Use and Planning	The City intends to pursue annexation in conjunction with LAFCO's municipal service review program. If entire northside parcel is purchased, the remainder of the parcel would remain in agricultural use.
Kim Uhlich, Ventura County LAFCO	2/22/07	The City needs to file an application for a sphere of influence amendment with the aforementioned reorganization application.	Land Use and Planning	The City intends to pursue annexation in conjunction with LAFCO's municipal service review program . See previous response to comment.
Kim Uhlich, Ventura County LAFCO	2/22/07	Discuss the project's consistency with the local policies included in the Ventura LAFCO Commissioner's Handbook (Commissioner's Handbook), including LAFCO's policies regarding "prime agricultural land."		The City intends to pursue annexation in conjunction with LAFCO's municipal service review program.
Kim Uhlich, Ventura County LAFCO	2/22/07	Address the following policies from the Commissioner's Handbook: 3.1.5.2, 4.1.5.2, 3.1.5.3, 4.1.5.3; including detailed alternative site analysis to determine whether sufficient non-prime agricultural or vacant land exists within City boundaries that could be developed for the same or similar use as that of the proposed project, as well as analysis of any non-prime land and an evaluation of the redevelopment potential of developed areas.		The City intends to pursue annexation in conjunction with LAFCO's municipal service review program.
Kim Uhlich, Ventura County LAFCO	2/22/07	Although not a CEQA issue, Policy 2.1.2.1, a new LAFCO policy, requires LAFCO applicants to submit information regarding the location and acreage totals for prime and nonprime agricultural land involved in the reorganization proposal area and adjacent areas, and the effects on		The City intends to pursue annexation in conjunction with LAFCO's municipal service review program

U.S. 101/Del Norte Interchange Project NOP & NOI Comments				
Respondent	**Date**	**Summary of Comments**	**EA/EIR Reference**	**Response to Comment**
		the economic integrity of the agricultural industry in Ventura County.		
Kim Uhlich, Ventura County LAFCO	2/22/07	Change jurisdictional boundaries map to depict the correct location of the project site.	Attachment 2 Jurisdictional Boundaries Map	Moved arrow location and "project site" label to correct location.
Rosa Munoz, CA Public Utilities Commission	3/02/07	During construction, traffic circulation and queuing should be monitored and considered for impacts to the DOT# 745856P, and appropriate mitigation measures should be adopted for any safety impacts.	Transportation /Traffic	Comment noted, and mitigation incorporated.
Kim Uhlich, Ventura County LAFCO	2/22/07	LAFCO Policy 3.1.3.2 and 4.1.2.2 should be addressed, which deal with LAFCO's goal to set boundaries that conform to lines of ownership and assessment.	Land Use and Planning	The City intends to pursue annexation in conjunction with LAFCO's municipal service review program
Rosa Munoz, CA Public Utilities Commission	3/02/07	Please advise the Consumer Protection & Safety Division of the Public Utilities Commission on the status of the project.	Utilities/ Service Systems	Comment noted, they have been added to project distribution list.
Nazir Lalani, Ventura County Public Works	3/06/07	Board of Supervisors (BOS) approval is required for right-of-way acquisition and vacation within the unincorporated area, and the portion of the acquired property used as a City/Caltrans roadway shall be deemed as a City/Caltrans roadway for all purposes.		Comment noted, the proper acquisition and approval process is will be undertaken.
Nazir Lalani, Ventura County Public Works	3/06/07	The City of Oxnard should file an application for reorganization with LAFCO to annex the portion of the project area located outside of the City boundaries.		The City intends to pursue annexation in conjunction with LAFCO's municipal service review program.
Nazir Lalani, Ventura County Public Works	3/06/07	Identify how the access to the Water and Sanitation facility will be maintained at all times. It is recommended that the pump station be relocated as part of this project.	Community Impacts Transportation /Traffic	The access driveway to the County Water and Sanitation facility will be extended to the realigned Ventura Boulevard. The shift in alignment of Ventura Boulevard at this location is minimal. The driveway will be maintained open at all times during

U.S. 101/Del Norte Interchange Project NOP & NOI Comments				
Respondent	**Date**	**Summary of Comments**	**EA/EIR Reference**	**Response to Comment**
				project construction (including its staged extension). Changes at the driveway (access) location are minimal as the driveway is located at the outer limits of the proposed improvements. There is no need for relocation of the facility.
Rita Graham, Ventura County Agricultural Commissioner's Office	2/26/07	The CEQA Guidelines set forth the statutory requirements for review and processing of projects, and Ventura County has adopted thresholds of significance and methodologies for analysis of agricultural impacts.	Agricultural Resources	Comment noted, and is reflected in the environmental document.
Rita Graham, Ventura County Agricultural Commissioner's Office	2/26/07	The farmland considered for conversion is classified "Farmland of Statewide Significance" on the California Department of Conversation Farmland Mapping and Monitoring Important Farmland Inventory (2004) map, and the County General Plan land use designation for this farmland is "Agricultural."	Agricultural Resources Land Use Planning	Comment noted, and is reflected in the environmental document.
Rita Graham, Ventura County Agricultural Commissioner's Office	2/26/07	Separate permits are not required by the Ventura County Agricultural Commissioner's Office for the project type.	Agricultural Resources	Comment noted.
Patrick Tumamait	2/27/07	New State law SB-18 requires a Native Chumash monitor be on site as well as an archeologist if cultural materials are found.	Cultural Resources	Comment noted.
Member, El Rio Municipal Advisory Commission	3/15/07	During periods of traffic congestion, a significant amount of northbound traffic (including large trucks) divert onto Ventura Boulevard, in between the U.S. 101/Del Norte Boulevard interchange and the adjacent U.S. 101/Rice Avenue Interchange. A method (not defined, perhaps signage?) should be done to discourage this behavior, with particular emphasis on trucks.	Community Impacts Transportation /Traffic	Comment noted, and incorporated into construction mitigation for transportation/traffic.
Member,	3/15/07	The amount of agricultural land		Comment noted. Impacts

U.S. 101/Del Norte Interchange Project NOP & NOI Comments				
Respondent	**Date**	**Summary of Comments**	**EA/EIR Reference**	**Response to Comment**
El Rio Municipal Advisory Commission		being taken is of concern. The remainder parcel would be much smaller than it currently is and this raises questions as to its viability for agricultural production. The property owner should be made aware of the project.	Agricultural Resources Community Impacts	resulting from lost agricultural land for each build alternative are analyzed in the Draft EA/EIR.
Member, El Rio Municipal Advisory Commission	3/15/07	Interstate projects are taking longer to be implemented than desirable.	General	Comment noted.
Member, El Rio Municipal Advisory Commission	3/15/07	Camino Avenue should be aligned with the southern end of the Power Machinery complex (as an extension of Gonzales Road) to connect better with the existing roadways, rather than in the midpoint, where it appears to be aligned near a drainage channel.	Project Description	Camino Avenue is proposed for realignment with the future extension of Gonzales Road. The future extension of Gonzales Road is shown in the proposed Sakioka Farms Specific Plan.
Member, El Rio Municipal Advisory Commission	3/15/07	The tight diamond configuration would take much less agricultural land and therefore would be desirable.	Agricultural Resources	Comment noted. Impacts to agricultural land for the tight diamond configuration are analyzed as build Alternative 2.
Member, El Rio Municipal Advisory Commission	3/15/07	Freeway interchanges are in need of improvement in a number of locations; drivers are using portions of the local roadway system to skirt heavy freeway traffic.	General Purpose and Need	Comment noted.
Member, El Rio Municipal Advisory Commission	3/15/07	Comments from the MAC should be considered by the City of Oxnard and County of Ventura before final decisions on the project are made.	General	Comment noted. All comments from the MAC are included and considered in the Draft EA/EIR.

APPENDIX G

ACRONYMS

APPENDIX G – ACRONYMS

AAQS	ambient air quality standards
AAM	Annual Arithmetic Mean
APE	area of potential effect
ADA	Americans with Disabilities Act
ADL	aerially deposited lead
ADT	Average Daily Traffic
AQMP	Air Quality Management Plan
ANSI	American National Standards Institute
ARS	Archaeological Survey Report
ASR	Archaeological Survey Report
ASTM	American Society of Testing Materials
bgs	below ground surface
BMP	best management practices
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CAL	Calibration Site
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CARIDAP	California Archeological Resource Identification and Data Acquisitions Programs
CBB	City Buffer Boundary
CCAA	California Clean Air Act
CCSO	Cultural and Community Studies Office
CDFG	California Fish and Game Services
CEC	California Energy Commission
CEC	Council on Environmental Quality
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act of 1980
CERFA	Community Response Facilitation Act of 1992
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
CHBC	California Historical Building Code

CLOMR	Conditional Letter of Map Revision
CNDDB	California Natural Diversity Data Base
CNG	compressed natural gas
CO	Carbon Monoxide
COM	Commercial
CSHM	California Seismic Hazard Map
CURB	City Urban Restriction Boundary
dB	decibel
dBA	A-weighted decibels
DOT	Department of Transportation
EMFAC	Emission FACtors
EO	Executive Order
EPA	Environmental Protection Agency
ESA	Environmental Sensitive Areas
FEMA	Federal Emergency Management Administration
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
FIRM	Flood Insurance Rate Maps
FHWA	Federal Highway Administration
FPPA	Farmland Protection Policy Act
FSTIP	Federal Statewide Transportation Improvement Plan
Ft	foot, feet
FTA	Federal Transit Administration
FWS	(US) Fish and Wildlife Service
GPA	General Plan Amendment
GPS	Global Position Satellite
GSA	General Services Agency (County of Ventura)
GWh	Gigawatt hours
HAP	hazardous air pollutants
HHS	Health and Human Services
HPSR	Historic Property Survey Report
HRER	Historic Resources Evaluation Report
Hz	Hertz
I.L.	Insertion Loss
ISA	Initial Site Assessment

km/h	kilometers per hour
LADWP	Los Angeles Department of Water and Power
LAFCO	Local Agency Formation Commission
LD870	Larson Davis Model 870
LOMR	Letter of map Revision
LOS	Level of Service
LARWQCB	Los Angeles Regional Water Quality Control Board
$L_{eq(h)}$	Equivalent Sound Level
L_{max}	Maximum Sound Level
L_p	sound pressure level
m	meter
MCE	maximum credible earthquake
MFR	Multiple Family Residence
$\mu g/m^3$	micrograms per cubic meter
mph	miles per hour
MPO	metropolitan planning organization
MSAT	Mobile Source Air Toxics
MSL	mean sea level
MOU	Memorandum of Agreement
n/a	not available
NAAQS	National Ambient Air Quality Standards
NAC	Noise Abatement Criteria
NAHC	California Native American Heritage Commission
NEPA	National Environmental Policy Act
N/m^2	micro-Newton per square meter
NO_x	Nitrogen Oxide
NPDES	National Pollution Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRHP	National Register Historic Places
NE	Northeast
NW	Northwest
O_3	Ozone
OSHA	Occupational Safety and Health Act
P_b	Lead

PBA	peak bedrock acceleration
POAQ	Projects of Air Quality Concern
PM	Post Mile
PM	Particulate Matter
Ppm	parts per million
Pqs	professional qualified staff
PRC	Public Resources Code (California)
RCB	reinforced concrete box-type culverts
RCRA	Resource Conservation and Recovery Act of 1976
REC	recognized environmental concern
ROC	reactive organic compounds
ROW	Right-of-Way
RTIP	Regional Transportation Improvement Programs
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
SCAG	Southern California Association of Governments
SCAT	South Coast Area Transit Agency
SCCAB	South Central Coast Air Basin
SCCIC	South Central Coastal Information Center
SCE	Southern California Edison Company
SHBSB	State Historic Building Safety Board
SHPO	State Historic Preservation Officer
SFR	Single Family Residence
SIP	State Implementation Plan
SO_2	Sulfur Dioxide
SOAR	Save Open Space and Agricultural Resources
STAA	Surface Transportation Assistance Act
STIP	State Transportation Improvement Program
SWPPP	State Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	Toxic Air Contaminants
TCM	Transportation Control Measures
TIP	Transportation Improvement Plan
TMP	Transportation Management Plan

TMDL	Total Maximum Daily Loads
TNM	Traffic Noise Model
TSCA	Toxic Substances Control Act
TSS	Totally suspended solids
UPRR	Union Pacific Railroad
USACE	United States Army Corps. of Engineers
U.S. 101	United States Highway 101
U.S.C.	United States Code
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Services
VCAPCD	Ventura County Air Pollution Control District
VMT	vehicle miles traveled
WDR	Waste Discharge Requirements