SOUTH ORANGE COUNTY TRANSPORTATION INFRASTRUCTURE IMPROVEMENT PROJECT LAND USE TECHNICAL REPORT

FINAL

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PREFACE

The alternatives considered for the South Orange County Transportation Infrastructure Improvement Project (SOCTIIP) are described in detail in the following technical report:

Project Alternatives Technical Report (P&D Consultants, 2003).

The alternatives include a number of build alternatives including extensions to the existing Foothill Transportation Corridor, improvements to Interstate 5 and arterial highway improvements.

Individual technical reports were prepared to assess the potential environmental impacts of the SOCTIIP alternatives. Each of the following reports describes the study area for the individual parameter, existing conditions, study methodology, short and long term adverse and beneficial effects of the SOCTIIP alternatives, and appropriate mitigation measures.

Air Quality Technical Report (Mestre Greve Associates, 2003).

Geotechnical, Geology and Soils Technical Report (GeoPentech, 2003).

Hazardous Materials and Wastes Technical Report (Initial Site Assessment) (P&D Consultants, 2003).

Phase I Historical Resource Inventory Report (Greenwood and Associates, 2003).

Hydrology Technical Report (Psomas, 2003).

Land Use Technical Report (P&D Consultants, 2003).

Location Hydraulic Studies (Psomas, 2003).

Military Impacts Technical Report (P&D Consultants, 2003).

Natural Environment Study (P&D Consultants, 2003).

Noise Assessment (Mestre Greve Associates, 2003).

Paleontological Resources Technical Report (SWCA, 2003).

Phase I Archeological Inventory (Greenwood and Associates, 2003).

Public Services and Utilities Technical Report (P&D Consultants, 2003).

Recreation Resources Technical Report (P&D Consultants, 2003).

Relocation Impacts Technical Report (P&D Consultants, 2003).

Runoff Management Plan (Psomas, 2003).

Socioeconomics and Growth Inducing Impacts Technical Report (P&D Consultants, 2003).

Traffic and Circulation Technical Report (Austin Foust Associates, 2003).

Visual Impact Assessment Technical Report (P&D Consultants, 2003).

These technical reports are available for review at the Transportation Corridor Agencies office.

This Technical Report identifies and evaluates the potential environmental impacts of a wide range of build and no action alternatives considered for the SOCTIIP. Based on the findings of the analysis of the potential effects of these alternatives as documented in the technical reports, the SOCTIIP Collaborative evaluated each alternative and made a decision whether to advance an alternative for detailed evaluation in the EIS/SEIR or to eliminate that alternative from detailed consideration in the EIS/SEIR. Table P-1 lists the SOCTIIP alternatives described in this Technical Report and identifies which were advanced for detailed evaluation in the EIS/SEIR and which were eliminated from further consideration in the EIS/SEIR. The detailed explanation for why each alternative was eliminated is provided in the EIS/SEIR.

During the preparation of the technical studies for the SOCTIIP, the name of the Rancho Mission Viejo (RMV) Land Conservancy was changed to the Donna O'Neill Land Conservancy. All references to the RMV Land Conservancy or the RMV Conservancy in this Technical Report should be interpreted to refer to the Donna O'Neill Land Conservancy.

TABLE P-1
SOCTIIP ALTERNATIVES ADVANCED TO THE EIS/SEIR OR ELIMINATED FROM DETAILED EVALUATION IN THE EIS/SEIR

TOLL ROAD CORRIDOR ALTERNATIVES	
FAR EAST CORRIDOR ALIGNMENT ALTERNATIVES	**Alternative Advanced or Eliminated (1)**
Far East Corridor - Complete - Initial Alternative	Eliminated.
Far East Corridor - Complete - Ultimate Alternative	Eliminated.
Far East Corridor - Talega Variation - Initial Alternative	Eliminated
Far East Corridor - Talega Variation - Ultimate Alternative	Eliminated
Far East Corridor - Cristianitos Variation - Initial Alternative	Eliminated.
Far East Corridor - Cristianitos Variation - Ultimate Alternative	Eliminated.
Far East Corridor - Agricultural Fields Variation - Initial Alternative	Eliminated.
Far East Corridor - Agricultural Fields Variation - Ultimate Alternative	Eliminated.
Far East Corridor - Ortega Highway Variation - Initial Alternative	Eliminated.
Far East Corridor - Ortega Highway Variation - Ultimate Alternative	Eliminated.
Far East Corridor - Avenida Pico Variation - Initial Alternative	Eliminated.
Far East Corridor - Avenida Pico Variation - Ultimate Alternative	Eliminated.
Far East Corridor-West-Initial Alternative	Advanced.
Far East Corridor-West-Ultimate Alternative	Advanced.
Far East Corridor-Modified-Initial Alternative	Advanced.
Far East Corridor-Modified-Ultimate Alternative	Advanced.
CENTRAL CORRIDOR ALIGNMENT ALTERNATIVES	**Alternative Advanced or Eliminated (1)**
Central Corridor - Complete - Initial Alternative	Advanced.
Central Corridor - Complete - Ultimate Alternative	Advanced.
Central Corridor - Avenida La Pata Variation - Initial Alternative	Advanced.
Central Corridor - Avenida La Pata Variation - Ultimate Alternative	Advanced.
Central Corridor - Ortega Highway Variation - Initial Alternative	Eliminated.
Central Corridor - Ortega Highway Variation - Ultimate Alternative	Eliminated.
ALIGNMENT 7 CORRIDOR ALIGNMENT ALTERNATIVES	**Alternative Advanced or Eliminated (1)**
Alignment 7 Corridor - Complete - Initial Alternative	Eliminated.
Alignment 7 Corridor - Complete - Ultimate Alternative	Eliminated.
Alignment 7 Corridor - 7 Swing Variation - Initial Alternative	Eliminated.
Alignment 7 Corridor - 7 Swing Variation - Ultimate Alternative	Eliminated.
Alignment 7 Corridor - Far East Crossover Variation - Initial Alternative	Eliminated.
Alignment 7 Corridor - Far East Crossover Variation - Ultimate Alternative	Eliminated.
Alignment 7 Corridor - Far East Crossover (Cristianitos) Variation - Initial Alternative	Eliminated.
Alignment 7 Corridor - Far East Crossover (Cristianitos) Variation - Ultimate Alternative	Eliminated.

TABLE P-1
SOCTIIP ALTERNATIVES ADVANCED TO THE EIS/SEIR OR ELIMINATED FROM DETAILED EVALUATION IN THE EIS/SEIR

TOLL ROAD CORRIDOR ALTERNATIVES	
Alignment 7 Corridor - Far East Crossover (Agricultural Fields) Variation - Initial Alternative	Eliminated.
Alignment 7 Corridor - Far East Crossover (Agricultural Fields) Variation - Ultimate Alternative	Eliminated.
Alignment 7 Corridor - Ortega Highway Variation - Initial Alternative	Eliminated.
Alignment 7 Corridor - Ortega Highway Variation - Ultimate Alternative	Eliminated.
Alignment 7 Corridor - Avenida La Pata Variation - Initial Alternative	Advanced.
Alignment 7 Corridor - Avenida La Pata Variation - Ultimate Alternative	Advanced.
Alignment 7 Corridor-Far East Corridor-Modified-Initial Alternative	Advanced.
Alignment 7 Corridor-Far East Corridor-Modified-Ultimate Alternative	Advanced.
NON-TOLL ROAD ALTERNATIVES	
ARTERIAL IMPROVEMENTS ALTERNATIVES	**Alternative Advanced or Eliminated (1)**
Arterial Improvements Only - Alternative	Advanced.
Arterial Improvements Only Plus HOV and Spot Mixed-Flow Lanes on I-5 Alternative	Eliminated.
I-5 ALTERNATIVE	**Alternative Advanced or Eliminated (1)**
I-5 Widening Alternative	Advanced.
NO ACTION ALTERNATIVES	**Alternative Advanced or Eliminated (1)**
No Action Alternative - Orange County Projections 2000	Advanced.
No Action Alternative - Rancho Mission Viejo (RMV) Development Plan	Advanced.

(1) Advanced: Alternative was advanced for detailed evaluation in the EIS/SEIR.
Eliminated: Alternative was eliminated from detailed evaluation in the EIS/SEIR and is discussed in the EIS/SEIR as an alternative "considered and eliminated."

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GLOSSARY OF ACRONYMS

G.1 ACRONYMS FOR THE BUILD ALTERNATIVES

There are a number of build alternatives considered for the South Orange County Transportation Infrastructure Improvement Project. The acronyms for the build alternatives are listed below.

Far East Corridor – Complete - Initial Alternative	FEC-Initial Alternative
Far East Corridor – Complete - Ultimate Alternative	FEC-Ultimate Alternative
Far East Corridor - Cristianitos Variation - Initial Alternative	FEC-CV-Initial Alternative
Far East Corridor - Cristianitos Variation - Ultimate Alternative	FEC-CV-Ultimate Alternative
Far East Corridor - Agricultural Fields Variation - Initial Alternative	FEC-AFV-Initial Alternative
Far East Corridor - Agricultural Fields Variation - Ultimate Alternative	FEC-AFV-Ultimate Alternative
Far East Corridor - Ortega Highway Variation - Initial Alternative	FEC-OHV-Initial Alternative
Far East Corridor - Ortega Highway Variation - Ultimate Alternative	FEC-OHV-Ultimate Alternative
Far East Corridor - Avenida Pico Variation - Initial Alternative	FEC-APV-Initial Alternative
Far East Corridor - Avenida Pico Variation - Ultimate Alternative	FEC-APV-Ultimate Alternative
Far East Corridor - Talega Variation - Initial Alternative	FEC-TV-Initial Alternative
Far East Corridor - Talega Variation - Ultimate Alternative	FEC-TV-Ultimate Alternative
Central Corridor – Complete - Initial Alternative	CC-Initial Alternative
Central Corridor – Complete - Ultimate Alternative	CC-Ultimate Alternative
Central Corridor - Avenida La Pata Variation - Initial Alternative	CC-ALPV-Initial Alternative
Central Corridor - Avenida La Pata Variation - Ultimate Alternative	CC-ALPV-Ultimate Alternative
Central Corridor - Ortega Highway Variation - Initial Alternative	CC-OHV-Initial Alternative
Central Corridor - Ortega Highway Variation - Ultimate Alternative	CC-OHV-Ultimate Alternative
Alignment 7 Corridor – Complete - Initial Alternative	A7C-Initial Alternative
Alignment 7 Corridor – Complete - Ultimate Alternative	A7C-Ultimate Alternative
Alignment 7 Corridor- 7 Swing Variation - Initial Alternative	A7C-7SV-Initial Alternative
Alignment 7 Corridor- 7 Swing Variation - Ultimate Alternative	A7C-7SV-Ultimate Alternative
Alignment 7 Corridor - Far East Crossover Variation - Initial Alternative	A7C-FECV-Initial Alternative
Alignment 7 Corridor - Far East Crossover Variation – Ultimate Alternative	A7C-FECV-Ultimate Alternative
Alignment 7 Corridor - Far East Crossover (Cristianitos) Variation - Initial Alternative	A7C-FECV-C-Initial Alternative
Alignment 7 Corridor - Far East Crossover (Cristianitos) Variation - Ultimate Alternative	A7C-FECV-C-Ultimate Alternative
Alignment 7 Corridor - Far East Crossover (Agricultural Fields) Variation - Initial Alternative	A7C-FECV-AF-Initial Alternative
Alignment 7 Corridor - Far East Crossover (Agricultural Fields) Variation - Ultimate Alternative	A7C-FECV-AF-Ultimate Alternative
Alignment 7 Corridor - Ortega Highway Variation - Initial Alternative	A7C-OHV-Initial Alternative
Alignment 7 Corridor - Ortega Highway Variation - Ultimate Alternative	A7C-OHV-Ultimate Alternative
Alignment 7 Corridor - Avenida La Pata Variation - Initial Alternative	A7C-ALPV-Initial Alternative
Alignment 7 Corridor - Avenida La Pata Variation - Ultimate Alternative	A7C-ALPV-Ultimate Alternative
Arterial Improvements Only Alternative	AIO Alternative
Arterial Improvements Plus HOV and Spot Mixed-Flow Lanes on I-5 Alternative	AIP Alternative
I-5 Widening Alternative	I-5 Alternative

No Action Alternative-Orange County: Projections 2000	No Action Alternative-OCP-2000
No Action Alternative-Rancho Mission Viejo Development Plan	No Action Alternative-RMV

G.2 OTHER ACRONYMS AND DEFINITIONS

A1	General Agriculture (land use designation)
A1	Agricultural District Zoning
Ac	Acre, acres
ACOE	United States Army Corps of Engineers
Avd	Avenida
BMP	Best Management Practices
BNSF	Burlington Northern Santa Fe Railroad
BP	Business Park (land use designation)
C	Coastal sage scrub
C-1	Central Commercial (land use designation)
C-2	General Commercial (land use designation)
CAA, CAAs	Community Analysis Area, Areas
Caltrans	California Department of Transportation
CC	Central Commercial (land use designation)
CC	Community Commercial (land use designation)
CCC	California Coastal Commission
CCA	California Coastal Act
CDC	California Department of Conservation
CCMP	California Coastal Management Program
CDFG	California Department of Fish and Game
CDP	Comprehensive Development Plan
CE	Categorical Exemption
CE	Categorical Exclusion
CEQ	Council on Environmental Quality
CEQ Regulations	Council on Environmental Quality Regulations
CEQA	California Environmental Quality Act
CEQA Guidelines	California Environmental Quality Act Guidelines
CIA	Community Impact Assessment
CIP	Capital Improvement Program
cm	centimeter
CMP	Congestion Management Program
CRA	California Resources Agency
CRA	Community Redevelopment Agency
CT-RTC	Caltrans Route Concept Report
CWRP	Chiquita Water Reclamation Plan
CZMA	Coastal Zone Management Act
D	Diesel
D-D	Development District (land use designation)
DON	Department of the Navy
du, dus	Dwelling unit, units
EA	Environmental Assessment

EIR	Environmental Impact Report
EIS	Environmental Impact Statement
ENRMO	Camp Pendleton's Environmental and Natural Resources Management Office
ESA, ESAs	Endangered Species Act, Acts
FC	Freeway Commercial (land use designation)
FESA	Federal Endangered Species Act (42 U.S.C. 4371)
FHWA	Federal Highway Administration
FONSI	Finding of No Significant Impact
FMMP	Farmland Mapping and Monitoring Program
FPPA	Farmland Protection Policy Act
F.R.	Federal Register
FTC-N	Foothill Transportation Corridor-North
FTC-S	Foothill Transportation Corridor-South
FTC-South	Foothill Transportation Corridor-South
G	Gas
GDP	General Development Plan
GIS	Geographic Information Systems
GP, GPs	General Plan, Plans
GP	General Purpose
GPA	General Plan Amendment
ha	Hectare, hectares
HCP	Habitat Conservation Plan
HOV	High occupancy vehicle, vehicles
I	Institutional (land use designation)
I2	Light Industrial (land use designation)
I3	Heavy Industrial (land use designation)
I-405	Interstate 405
I-5	Interstate 5
IDPA	Integrated Development Planning Area (City of San Clemente)
INRMP	MCB Camp Pendleton Integrated Natural Resource Management Plan
IS	Initial Study
IS/EA	Initial Study/Environmental Analysis
km	Kilometer, kilometers
L	Low Density Residential (land use designation)
LAFCO	Local Agency Formation Commission
LCP, LCPs	Local Coastal Program, Programs
LDR	Low Density Residential (land use designation)
LESA	Land Evaluation and Site Assessment
LFPC	Las Flores Planned Community
LOS	Level or levels of service
LUE, LUEs	Land Use Element, Elements
MCAS, MCASs	Marine Corps Air Station, Stations
MCB Camp Pendleton	Marine Corps Base Camp Pendleton
mgd	million gallons per day

MH	Medium High Residential (land use designation)
mi	Mile, miles
mld	million liters per day
MMP	Mitigation Monitoring Program
MPAH	Master Plan of Arterial Highways as overseen
MU	Mixed Use (land use designation)
NB	Northbound
NCCP	Natural Community Conservation Plan or Program
NCTD	North County Transit District
ND	Negative Declaration
NRCS	United States Department of Agriculture, Natural Resources Conservation Service
NEPA	National Environmental Policy Act
OCP-2000	Orange County Projections 2000
OCTA	Orange County Transportation Authority
OS	Open Space (land use designation)
OSC	Open Space Commercial (land use designation)
OS 1	Open Space, public (land use designation)
OS 2	Open Space, privately owned (land use designation)
OS-2	Open Space, Drainage Facilities (land use designation)
O-S	Open space (land use designation)
P	Public Parking (land use designation)
PC	Planned Community
PDSD	County of Orange Planning and Development Services Department
PRD	Planned Residential Development (land use designation)
PS&E	Plans, Specifications and Engineering
PSR	Project Study Report
PU	Utility Buildings and Facilities (land use designation)
RCFPP	Regional Circulation Financing and Phasing Program
RCPG	Regional Comprehensive Plan and Guidelines
RL	Residential, Low Density (land use designation)
RM	Residential, Medium Density (land use designation)
RML	Residential, Medium to Low Density (land use designation)
Rms	Rooms
RMV	Rancho Mission Viejo
ROW	right-of-way
RSA	Regional Statistical Area
RTIP	Regional Transportation Improvement Program
RTP	Regional Transportation Plan
SAMP	Special Area Management Plan
SANDAG	San Diego Association of Governments
SB	Southbound
SCAG	Southern California Association of Governments
SEIR	Subsequent Environmental Impact Report
sf	square footage, square feet
SJHTC	San Joaquin Hills Transportation Corridor

SMWD	Santa Margarita Water District
SOCTIIP	South Orange County Infrastructure Improvement Project
SOI	Sphere of Influence, an area designated by LAFCO for future annexation to a particular city
SONGS	San Onofre Nuclear Generating Station
SOSB	San Onofre State Beach
SP	Specific Plan
SR 74	State Route 74
SR 91	State Route 91
SR 241	State Route 241
SRA, SRAs	Subregional Area, Areas
TCA	Transportation Corridor Agency
TPZ, TPZs	Timber Protection Zone, Zones
TSF	Thousand square feet
TSM	Transportation Systems Management
TT	Tentative Tract
UAC	Urban Activity Center (land use designation)
U.S.C.	United States Code
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service
VC	Village Commercial (land use designation)
W	Wetland, wetlands
ZC	Zone Change
ZO, ZOs	Zoning Ordinance, Ordinances

G.3 MEASUREMENTS

The measurement units in this report are expressed in both metric and English units, with metric units followed by English units in parentheses. For ease of translation, the following conversions are included to allow the reader to better understand the measurements in the report.

English/Metric Conversion	**Metric/English Conversion**
AREA	**AREA**
1 square foot = 0.093 square meters 1 acre = 0.405 hectares, 4,047 square meters 1 square mile(640 acres) = 2.59 square kilometers	1 square meter = 10.752 square feet 1 hectare = 2.469 acres 1 square kilometer = 0.386 square miles
LENGTH	**LENGTH**
1 inch = 2.54 centimeters	1 centimeter = 0.394 inch
1 foot = 30.480 centimeters or 0.305 meters	--
1 yard = 0.914 meters	1 meter = 1.094 yards
1 mile = 1.609 kilometers	1 kilometer = 0.621 mile

SECTION 1.0
EXECUTIVE SUMMARY

1.1 INTRODUCTION

The purpose of this technical report is to inventory land uses and evaluate the impacts of the South Orange County Transportation Infrastructure Improvement Project (SOCTIIP) build alternatives related to land use and agriculture. The study area comprises most of south Orange County as defined in detail in Section 3.0 (Existing Environment) and as shown on Figure 3.1-1. This report analyzes both quantitatively and qualitatively the potential impacts to land use and agriculture of the SOCTIIP build alternatives and the two No Action Alternatives.

1.2 OVERVIEW OF ALIGNMENTS OF THE BUILD ALTERNATIVES

1.2.1 CORRIDOR ALTERNATIVES

All the corridor alternatives extend south from the terminus of the existing Foothill Transportation Corridor (FTC) at Oso Parkway. The alignments of the corridor alternatives cross areas under the jurisdiction of a number of agencies including the County of Orange, the City of San Clemente, the California Department of Parks and Recreation and Marine Corps Base (MCB) Camp Pendleton. The alignments of the corridor alternatives are also in proximity to the Cities of San Juan Capistrano, Mission Viejo and Rancho Santa Margarita.

The majority of the north part of the study area for the SOCTIIP corridor alternatives is on Rancho Mission Viejo (RMV). This land is currently used primarily for cattle grazing with some field and specialty crops. The southernmost segments of several corridor alternatives are on MCB Camp Pendleton. Part of this area is MCB Camp Pendleton land which is leased to the California Department of Parks and Recreation by the United States of America for San Onofre State Beach or which is leased for agricultural uses. The south segments of several alignments traverse both developing and urbanized areas in the City of San Clemente including the communities of Talega, Marblehead Inland and Rancho San Clemente and areas along I-5 (e.g., commercial and residential uses).

1.2.2 NON-CORRIDOR ALTERNATIVES

The Arterial Improvements Only (AIO) and Arterial Improvements Plus High Occupancy Vehicle (HOV) and Spot Mixed Flow Lanes on I-5 (AIP) Alternatives include enhancements to the Master Plan of Arterial Highways (MPAH) in the SOCTIIP study area. La Pata Avenue/Antonio Parkway would be widened beyond its MPAH designation from Oso Parkway to approximately one kilometer (km) (0.62 mile (mi)) south of the future intersection with Camino Las Ramblas. Other improvements that affect land uses would be intersection capacity improvements such as grade separated crossings or intersection widenings to accommodate additional turn lanes. The AIO study area comprises primarily unincorporated County of Orange land on RMV and the City of San Clemente.

The alignments of the arterial alternatives traverse unincorporated Orange County and the Cities

of San Juan Capistrano and San Clemente. The I-5 Alternative traverses or is immediately adjacent to nine cities bordering I-5. Each of these agencies is responsible for land use planning for the areas under their jurisdiction.

The AIP Alternative includes the same arterial improvements as the AIO Alternative and also includes widening of I-5 from Irvine south to the northern San Diego County. The I-5 Alternative proposes widening of I-5 from Irvine to San Diego County to add two general purpose lanes, two high occupancy vehicle (HOV) lanes and auxiliary lanes. The study area for the AIP and I-5 Alternatives includes the Cities of Irvine, Lake Forest, Mission Viejo, Laguna Woods, Laguna Hills, Laguna Niguel, Dana Point, San Juan Capistrano and San Clemente. The study area for the arterial improvements under the AIP and AIO Alternatives includes the RMV property in unincorporated Orange County and the Cities of San Clemente and San Juan Capistrano.

1.3 NO ACTION ALTERNATIVES

There are two No Action Alternatives being analyzed as discussed in Section 2.0. Both assume build out of the County of Orange General Plan (except RMV), the MPAH and Regional Transportation Plan (RTP). The difference between the two No Action Alternatives involves the assumptions for RMV. One assumes RMV builds out to include approximately 21,000 dwelling units (dus) as indicated in OCP-2000. The other assumes build out of RMV consistent with their pending planning application with the County of Orange which proposes 14,000 dus, commercial development, business park development and open space. Since no action would be taken by the TCA, there will not be any land use impacts or impacts to agricultural resources from either of these two alternatives.

1.4 OVERVIEW OF AGRICULTURAL USES

There are agricultural resources and activities in two main parts of the SOCTIIP study area: RMV and MCB Camp Pendleton adjacent to San Onofre State Beach. All the Corridor alternatives would traverse agricultural resources on RMV and/or MCB Camp Pendleton. There are two issues concerning agricultural resources: agricultural activities and soil resources that support those activities. Agricultural activities are broadly defined and include uses such as ranching. Agricultural soils are a limited non-renewable resource that are usually confined to specific locations. Any effect on these resources would be of interest to state and federal agencies that oversee agricultural conservation. As described in detail in Section 3.0, RMV submitted preliminary development plans to the County of Orange for the 9,254.25 hectare (ha) (22,850-acre (ac)) ranch in November 2001. These plans would affect some of the agricultural resources on RMV. Section 6.0 (Impacts Related to Agricultural Resources) discusses the impacts of the SOCTIIP alternatives on agricultural resources.

1.5 SUMMARY OF IMPACTS

"Table 1.5-1 provides a general summary of the impacts of the SOCTIIP Alternatives related to land use and agriculture, the mitigation measures and the level of significance, of those impacts after mitigation. Tables 1.5-2 through 1.5-20 summarize the impacts of each alternative by

jurisdiction, by temporary and permanent impacts, and by land use category. Table 1.5-21 summarizes the impacts of each alternative on agricultural resources (Natural Resource Conservation Service classified lands) and agricultural preserves."

TABLE 1.5-1
SUMMARY OF IMPACTS, MITIGATION MEASURES AND LEVEL OF SIGNIFICANCE AFTER MITIGATION

PARAMETER	ADVERSE IMPACTS	MITIGATION MEASURES (1)	CEQA SIGNIFICANCE AFTER MITIGATION
FEC-INITIAL AND ULTIMATE ALTERNATIVES			
Land Use	Existing uses and leases on RMV would be directly affected.	LU-1 (Existing Uses) and LU-2 (TRW). See note 1, below.	Not significant.
	Uses in San Onofre State Beach Cristianitos Subunit would be impacted.	See note 1, below.	Significant.
Agriculture	51 hectares (ha, 127 acres (ac) (I) or 62 ha (153 ac) (U) of rated agricultural land will be impacted.	AG-1 through AG-3 (RMV Agricultural Operations) and AG-4 (Camp Pendleton Agricultural Operations).	Significant.
	178 ha (441 ac) (I) or 183 ha (452 ac) (U) of agricultural preserves will be impacted.	None.	Significant.
FEC-TV-INITIAL AND ULTIMATE ALTERNATIVES			
Land Use	Existing and planned land uses in RMV and the City of San Clemente would be directly impacted.	LU-1 (Existing Land Uses). See note 1, below.	Significant.
	Established communities in the City of San Clemente would be physically divided.	LU-1 (Existing Land Uses). See note 1, below.	Significant.
Agriculture	49 ha (120 ac) (I) or 59 ha (145 ac) (U) of rated agricultural land will be impacted.	AG-1 through AG-3 (RMV Agricultural Operations).	Significant.
	178 ha (441 ac) (I) or 183 ha (452 ac) (U) of agricultural preserves will be impacted.	None.	Significant.
FEC-CV-INITIAL AND ULTIMATE ALTERNATIVES			
Land Use	Existing uses and leases on RMV would be directly affected.	LU-1 (Existing Uses) LU-2 (TRW). See note 1, below.	Not significant.
	Uses in San Onofre State Beach Cristianitos Subunit and Camp Pendleton would be impacted.	See note 1, below.	Significant.
Agriculture	52 ha (129 ac) (I) or 62 ha (153 ac) (U) of rated agricultural land will be impacted.	AG-1 through AG-3 (RMV Agricultural Operations) and AG-4 (Camp Pendleton Agricultural Operations).	Significant.
	178 ha (441 ac) (I) or 183 ha (452 ac) (U) of agricultural preserves will be impacted.	None.	Significant.
FEC-AFV-INITIAL AND ULTIMATE ALTERNATIVES			
Land Use	Existing uses and leases on RMV would be directly affected.	LU-1 (Existing Uses) and LU-2 (TRW). See note 1, below.	Not significant.
	Uses in San Onofre State Beach Cristianitos Subunit and Camp Pendleton would be impacted.	See note 1, below.	Significant.

TABLE 1.5-1
SUMMARY OF IMPACTS, MITIGATION MEASURES AND LEVEL OF SIGNIFICANCE AFTER MITIGATION

PARAMETER	ADVERSE IMPACTS	MITIGATION MEASURES (1)	CEQA SIGNIFICANCE AFTER MITIGATION
Agriculture	63 ha (155 ac (I) or 75 ha (185 ac) (U) of rated agricultural land will be impacted.	AG-1 through AG-3 (RMV Agricultural Operations) and AG-4 (Camp Pendleton Agricultural Operations).	Significant.
	178 ha (441 ac) (I) or 183 ha (452 ac) (U) of agricultural preserves will be impacted.	None.	Significant.
FEC-OHV-INITIAL AND ULTIMATE ALTERNATIVES			
Land Use	Existing uses and leases on RMV would be directly affected.	LU-1 (Existing Uses). See note 1, below.	Not significant.
Agriculture	20 ha (51 ac) (I) or 25 ha (61 ac) (U) of rated agricultural land will be impacted.	AG-1 through AG-3 (RMV Agricultural Operations).	Significant.
	75 ha (185 ac) (I) or 109 (270 ac) (U) of agricultural preserves will be impacted.	None.	Significant.
FEC-APV-INITIAL AND ULTIMATE ALTERNATIVES			
Land Use	Existing uses and leases on RMV would be directly affected.	LU-1 (Existing Uses) and LU-2 (TRW). See note 1, below.	Not significant.
Agriculture	49 ha (120 ac) (I) or 58 ha (144 ac) (U) of rated agricultural land will be impacted.	AG-1 through AG-3 (RMV Agricultural Operations).	Significant.
	178 ha (441 ac) (I) or 183 ha (452 ac) (U) of agricultural preserves will be impacted.	None.	Significant.
FEC-W-INITIAL AND ULTIMATE ALTERNATIVES			
Land Use	Existing uses and leases on RMV would be directly affected.	LU-1 (Existing Uses). See note 1, below.	Not significant.
	Uses in San Onofre State Beach Cristianitos Subunit would be impacted.	See note 1, below.	Significant.
Agriculture	34 ha (83ac) (I) or 34h a (85 ac) (U) of rated agricultural land will be impacted.	AG-1 through AG-3 (RMV Agricultural Operations) and AG-4 (Camp Pendleton Agricultural Operations).	Significant.
	109 ha (269 ac) (I) or 111 ha (275 ac) (U) of agricultural preserves will be impacted.	None.	Significant.
FEC-M-INITIAL AND ULTIMATE ALTERNATIVES			
Land Use	Existing uses and leases on RMV would be directly affected.	LU-1 (Existing Uses) and LU-2 (TRW). See note 1, below.	Not significant.
	Uses in San Onofre State Beach Cristianitos Subunit would be impacted.	See note 1, below.	Significant.

TABLE 1.5-1
SUMMARY OF IMPACTS, MITIGATION MEASURES AND LEVEL OF SIGNIFICANCE AFTER MITIGATION

PARAMETER	ADVERSE IMPACTS	MITIGATION MEASURES (1)	CEQA SIGNIFICANCE AFTER MITIGATION
Agriculture	22 ha (56 ac) (I) or 25 ha (61 ac) (U) of rated agricultural land will be impacted.	AG-1 through AG-3 (RMV Agricultural Operations) and AG-4 (Camp Pendleton Agricultural Operations).	Significant.
	123 ha (304 ac) (I) or 133 ha (328 ac) (U) of agricultural preserves will be impacted.	None.	Significant.
CC-INITIAL AND ULTIMATE ALTERNATIVES			
Land Use	Existing and planned land uses in the City of San Clemente would be directly impacted.	LU-1 (Existing Land Uses). See note 1, below.	Significant.
	Established communities in the City of San Clemente would be physically divided.	LU-1 (Existing Land Uses).	Significant.
	Existing uses in the County of Orange would be directly impacted.	LU-1 (Existing Land Uses). See note 1, below.	Not significant.
Agriculture	18 ha (45 ac) (I) or 22 ha (55 ac) (U) of rated agricultural land will be impacted.	AG-1 through AG-3 (RMV Agricultural Operations).	Significant.
	84 ha (208 ac) (I) or 110 ha (272 ac) (U) of agricultural preserves will be impacted.	None.	Significant.
CC-ALPV-INITIAL AND ULTIMATE ALTERNATIVES			
Land Use	Existing and planned land uses in the City of San Clemente would be directly impacted.	LU-1 (Existing Land Uses). See note 1, below.	Significant.
	Established communities in the City of San Clemente would be physically divided.	LU-1 (Existing Land Uses).	Significant.
	Existing uses in the County of Orange would be directly impacted.	LU-1 (Existing Land Uses). See note 1, below.	Significant.
Agriculture	18 ha (45 ac) (I) or 22 ha (55 ac) (U) of rated agricultural land will be impacted.	AG-1 through AG-3 (RMV Agricultural Operations).	Significant.
	84 ha (208 ac) (I) or 110 ha (272 ac) (U) of agricultural preserves will be impacted.	None.	Significant.

TABLE 1.5-1
SUMMARY OF IMPACTS, MITIGATION MEASURES AND LEVEL OF SIGNIFICANCE AFTER MITIGATION

PARAMETER	ADVERSE IMPACTS	MITIGATION MEASURES (1)	CEQA SIGNIFICANCE AFTER MITIGATION
CC-OHV-INITIAL AND ULTIMATE ALTERNATIVES			
Land Use	Existing uses and leases on RMV would be directly affected.	LU-1 (Existing Uses). See note 1, below.	Not significant.
Agriculture	10 ha (24 ac) (I) or 17 ha (42 ac) (U) of rated agricultural land will be impacted.	AG-1 through AG-3 (RMV Agricultural Operations).	Significant.
	59 ha (145 ac) (I) or 80 ha (199 ac) (U) of agricultural preserves will be impacted.	None.	Significant.
A7C-INITIAL AND ULTIMATE ALTERNATIVES			
Land Use	Existing and planned land uses within the City of San Clemente would be directly impacted.	LU-1 (Existing Land Uses). See note 1, below.	Significant
	Established communities in the City of San Clemente would be physically divided.	LU-1 (Existing Land Uses).	Significant
	Established uses the County of Orange would be directly impacted.	LU-1 (Existing Land Uses). See note 1, below.	Significant.
Agriculture	3 ha (8 ac) (I) or 4 ha (9 ac) (U) of rated agricultural land will be impacted.	AG-1 through AG-3 (RMV Agricultural Operations).	Significant.
	171 ha (423 ac) (I) or 183 ha (451 ac) (U) of agricultural preserves will be impacted.	None.	Significant.
A7C-7SV-INITIAL AND ULTIMATE ALTERNATIVES			
Land Use	Existing and planned land uses in the City of San Clemente would be directly impacted.	LU-1 (Existing Land Uses). See note 1, below.	Significant.
	Established communities in the City of San Clemente would be physically divided.	LU-1 (Existing Land Uses).	Significant.
	Existing and planned in uses in the County of Orange would be directly impacted.	LU-1 (Existing Land Uses). See note 1, below.	Significant.
Agriculture	3 ha (8 ac) (I) or 4 ha (9 ac) (U) of rated agricultural land will be impacted.	AG-1 through AG-3 (RMV Agricultural Operations).	Significant.
	171 ha (423 ac) (I) or 183 ha (451 ac) (U) of agricultural preserves will be impacted.	None.	Significant.
A7C-OHV-INITIAL AND ULTIMATE ALTERNATIVES			
Land Use	Existing uses and leases on RMV would be directly affected.	LU-1 (Existing Uses). See note 1, below.	Not significant.
Agriculture	2 ha (6 ac) (I) or 3 ha (7 ac) (U) of rated agricultural land will be impacted.	AG-1 through AG-3 (RMV Agricultural Operations).	Significant.

TABLE 1.5-1
SUMMARY OF IMPACTS, MITIGATION MEASURES AND LEVEL OF SIGNIFICANCE AFTER MITIGATION

PARAMETER	ADVERSE IMPACTS	MITIGATION MEASURES (1)	CEQA SIGNIFICANCE AFTER MITIGATION
	77 ha (189 ac) (I) or 92 ha (228 ac) (U) of agricultural preserves will be impacted.	None.	Significant.
A7C-ALPV-INITIAL AND ULTIMATE ALTERNATIVES			
Land Use	Existing and planned land uses in the City of San Clemente and the County of Orange would be directly impacted.	LU-1 (Existing Land Uses). See note 1, below.	Significant.
	Established communities in the City of San Clemente would be physically divided.	LU-1 (Existing Land Uses).	Significant.
Agriculture	3 ha (8 ac) (I) or 4 ha (9 ac) (U) of rated agricultural land will be impacted.	AG-1 through AG-3 (RMV Agricultural Operations).	Significant.
	171 ha (423 ac) (I) or 183 ha (451 ac) (U) of agricultural preserves will be impacted.	None.	Significant.
A7C-FECV-INITIAL AND ULTIMATE ALTERNATIVES			
Land Use	Planned land uses in the City of San Clemente and existing and planned land uses in the County of Orange would be directly impacted.	LU-1 (Existing Land Uses). See note 1, below.	Significant.
	Established communities in the City of San Clemente and the County of Orange would be physically divided.	LU-1 (Existing Land Uses).	Significant.
	Uses within the San Onofre State Beach Cristianitos Subunit would impacted by this alternative.	See note 1, below.	Significant.
Agriculture	6 ha (14 ac) (I) or 6 ha (16 ac) (U) of rated agricultural land will be impacted.	AG-1 through AG-3 (RMV Agricultural Operations) and AG-4 (Camp Pendleton Agricultural Operations).	Significant.
	171 ha (423 ac) (I) or 183 ha (451 ac) (U) of agricultural preserves will be impacted.	None.	Significant.
A7C-FECV-C-INITIAL AND ULTIMATE ALTERNATIVES			
Land Use	Existing and planned land uses within the City of San Clemente and the County of Orange would be directly impacted.	LU-1 (Existing Land Uses). See note 1, below.	Significant.
	Uses in San Onofre State Beach Cristianitos Subunit would be impacted.	See note 1, below.	Significant.
	Established communities in the City of San Clemente and the County of Orange would be physically divided.	LU-1 (Existing Land Uses).	Significant.

TABLE 1.5-1
SUMMARY OF IMPACTS, MITIGATION MEASURES AND LEVEL OF SIGNIFICANCE AFTER MITIGATION

PARAMETER	ADVERSE IMPACTS	MITIGATION MEASURES (1)	CEQA SIGNIFICANCE AFTER MITIGATION
	Established uses the County of Orange would be directly impacted.	LU-1 (Existing Land Uses). See note 1, below.	Significant.
Agriculture	6 ha (15 ac) (I) or 6 ha (15 ac) (U) of rated agricultural land will be impacted.	AG-1 through AG-3 (RMV Agricultural Operations) and AG-4 (Camp Pendleton Agricultural Operations).	Significant.
	171 ha (423 ac) (I) or 183 ha (451 ac) (U) of agricultural preserves will be impacted.	None.	Significant.
A7C-FECV-AF-INITIAL AND ULTIMATE ALTERNATIVES			
Land Use	Existing and planned land uses in the City of San Clemente and the County of Orange would be directly impacted.	LU-1 (Existing Land Uses). See note 1, below.	Significant.
	Uses in San Onofre State Beach Cristianitos Subunit would be impacted.	See note 1, below.	Significant.
	Established communities in the City of San Clemente and the County of Orange would be physically divided.	LU-1 (Existing Land Uses).	Significant.
Agriculture	17 ha (41 ac) (I) or 19 ha (48 ac) (U) of rated agricultural land will be impacted.	AG-1 through AG-3 (RMV Agricultural Operations) and AG-4 (Camp Pendleton Agricultural Operations).	Significant.
	171 ha (423 ac) (I) or 183 ha (451 ac) (U) of agricultural preserves will be impacted.	None.	Significant.
A7C-FEC-M-INITIAL AND ULTIMATE ALTERNATIVES			
Land Use	Existing uses and leases on RMV would be directly affected.	LU-1 (Existing Uses). See note 1, below.	Not significant.
	Uses in San Onofre State Beach Cristianitos Subunit would be impacted.	See note 1, below.	Significant.
Agriculture	3 ha (7 ac) (I) or 3 ha (7 ac) (U) of rated agricultural land will be impacted.	AG-1 through AG-3(RMV Agricultural Operations) and AG-4 (Camp Pendleton Agricultural Operations).	Significant.
	89 ha (220 ac) (I) or 92 ha (227 ac) (U) of agricultural preserves will be impacted.	None.	Significant.
AIO			
Land Use	Existing land uses in the County of Orange and the City of San Clemente would be directly impacted.	LU-1 (Existing Land Uses). See note 1, below.	Significant.

TABLE 1.5-1
SUMMARY OF IMPACTS, MITIGATION MEASURES AND LEVEL OF SIGNIFICANCE AFTER MITIGATION

PARAMETER	ADVERSE IMPACTS	MITIGATION MEASURES (1)	CEQA SIGNIFICANCE AFTER MITIGATION
	Established communities in the County of Orange and the City of San Clemente would be physically divided.	LU-1 (Existing Land Uses).	Significant.
Agriculture	7 ha (16 ac) of rated agricultural land will be impacted.	AG-1 through AG-3 (RMV Agricultural Operations).	Significant.
	15 ha (37ac) of agricultural preserves will be impacted.	None.	Significant.
AIP			
Land Use	Existing land uses in the in the City of San Clemente, County of Orange and cities along I-5 would be directly impacted.	LU-1 (Existing Land Uses). See note 1, below.	Significant.
	Established communities in the County of Orange and the City of San Clemente would be physically divided.	LU-1 (Existing Land Uses).	Significant
Agriculture	9 ha (22 ac) of rated agricultural land will be impacted.	AG-1 through AG-3 (RMV Agricultural Operations).	Significant
	15 ha (37ac) of agricultural preserves will be impacted.	None.	Significant.
I-5			
Land Use	Existing and planned land uses along I-5 would be impacted.	LU-1 (Existing Land Uses). See note 1, below.	Significant.
	Established communities along I-5 would be physically divided.	LU-1 (Existing Land Uses).	Significant.
Agriculture	No impacts	None necessary.	Not significant.
NO ACTION-OCP			
Land Use	No Impacts.	None necessary.	Not significant.
Agriculture	No Impacts.	None necessary.	Not significant.
NO ACTION-RMV			
Land Use	No impacts.	None necessary.	Not significant.
Agriculture	No impacts.	None necessary.	Not significant.

(I) Initial Corridor.
(U) Ultimate Corridor.
(1) All temporary use and permanent acquisition of right-of-way for the build alternatives will be conducted consistent with the requirements of the Uniform Relocation and Assistance Real Property Acquisition Polices Act of 1970, as amended (California Government Code, Chapter 16, Section 7260, et. seq.). A mitigation measure regarding compliance with this Act for all temporary use and permanent acquisition of property for the build alternatives is included in the Socioeconomics and Growth Inducing Impacts Technical Report. That measure would also apply to the land use impacts of this alternative.

Referenced mitigation measures.

Measure LU-1: Impacts on Existing Land Uses. If a SOCTIIP build alternative is selected, design refinements to avoid or minimize impacts to existing land uses, related to the temporary use and/or permanent acquisition of property, will be incorporated in the final design of the selected alternative, where prudent and feasible.

Measure LU-2: TRW Capistrano Test Site. During final design and/or construction, as appropriate, in coordination with TRW and Rancho Mission Viejo (landowner), the facility access road and front gate at the TRW Capistrano Test Site will be relocated to minimize disruption and impacts to TRW security and to maintain access to this facility. During final design and/or construction, as appropriate, the contractor will coordinate with TRW and incorporate design features and security measures, as appropriate, to mitigate construction related impacts to operations at the TRW Capistrano Test Site.

Measure AG-1 . Existing Operations on RMV. During final design, and in coordination RMV and its agricultural leaseholders, the contractor will finalize the realignments of access roads on the ranch to provide cattle and equipment crossings to minimize impediments to cattle movement and routine agricultural operations and normal business activities.

Measure AG-2: Existing Operations on RMV. Prior to the start of any construction activities, any corrals and/or windmills within the disturbance limits of a SOCTIIP build alternative will be relocated or replaced. In the event that the RMV or the leaseholder does not want the facility relocated, appropriate compensation for the facility will be provided.

Measure AG-3: Agricultural Operations on Camp Pendleton (San Clemente Ranch). During final design, the contractor will develop a realigned access road for the San Clemente Ranch to ensure all-weather access to the agricultural operations in the outlease area on MCB Camp Pendleton. The timing of the construction of this realigned access road will be coordinated with the agricultural operator to ensure that peak operation times are not affected. The realigned road must be completed prior to closure of the existing road.

In addition to mitigation measures AG-1, AG-2 and AG-3, above, which identify specific actions to avoid, minimize or compensate for potential adverse impacts related to agricultural resources, the following commitment is included in the project alternatives:

Commitment AGC-1: Existing Operations on RMV. Prior to the start of any construction activity, written notification will be provided to agricultural property owners or leaseholders immediately adjacent to the disturbance limits for the SOCTIIP build Alternative. The notification is to indicate the intent to begin construction, including an estimated date for the start of construction. This notification shall be provided at least three, but no more than 12, months prior to the start of construction activity.

TABLE 1.5-2
SUMMARY OF LAND USE IMPACTS OF THE FEC-INITIAL AND ULTIMATE ALTERNATIVES

Jurisdiction	Land Use Type	FEC-Initial Area Affected hectares/acres		FEC-Ultimate Area Affected hectares/acres	
		Permanent ROW	Temporary Disturbance	Permanent ROW	Temporary Disturbance
County of Orange					
Rancho Mission Viejo	Open Space (5)	339/836	360/889	365/901	472/1,167
Rolling Hills (b)	Community Commercial (2A)	1/3	3/7	3/8	5/13
MCB Camp Pendleton (d)	Public Facilities (4)	3/7	3/8	3/7	4/9
City of San Clemente (c)	Open Space	2/4	2/4	2/4	2/4
MCB Camp Pendleton (a)	Military	49/121	52/129	51/125	56/139
San Onofre State Beach	Public Recreation	117/289	122/302	161/398	167/413
Total Impact Area	--	509/1,260	540/1,337	583/1,442	705/1,745

Source: County of Orange Land Use Element (2000) P&D Consultants (2001), San Clemente Land Use Element (1993), San Onofre State Beach General Plan (1984) and MCB Camp Pendleton Final Integrated Natural Resources Management Plan (October 2001).

(a) The area shown includes the existing I-5 right-of-way area, which results in an overstatement of land use impacts on MCB Camp Pendleton.
(b) This includes the Rolling Hills PC Specific Plan which assumed implementation of a transportation corridor generally following the previous CP Alignment (now referred to as the FEC Alternative). The City of San Clemente is in the process of annexing all the Rolling Hills PC by early 2003.
(c) Impacts in San Clemente occur in Talega PC along Avenida Pico in open space to accommodate the interchange.
(d) A small segment of MCB Camp Pendleton is in Orange County at the northern border of SOSB.

TABLE 1.5-3
SUMMARY OF LAND USE IMPACTS OF THE FEC-CV-INITIAL AND ULTIMATE ALTERNATIVES

Jurisdiction	Land Use Type	FEC-CV-Initial Area Affected hectares/acres		FEC-CV-Ultimate Area Affected hectares/acres	
		Permanent ROW	Temporary Disturbance	Permanent ROW	Temporary Disturbance
County of Orange					
Rancho Mission Viejo	Open Space (5)	338/836	360/888	364/900	472/1,167
Rolling Hills (b)	Community Commercial (2A)	1/3	3/7	1/3	4/9
MCB Camp Pendleton (d)	Public Facilities (4)	3/7	3/8	3/7	4/9
City of San Clemente (c)	Residential-Low Density, Open Space	2/4	2/4	2/4	2/4
MCB Camp Pendleton (a)	Military	33/82	34/84	29/72	39/96
San Onofre State Beach	Public Recreation	71/175	75/185	75/186	134/331
Total Impact Area	--	452/1,120	480/1,188	473/1,171	658/1,628

Sources: County of Orange Land Use Element (2000), P&D Consultants (2001), San Clemente Land Use Element (1993), San Onofre State Beach General Plan (1984) and MCB Camp Pendleton Final Integrated Natural Resources Management Plan (October 2001).

(a) The area shown includes the existing I-5 right-of-way area, which results in an overstatement of land use impacts on MCB Camp Pendleton.
(b) This includes the Rolling Hills PC Specific Plan which assumed implementation of a transportation corridor generally following the previous CP Alignment (now referred to as the FEC Alternative). The City of San Clemente is in the process of annexing all the Rolling Hills PC by early 2003.
(c) Impacts in San Clemente occur in Talega PC along Avenida Pico in open space to accommodate the interchange and in the southeast section of the City along I-5 to accommodate ramps.
(d) A small segment of MCB Camp Pendleton is in Orange County at the northern border of SOSB.

TABLE 1.5-4
SUMMARY OF LAND USE IMPACTS OF THE FEC-AFV-INITIAL AND ULTIMATE ALTERNATIVES

Jurisdiction	Land Use Type	FEC-AFV-Initial Area Affected hectares/acres		FEC-AFV-Ultimate Area Affected hectares/acres	
		Permanent ROW	Temporary Disturbance	Permanent ROW	Temporary Disturbance
County of Orange					
Rancho Mission Viejo	Open Space (5)	356/830	360/888	362/894	472/1167
Rolling Hills (c)	Community Commercial (2A)	1/3	3/7	2/4	5/11
MCB Camp Pendleton		3/7	3/8	3/8	4/10
City of San Clemente (b)	Open Space	2/4	2/4	2/4	2/4
San Onofre State Beach	Public Recreation	53/130	55/135	62/154	110/271
MCB Camp Pendleton (a)	Military/Agricultural	88/218	94/231	65/234	112/278
Total Impact Area	--	484/1,197	574/1,272	496/1,301	703/1,739

Source: County of Orange Land Use Element (2000), P&D Consultants (2001), San Clemente Land Use Element (1993), San Onofre State Beach General Plan (1984) and MCB Camp Pendleton Final Integrated Natural Resources Management Plan (October 2001).

(a) Represents areas on MCB Camp Pendleton not leased to SOSB which are on DON property. The area shown includes the existing I-5 right-of-way area, which results in an overstatement of land use impacts on MCB Camp Pendleton.
(b) The FEC-AFV traverses mostly Orange County except for a small area in the Talega development in San Clemente.
(c) The Rolling Hills PC Specific Plan assumed implementation of a transportation corridor generally following the CP Alignment (now referred to as the FEC Alternative). The City of San Clemente is in the process of annexing all the Rolling Hills PC by early 2003.
(d) A small segment of MCB Camp Pendleton is in Orange County at the northern border of SOSB.

TABLE 1.5-5
SUMMARY OF LAND USE IMPACTS OF THE FEC-OHV-INITIAL AND ULTIMATE ALTERNATIVES

Jurisdiction	Land Use Type	FEC-OHV-Initial Area Affected hectares/acres		FEC-OHV-Ultimate Area Affected hectares/acres	
		Permanent ROW	Temporary Disturbance	Permanent ROW	Temporary Disturbance
County Of Orange					
Rancho Mission Viejo	Open Space (5)	145/358	159/393	208/514	246/608

Source: P&D Consultants (2001) and County of Orange LUE (2000).

TABLE 1.5-6
SUMMARY OF LAND USE IMPACTS OF THE FEC-APV-INITIAL AND ULTIMATE ALTERNATIVES

Jurisdiction	Land Use Type	FEC-APV-Initial Area Affected hectares/acres		FEC-APV-Ultimate Area Affected hectares/acres	
		Permanent ROW	Temporary Disturbance	Permanent ROW	Temporary Disturbance
County Of Orange					
Rancho Mission Viejo	Open Space (5)	329/813	350/865	357/883	467/1,155
Rolling Hills (a)	Open Space	0.2/0.4	2/5	1/3	3/7
Total Impact Area	--	329/814	352/870	358/886	470/1,162

Source: P&D Consultants (2001), County of Orange LUE (2000) and Rolling Hills PC AMR (1999).
(a) This includes the Rolling Hills PC Specific Plan which assumed implementation of a transportation corridor generally following the CP alignment (now referred to as the FEC Alignment). The City of San Clemente is in the process of annexing all the Rolling Hills PC by early 2003.

TABLE 1.5-7
SUMMARY OF LAND USE IMPACTS OF THE FEC-W-INITIAL AND ULTIMATE ALTERNATIVES

Jurisdiction	Land Use Type	FEC-W-Initial Area Affected hectares/acres		FEC-W-Ultimate Area Affected hectares/acres	
		Permanent ROW	Temporary Disturbance	Permanent ROW	Temporary Disturbance
County of Orange					
Rancho Mission Viejo	Open Space (5)	202/498	216/533	210/520	225/556
Rolling Hills (b)	Community Commercial (2A)	2/5	2/6	2/5	2/6
RMV Conservancy	Open Space Reserve	41/101	42/104	42/105	44/108
MCB Camp Pendleton (d)	Public Facilities (4)	3/8	5/12	3/9	5/13
City of San Clemente (c)	Open Space Public	2/4	2/4	2/4	2/4
RMV Conservancy	Open Space Private	22/55	25/61	22/56	25/62
MCB Camp Pendleton (a)	Military	36/89	41/101	36/89	41/102
San Onofre State Beach	Public Recreation	119/295	135/334	125/309	134/357
Total Impact Area	--	427/1,056	467/1,155	443/1,097	489/1,208

Source: County of Orange Land Use Element (2000) P&D Consultants (2001), San Clemente Land Use Element (1993), San Onofre State Beach General Plan (1984) and MCB Camp Pendleton Final Integrated Natural Resources Management Plan (October 2001).

(a) The area shown includes the existing I-5 right-of-way area, which results in an overstatement of land use impacts on MCB Camp Pendleton.
(b) This includes the Rolling Hills PC Specific Plan which assumed implementation of a transportation corridor generally following the previous CP Alignment (now referred to as the FEC Alternative). The City of San Clemente is in the process of annexing all the Rolling Hills PC by the end of 2003.
(c) Impacts in San Clemente occur in Talega PC along Avenida Pico in open space to accommodate the interchange.
(d) A small segment of MCB Camp Pendleton is in Orange County at the northern border of SOSB.

TABLE 1.5-8
SUMMARY OF LAND USE IMPACTS OF THE FEC-M-INITIAL AND ULTIMATE ALTERNATIVES

Jurisdiction	Land Use Type	FEC-M-Initial Area Affected hectares/acres		FEC-M-Ultimate Area Affected hectares/acres	
		Permanent ROW	Temporary Disturbance	Permanent ROW	Temporary Disturbance
County of Orange					
Rancho Mission Viejo	Open Space (5)	232/574	280/692	276/682	300/742
Rolling Hills (b)	Community Commercial (2A)	2/5	2/6	2/5	2/6
RMV Conservancy	Open Space Reserve	22/55	22/55	22/55	22/55
MCB Camp Pendleton (d)	Public Facilities (4)	3/8	3/84	4/11	5/12
City of San Clemente (c)	Open Space	2/5	2/5	2/5	3/6
MCB Camp Pendleton (a)	Military	36/89	41/101	36/90	41/102
San Onofre State Beach	Public Recreation	119/295	135/334	125/309	144/357
Total Impact Area	--	417/1,031	488/1,206	467/1,156	519/1,282

Source: County of Orange Land Use Element (2000) P&D Consultants (2001), San Clemente Land Use Element (1993), San Onofre State Beach General Plan (1984) and MCB Camp Pendleton Final Integrated Natural Resources Management Plan (October 2001).

(a) The area shown includes the existing I-5 right-of-way area, which results in an overstatement of land use impacts on MCB Camp Pendleton.
(b) This includes the Rolling Hills PC Specific Plan which assumed implementation of a transportation corridor generally following the previous CP Alignment (now referred to as the FEC Alternative). The City of San Clemente is in the process of annexing all the Rolling Hills PC by the end of 2003.
(c) Impacts in San Clemente occur in Talega PC along Avenida Pico in open space to accommodate the interchange.
(d) A small segment of MCB Camp Pendleton is in Orange County at the northern border of SOSB.

TABLE 1.5-9
SUMMARY OF LAND USE IMPACTS OF THE FEC-TV-INITIAL AND ULTIMATE ALTERNATIVES

Jurisdiction	Land Use Type	FEC-TV-Initial Area Affected hectares/acres		FEC-TV-Ultimate Area Affected hectares/acres	
		Permanent ROW	Temporary Disturbance	Permanent ROW	Temporary Disturbance
County of Orange					
Rancho Mission Viejo	Open Space (5)	265/655	277/684	280/693	381/941
RMV Conservancy	Open Space Reserve	26/63	26/63	29/72	35/87
City of San Clemente					
Talega PC, Rancho San Clemente PC, Marblehead Inland PC, Other	Community – Commercial	2/5	2/5	2/5	2/5
	Neighborhood – Commercial	6/14	6/14	6/14	6/14
	Regional – Commercial	1/3	1/3	1/3	1/3
	Government (a)	4/10	5/11.1	4/10	5/13
	Commercial - Mixed Use Residential	24/59	26/65	27/67	29/71
	Open Space – Golf	11/27	13/31	12/30	15/37
	Open Space – Private	81/200	92/226	93/230	105/260
	Open Space – Public	1/3	1/3	1/3	1/3
	Residential – High	1/2	1/2	1/2	1/3
	Residential – Low	10/25	10/26	11/27	12/31
	Residential – Medium	2/4	2/4	2/4	4/10
	Residential - Medium Low	14/34	14/34	14/33	15/37
	Transportation (I-5) (b)	61/150	61/150	61/150	61/150
Subtotal for San Clemente	--	216/534	233/576	235/579	258/638
Total Impact Area (c)	--	508/1,256	537/1,326	546/1,348	675/1,669

Source: P&D Consultants (2001), County of Orange LUE (2000) and San Clemente Land Use Element (1993).
(a) Government is a category "P" in the San Clemente General Plan that includes Governmental, Administrative, Utilities, Schools, Public and Private Parking.
(b) This land use category reflects the right-of-way for I-5 as specified in all General Plans for cities that border I-5 in the SOCTIIP study area.
(c) This includes a 0.1 km (300 ft) segment of I-5 that occurs in San Diego County with the existing I-5 right-of-way.

TABLE 1.5-10
SUMMARY OF LAND USE IMPACTS OF THE CC-INITIAL AND ULTIMATE ALTERNATIVES

Jurisdiction	Land Use Type	CC-Initial Area Affected hectares/acres		CC-Ultimate Area Affected hectares/acres	
		Permanent ROW	Temporary Disturbance	Permanent ROW	Temporary Disturbance
County of Orange					
Rancho Mission Viejo	Open Space (5)	181/448	260/643	227/560	282/697
Prima Deshecha Landfill	Public Facilities - Landfill Site (LS)	23/57	28/69	29/72	31/78
City of San Clemente					
Forster Ranch PC, Rancho San Clemente PC, Marblehead Inland PC and Other	Community – Commercial	2/5	2/5	2/5	2/5
	Neighborhood - Commercial	6/14	6/14	6/14	6/14
	Regional - Commercial	1/3	1/3	1/3	1/3
	Government (a)	8/21	9/23	9/23	10/25
	Commercial - Mixed Use Residential	12/30	14/35	12/30	13/33
	Open Space - Private	66/164	74/184	76/187	81/201
	Open Space - Public	8/19	9/22	9/23	10/25
	Residential - High	1/3	1/3	1/3	1/3
	Residential - Low	17/43	18/44	19/48	20/49
	Residential - Medium	2/4	2/4	2/4	2/4
	Residential - Medium Low	7/17	7/17	8/19	8/19
	Transportation (I-5)(b)	61/150	61/150	61/150	61/150
Subtotal for San Clemente	--	191/472	205/507	205/507	215/530
Total Impact Area (c)	--	395/976	488/1,206	460/1,138	527/1,305

Source: P&D Consultants (2001), County of Orange LUE (2000) and San Clemente Land Use Element (1993).
(a) Government is a category "P" in the San Clemente General Plan that includes Governmental, Administrative, Utilities, Schools, Public and Private Parking.
(b) This land use category reflects the right-of-way for I-5 as specified in all General Plans for cities that border I-5 in the SOCTIIP study area.
(c) This includes a 0.1 km (300 ft) segment of I-5 that occurs in San Diego County with the existing I-5 right-of-way.

TABLE 1.5-11
SUMMARY OF LAND USE IMPACTS OF THE CC-ALPV-INITIAL AND ULTIMATE ALTERNATIVES

Jurisdiction	Land Use Type	CC-ALPV-Initial Area Affected hectares/acres		CC-ALPV-Ultimate Area Affected hectares/acres	
		Permanent ROW	Temporary Disturbance	Permanent ROW	Temporary Disturbance
County of Orange					
Rancho Mission Viejo	Open Space (5)	181/448	260/643	227/560	282/697
Prima Deshecha Landfill	Public Facilities - Landfill Site (LS)	23/57	28/68	29/72	31/78
City of San Clemente					
Forster Ranch PC, Rancho San Clemente PC	Government (a)	2/5	2/6	3/7	3/7
	Commercial - Mixed Use Residential	0/0	5/11	4/9	5/11
	Open Space - Private	15/36	16/39	20/50	23/56
	Open Space - Public	7/16	8/19	8/20	9/22
	Residential - High	0.1/0.3	0.1/0.3	0.1/0.2	0.1/0.3
	Residential - Low	11/27	12/29	13/32	13/33
	Residential - Medium Low	3/8	3/8	6/15	6/15
Subtotal for San Clemente	--	38/93	41/101	54/132	58/144
Total Impact Area	--	244/597	329/813	310/764	371/919

Sources: P&D Consultants (2001), San Clemente General Plan (1993) and Zoning Maps (1996), and Prima Deshecha General Development Plan (2000).
(a) Government is a category "P" in the San Clemente General Plan that includes Governmental, Administrative, Utilities, Schools, Public and Private Parking.

TABLE 1.5-12
SUMMARY OF LAND USE IMPACTS OF THE FEC-OHV-INITIAL AND ULTIMATE ALTERNATIVES

Jurisdiction	Land Use Type	CC-OHV-Initial Area Affected hectares/acres		CC-OHV-Ultimate Area Affected hectares/acres	
		Permanent ROW	Temporary Disturbance	Permanent ROW	Temporary Disturbance
County Of Orange					
Rancho Mission Viejo	Open Space (5)	118/291	175/432	169/418	531/1,313

Source: P&D Consultants (2001) and County of Orange LUE (2000).

TABLE 1.5-13
SUMMARY OF LAND USE IMPACTS OF THE A7C-INITIAL AND ULTIMATE ALTERNATIVES

Jurisdiction	Land Use Type	A7C-Initial Area Affected hectares/acres		A7C-Ultimate Area Affected hectares/acres	
		Permanent ROW	Temporary Disturbance	Permanent ROW	Temporary Disturbance
County of Orange					
Rancho Mission Viejo	Open Space (5)	268/663	282/698	293/725	317/785
Prima Deshecha Landfill	Public Facilities - Landfill Site (LS)	30/74	33/81	35/87	38/94
CWRP	Public Facilities	3/8	3/8	3/8	3/8
City of San Clemente					
Talega PC, Rancho San Clemente PC, Marblehead Inland PC, Other	Community – Commercial	2/5	2/5	2/5	2/5
	Neighborhood – Commercial	6/14	6/14	6/14	6/14
	Regional – Commercial	1/3	1/3	1/3	1/3
	Government (a)	4/10	5/11	5/11	5/13
	Commercial - Mixed Use Residential	24/59	26/65	26/65	28/70
	Open Space – Golf	14/34	14/34	15/37	15/38
	Open Space – Private	57/141	64/158	68/169	71/174
	Open Space – Public	2/5	2/5	0/0	0/0
	Residential – High	1/2	1/2	1/2	1/2
	Residential – Low	26/65	27/67	28/70	30/73
	Residential – Medium	6/16	7/16	7/17	7/17
	Residential - Medium Low	11/27	11/27	10/24	12/29
	Transportation (I-5) (b)	61/150	61/150	61/150	61/150
Subtotal for San Clemente	--	215/530	226.3/559	229/567	239/590
Total Impact Area (c)	--	516/1,274	544/1,346	562/1,387	598/1,477

Source: P&D Consultants (2001), County of Orange LUE (2000) and San Clemente Land Use Element (1993).
(a) Government is a category "P" in the San Clemente General Plan that includes Governmental, Administrative, Utilities, Schools, Public and Private Parking.
(b) This land use category reflects the right-of-way for I-5 as specified in all General Plans for cities that border I-5 in the SOCTIIP study area.
(c) This includes a 0.1 km (300 ft) segment of I-5 that occurs in San Diego County with the existing I-5 right-of-way.

TABLE 1.5-14
SUMMARY OF LAND USE IMPACTS OF THE A7C-OHV-INITIAL AND ULTIMATE ALTERNATIVES

Jurisdiction	Land Use Type	A7C-OHV-Initial Area Affected hectares/acres		A7C-OHV-Ultimate Area Affected hectares/acres	
		Permanent ROW	Temporary Disturbance	Permanent ROW	Temporary Disturbance
County Of Orange					
Rancho Mission Viejo	Open Space (5)	144/357	155/384	175/432	206/510
CWRP	Public Facilities (4)	2/5	2/5	2/6	2/6
Total Impact Area	--	147/363	158/390	178/439	209/516
Source: P&D Consultants (2001) and County of Orange LUE (2000).					

TABLE 1.5-15
SUMMARY OF LAND USE IMPACTS OF THE A7C-ALPV-INITIAL AND ULTIMATE ALTERNATIVES

Jurisdiction	Land Use Type	A7C-ALPV-Initial Area Affected hectares/acres		A7C-ALPV-Ultimate Area Affected hectares/acres	
		Permanent ROW	Temporary Disturbance	Permanent ROW	Temporary Disturbance
County of Orange					
Rancho Mission Viejo	Open Space (5)	268/663	282/698	293/725	317/785
Prima Deshecha Landfill	Public Facilities - Landfill Site (LS)	30/74	33/82	35/87	38/94
CWRP	Public Facilities (4)	3/8	3/8	3/8	3/9
City of San Clemente					
Talega PC	Government (a)	0.1/0.2	0.1/0.1	0.3/1	0.3/1
	Commercial - Mixed Use Residential	0.1/0.2	0.1/0.3	7/18	8/20
	Open Space - Golf	12/29	13/32	14/34	14/20
	Open Space - Private	9/21	9/22	11/28	13/31
	Open Space - Public	1/2	1/2	1/3	1/3
	Residential - High	0/0	0/0	0.1/0.2	0.1/0.3
	Residential – Low	19/47	20/50	21/52	23/56
	Residential - Medium	5/11	5/12	5/12	5/13
	Residential - Medium Low	5/12	8/12	6/15	6/15
Subtotal for San Clemente	--	50/123	56/131	66/162	70/173
Total Impact Area	--	351/867	374/918	398/983	429/1,061
Sources: P&D Consultants (2001), San Clemente General Plan (1993) and Zoning Maps (1996), and Prima Deshecha General Development Plan (2000). (a) Government is a category "P" in the San Clemente General Plan that includes Governmental, Administrative, Utilities, Schools, Public and Private Parking.					

TABLE 1.5-16
SUMMARY OF LAND USE IMPACTS OF THE A7C-7SV-INITIAL AND ULTIMATE ALTERNATIVES

Jurisdiction	Land Use Type	A7C-7SV-Initial Area Affected hectares/acres		A7C-7SV-Ultimate Area Affected hectares/acres	
		Permanent ROW	Temporary Disturbance	Permanent ROW	Temporary Disturbance
County of Orange					
Rancho Mission Viejo	Open Space (5)	269/664	281/694	294/726	317/783
Prima Deshecha Landfill	Public Facilities - Landfill Site (LS)	29/71	31/75	34/83	35/87
CWRP	Public Facilities (4)	3/8	3/8	3/8	3/8
City of San Clemente					
Talega PC, Rancho San Clemente PC, Marblehead Inland PC, Other	Community – Commercial	2/5	2/5	2/5	2/5
	Neighborhood – Commercial	6/14	6/14	6/14	6/14
	Regional – Commercial	1/3	1/3	1/3	1/3
	Government (a)	9/21	9/23	9/23	10/25
	Institutional	0.1/0.3	0.1/0.3	0.1/0.3	0.1/0.3
	Commercial - Mixed Use Residential	12/30	14/35	12/30	13/33
	Open Space – Private	66/163	73/181	75/184	79/196
	Open Space – Public	8/18	8/19	8/21	9/21
	Residential – High	1/3	0.2/1	1/3	1/3
	Residential – Low	18/44	18/44	19/48	19/48
	Residential – Medium	2/4	2/4	2/4	2/4
	Residential - Medium Low	7/17	7/17	8/19	8/19
	Transportation (I-5) (b)	61/150	61/150	61/150	61/150
Subtotal for San Clemente	--	191/471	201/496	203/502	203/521
Total Impact Area (c)	--	491/1,218	515/1,273	534/1,320	567/1,400

Source: P&D Consultants (2001), County of Orange LUE (2000) and San Clemente Land Use Element (1993).
(a) Government is a category "P" in the San Clemente General Plan that includes Governmental, Administrative, Utilities, Schools, Public and Private Parking.
(b) This land use category reflects the right-of-way for I-5 as specified in all General Plans for cities that border I-5 in the SOCTIIP study area.
(c) This includes a 0.1 km (300 ft) segment of I-5 that occurs in San Diego County with the existing I-5 right-of-way.

TABLE 1.5-17
SUMMARY LAND USE IMPACTS OF THE A7C-FECV-INITIAL AND ULTIMATE ALTERNATIVES

Jurisdiction	Land Use Type	A7C-FECV-Initial Area Affected hectares/acres		A7C-FECV-Ultimate Area Affected hectares/acres	
		Permanent ROW	Temporary Disturbance	Permanent ROW	Temporary Disturbance
County of Orange					
Rancho Mission Viejo Rolling Hills PC	Open Space (5)	242/598	264/652	276/682	324/800
Prima Deshecha Landfill	Public Facilities - Landfill Site (LS)	28/70	31/76	36/88	52/129
RMV Conservancy	Open Space Reserve	12/31	13/31	16/39	16/39
Rolling Hills PC	Community Commercial (2A)	6/15	6/15	6/15	6/15
	Suburban Residential (1B)	12/30	12/31	15/37	17/43
	Urban Residential (1C)	4/9	4/9	4/10.3	8/21
CWRP	Public Facilities (4)	3/7	3/7	3/7	3/7
MCB Camp Pendleton (c)	Public Facilities (4)	2/5	2/5	2/5	2/5
Subtotal Orange County	--	307/758	332/820	355/878	427/1,055
City of San Clemente					
Talega PC	Coastal – Commercial	0.1/0.2	0.1/0.3	0.4/1	2/5
	Neighborhood - Commercial	2/5	2/5	2/5	2/6
	Government (a)	2/6	2/6	3/7	3/7
	Open Space - Golf	8/19	8/20	10/24	12/29
	Community Commercial	0/0	0/0	0/0	0/0
	Open Space - Private	25/63	26/65	32/78	34/85
	Open Space - Public	2/5	2/5	0/0	0/0
	Open Space - Talega Reserve	0/0	0/0	0.1/0.2	0.1/0.2
	Residential – Low	7/17	7/18	10/24	14/35
	Residential - Medium	5/12	5/12	5/12	6/15
	Residential - Medium Low	3/8	3/8	4/9	5/10
	Residential - Urban	0.4/1.0	0.4/1	1/2	5/12
Subtotal for San Clemente	--	55/136	57/142	66/164	83/205
MCB Camp Pendleton (b)	Military	47/117	50/123	48/118	53/131
San Onofre State Beach	Public Recreation	118/291	123/304	155/383	166/410
Total Impact Area	--	529/1,306	567/1,395	626/1,548	731/1,806

Sources: P&D Consultants (2001), San Clemente General Plan (1993) and Zoning Maps (1996), Prima Deshecha General Development Plan (2000), San Onofre State Beach General Plan (1984) and MCB Camp Pendleton Integrated Natural Resources Management Plan (October 2001).

(a) Government is a category "P" in the San Clemente General Plan that includes Governmental, Administrative, Utilities, Schools, Public and Private Parking.

(b) The area shown includes the existing I-5 right-of-way area, which results in an overstatement of land use impacts on MCB Camp Pendleton.

(c) A small segment of MCB Camp Pendleton is in Orange County at the northern border of SOSB.

TABLE 1.5-18
SUMMARY LAND USE IMPACTS OF THE A7C-FECV-C-INITIAL AND ULTIMATE ALTERNATIVES

Jurisdiction	Land Use Type	A7C-FECV-C-Initial Area Affected hectares/acres		A7C-FECV-C-Ultimate Area Affected hectares/acres	
		Permanent ROW	Temporary Disturbance	Permanent ROW	Temporary Disturbance
County of Orange					
Rancho Mission Viejo Rolling Hills PC	Open Space (5)	242/598	264/652	276/682	324/801
Prima Deshecha Landfill	Public Facilities - Landfill Site (LS)	28/70	31/76	36/88	52/129
RMV Conservancy	Open Space Reserve	12/31	13/31	16/39	16/39
Rolling Hills PC	Community Commercial (2A)	6/15	6/15	6/15	6/15
	Suburban Residential (1B)	12/30	12/31	15/37	17/43
	Urban Residential (1C)	4/9	4/9	4/10	8/21
CWRP	Public Facilities (4)	3/7	3/7	3/7	3/7
MCB Camp Pendleton (d)	Public Facilities (4)	2/5	2/5	2/5	2/5
Subtotal Orange County	--	307/758	332/820	355/878	427/1,056
City of San Clemente					
Talega PC	Coastal – Commercial	0.1/0.2	0.1/0.3	0.4/1.0	2/5
	Neighborhood - Commercial	2/5	2/5	2/5	2/6
	Government (a)	2/6	2/6	3/7	3/7
	Community Commercial	0/0	0/0	0/0	0/0
	Open Space - Golf	8/19	8/20	10/24	12/29
	Open Space - Private	25/63	26/65	30/73	34/84
	Open Space - Public	2/5	2/5	2/4	2/4
	Open Space - Talega Reserve	0/0	0/0	0.1/0.2	0.1/0.2
	Residential - Low (c)	9/22	9/22	12/29	16/40
	Residential - Medium	5/12	6/12	5/12	6/15
	Residential - Medium Low	3/8	3/8	4/9	4/10
	Residential - Urban	0.4/1.0	3/8	1/2	3/8
Subtotal for San Clemente	--	60/148	63/154	71/175	89/221
MCB Camp Pendleton (b)	Military	32/178	33/80	31/177	37/91
San Onofre State Beach	Public Recreation	73/179	77/190	79/196	127/813
Total Impact Area	--	529/1,306	567/1,395	626/1,548	731/1,806

Sources: P&D Consultants (2001), San Clemente General Plan (1993) and Zoning Maps (1996), Prima Deshecha General Development Plan (2000), San Onofre State Beach General Plan (1984) and MCB Camp Pendleton Integrated Natural Resources Management Plan (October 2001).

(a) Government is a category "P" in the San Clemente General Plan that includes Governmental, Administrative, Utilities, Schools, Public and Private Parking.
(b) The area shown includes the existing I-5 right-of-way area, which results in an overstatement of land use impacts on MCB Camp Pendleton.
(c) This includes a 2 ha (4 ac) area of area that is designated Residential - Low in the southeast section of the City along I-5 to accommodate ramps.
(d) A small segment of MCB Camp Pendleton is in Orange County at the northern border of SOSB.

TABLE 1.5-19
SUMMARY LAND USE IMPACTS OF THE A7C-FECV-AF INITIAL AND ULTIMATE ALTERNATIVES

Jurisdiction	Land Use Type	A7C-FECV-AF-Initial Area Affected hectares/acres		A7C-FECV-AF-Ultimate Area Affected hectares/acres	
		Permanent ROW	Temporary Disturbance	Permanent ROW	Temporary Disturbance
County of Orange					
Rancho Mission Viejo Rolling Hills PC	Open Space (5)	242/598	264/652	276/682	324/800
Prima Deshecha Landfill	Public Facilities - Landfill Site (LS)	28/70	31/76	36/88	52/129
RMV Conservancy	Open Space Reserve	12/31	13/31	16/39	16/39
Rolling Hills PC	Community Commercial (2A)	6/15	6/15	6/15	6/15
	Suburban Residential (1B)	12/30	12/31	15/37	17/43
	Urban Residential (1C)	4/9	4/9	4/10	8/21
CWRP	Public Facilities (4)	3/7	3/7	3/7	3/7
MCB Camp Pendleton (c)	Public Facilities (4)	2/5	2/5	2/5	2/5
Subtotal Orange County	--	307/758	332/820	355/878	427/1,055
City of San Clemente					
Talega PC	Coastal – Commercial	0.1/0.2	0.1/0.3	0.4/1.0	2/5
	Neighborhood - Commercial	2/5	2/5	2/5	2/6
	Government (a)	2/6	2/6	3/7	3/7
	Open Space - Golf	8/19	8/20	10/24	10/24
	Community Commercial	0/0	0/0	0/0	0/0
	Open Space - Private	25/63	26/65	30/73	34/84
	Open Space - Public	2/5	2/5	2/4	2/4
	Open Space - Talega Reserve	0/0	0/0	0.1/0.2	0.1/0.2
	Residential - Low	7/17	7/18	10/24	14/35
	Residential - Medium	5/12	5/12	5/12	6/15
	Residential - Medium Low	3/8	0.4/0.1	4/9	4/10
	Residential - Urban	0.4/1.0	0.4/1	1/2	5/12
Subtotal for San Clemente	--	55/136	57/142	66/163	83/204
MCB Camp Pendleton (b)	Military	86/213	92/226	93/229	109/270
San Onofre State Beach	Public Recreation	54/132	56/138	64/151	102/252
Total Impact Area	--	504/1,244	539/1332	580/1,426	715/1,767

Sources: P&D Consultants (2001), San Clemente General Plan (1993) and Zoning Maps (1996), Prima Deshecha General Development Plan (2000), San Onofre State Beach General Plan (1984) and MCB Camp Pendleton Integrated Natural Resources Management Plan (October 2001).

(a) Government is a category "P" in the San Clemente General Plan that includes Governmental, Administrative, Utilities, Schools, Public and Private Parking.

(b) The area shown includes the existing I-5 right-of-way area, which results in an overstatement of land use impacts on MCB Camp Pendleton.

(c) A small segment of MCB Camp Pendleton is in Orange County at the northern border of SOSB.

TABLE 1.5-20
SUMMARY OF LAND USE IMPACTS OF THE A7C-FEC-M-INITIAL AND ULTIMATE ALTERNATIVES

Jurisdiction	Land Use Type	A7C-FEC-M-Initial Area Affected hectares/acres		A7C-FEC-M-Ultimate Area Affected hectares/acres	
		Permanent ROW	Temporary Disturbance	Permanent ROW	Temporary Disturbance
County of Orange					
Rancho Mission Viejo	Open Space (5)	207/512	260/642	256/632	270/667
Rolling Hills (b)	Community Commercial (2A)	2/5	2/6	2/5	2/6
RMV Conservancy	Open Space Reserve	40/98	40/101	41/102	41/103
MCB Camp Pendleton (d)	Public Facilities (4)	3/7	3/8	4/11	5/12
City of San Clemente (c)	Open Space Public	2/4	2/4	2/4	2/4
RMV Conservancy	Open Space Private	22/55	25/61	22/56	25/62
MCB Camp Pendleton (a)	Military	36/89	41/101	36/90	41/102
San Onofre State Beach	Public Recreation	119/295	135/334	125/309	144/357
Total Impact Area	--	432/1,067	511/1,263	487/1,207	531/1,314

Source: County of Orange Land Use Element (2000) P&D Consultants (2001), San Clemente Land Use Element (1993), San Onofre State Beach General Plan (1984) and MCB Camp Pendleton Final Integrated Natural Resources Management Plan (October 2001).

(a) The area shown includes the existing I-5 right-of-way area, which results in an overstatement of land use impacts on MCB Camp Pendleton.
(b) This includes the Rolling Hills PC Specific Plan which assumed implementation of a transportation corridor generally following the previous CP Alignment (now referred to as the FEC Alternative). The City of San Clemente is in the process of annexing all the Rolling Hills PC by the end of 2003.
(c) Impacts in San Clemente occur in Talega PC along Avenida Pico in open space to accommodate the interchange.
(d) A small segment of MCB Camp Pendleton is in Orange County at the northern border of SOSB.

TABLE 1.5-21
SUMMARY OF LAND USE IMPACTS ALONG ARTERIALS OF THE AIO ALTERNATIVE

Jurisdiction	Land Use Types	Permanent Right of Way	Temporary Disturbance
County of Orange			
	Residential-Suburban	39/96	53/130
	Open Space	66/164	109/269
	Urban Activity Center	5/13	7/16
	Public Facilities-Landfill Site	18/44	24/60
Subtotal	--	128/317	192/475
San Clemente			
	Community-Commercial	2/4	2/5
	Neighborhood-Commercial	2/4	2/5
	Government	4/9	4/9
	Industrial	1/3	3/8
	Commercial-Mixed	2/4	3/6
	Open Space-Private	25/63	31/76
	Open Space-Public	6/15	8/19
	Residential-High	1/3	2/4
	Residential-Low	6/14	8/19
Subtotal	--	48/119	61/151
San Juan Capistrano			
	Open Space-Regional Park*	0.2/1	1/4
Total Impact Area	--	177/436	255/630

* The area of AIO Alternative occurs along La Pata Avenue on the Prima Deshecha Landfill where the disturbance limits cross the City boundary in an area designated Regional Park.
Source: P&D Consultants (2001), San Clemente General Plan (1993) and Zoning Maps (1996), Prima Deshecha General Development Plan (2000) and County of Orange General Plan (200).

TABLE 1.5-22
SUMMARY OF LAND USE IMPACTS OF THE AIP ALTERNATIVE

Jurisdiction	Land Use Types	ROW (hectares/acres)		Area Disturbed (hectares/acres)	
ARTERIAL IMPROVEMENT COMPONENT					
County of Orange					
	Residential-Suburban	39	96	53	130
	Open Space	66	164	109	269
	Urban Activity Center	5	13	7	16
	Public Facilities-Landfill Site	18	44	24	60
Subtotal	--	128	317	192	475
San Clemente					
	Community-Commercial	2	4	2	5
	Neighborhood-Commercial	2	4	2	5
	Government	4	9	4	9
	Industrial	1	3	3	8
	Commercial-Mixed	2	4	3	6
	Open Space-Private	25	63	31	76
	Open Space-Public	6	15	8	19
	Residential-High	1	3	2	4
	Residential-Low	6	14	8	19
Subtotal	--	48	119	61	151
San Juan Capistrano					
	Open Space-Regional Park	0.2	1	1	4
Subtotal Arterial Improvements		177	436	255	630
I-5 HOV SPOT MIXED FLOW LANES COMPONENT					
Laguna Hills					
	Commercial Community	7	17	7	17
	Commercial Freeway	7	17	7	18
	Commercial Village	10	25	10	25
	Mixed Use	0.4	1	1	1
	Open Space	3	9	3	8
	Residential Low	4	11	4	11
	Residential Medium Low	0.2	1	0.2	1
	Transportation (I-5)	0.3	1	0.3	1
Subtotal	--	32	80	32	81
Mission Viejo					
	CIOA Office	1	3	1	3
	CIOA Com Highway/Office	1	3	1	3
	CIOA Com Highway	0.4	1	0.4	1
	CIOA Com Regional	1	3	1	3
	Commercial Bus Park	1	2	1	1
	Commercial Community	1	2	1	3
	Commercial Highway	16	39	16	39
	Commercial Office	0.1	0.3	0.1	0.3
	Open Space Recreation	8	19	8	19
	Public Community Facility	4	11	4	11
	Residential Medium	5	11	5	11
	Residential Medium Low	1	1	1	1
	Transportation (I-5)	47	115	47	115
Subtotal	--	85	211	85	213

TABLE 1.5-22
SUMMARY OF LAND USE IMPACTS OF THE AIP ALTERNATIVE

Jurisdiction	Land Use Types	ROW (hectares/acres)		Area Disturbed (hectares/acres)	
Laguna Niguel					
	Commercial Comm./Office	4	11	4	11
	Commercial Community	1	4	1	4
	Comm. Indust Bus Pk	5	13	5	13
	Open Space	2	5	2	5
	Public/Institutional	1	2	0.3	2
	Residential Attached	0.1	0.2	0	0
	Residential Detached	0.1	0.3	0	0
	Transportation (I-5)	5	12	3	8
Subtotal	--	19	46	16	41
San Juan Capistrano					
	Commercial General	5	13	5	13
13	Commercial Neighborhood	1	3	1	3
	Industrial Light	1	2	1	2
	Industrial Park	3	7	3	7
	Industrial Quasi	4	10	1	4
	Office Research	4	9	4	9
	Open Space Community Pk	1	4	1	4
	Open Space General	10	24	10	25
	Open Space Neigh. Pk	0.4	1	0.4	1
	Open Space Recreation	1	3	1	3
	Public Schools	0.2	1	0.2	1
	Planned Community	18	44	18	44
	Public and Institutional	3	7	3	7
	Residential High	2	5	2	4
	Residential Low	0.1	0.2	0.1	0.2
	Residential Medium	1	1	1	1
	Residential Medium High	5	12	5	13
	Transportation (I-5)	58	144	58	144
Subtotal	--	117	288	115	283
Dana Point					
	Open Space	6	15	6	15
	Public Facility	1	2	1	2
	Residential Multifamily	4	9	4	9
	Residential Single Family	5	11	5	11
	Transportation (I-5)	11	27	11	27
Subtotal	--	26	63	26	63
San Clemente					
	Commercial Community	5	12	5	12
	Commercial Neighborhood	10	25	10	24
	Commercial Regional	1	3	1	3
	Government	2	4	1	3
	Industrial Heavy	0.4	1	0.3	1
	Industrial Light	0	0	0	0
	Institutional	0.1	0.3	0.1	0.3
	Commercial Mixed-Res	6	15	6	14
	Open Space Golf	0.2	1	0.2	1
	Open Space Private	3	7	1	3

TABLE 1.5-22
SUMMARY OF LAND USE IMPACTS OF THE AIP ALTERNATIVE

Jurisdiction	**Land Use Types**	**ROW (hectares/acres)**		**Area Disturbed (hectares/acres)**	
	Open Space Public	0	0	0	0
	Residential High	0	0	0	0
	Residential Low	5	13	5	13
	Residential Medium	3	7	3	7
	Residential Medium Low	1	3	1	3
	Transportation (I-5)	98	243	98	243
Subtotal	--	135	333	132	326
County of Orange					
	Open Space	7	17	5	13
	Residential Suburban	1	1	0	0
Subtotal	--	7	18	5	13
MCB Camp Pendleton					
	I-5 Right-of-Way Corridor	7	18	7	18
Subtotal I-5 HOV Spot Mixed Flow Lanes		428	1,056	418	1,037
TOTAL IMPACTS		604	1,492	673	1,667
Sources: SCAG Land Use Data (2000) and P&D Consultants (2002).					

TABLE 1.5-23
SUMMARY OF LAND USE IMPACTS OF THE I-5 WIDENING ALTERNATIVE

Jurisdiction	Land Use Types	ROW (hectares/acres)		Area Disturbed (hectares/acres)	
Irvine					
	Community Commercial	2	5	2	5
	Research and Industrial	1	2	1	2
	Transportation (I-5)	7	18	7	18
Subtotal	--	10	25	10	25
Lake Forest					
	Commercial	5	12	5	12
	Office Professional	1	2	1	2
	Open Space	3	8	3	8
	Public Facility	1	1	1	1
	Residential Low	2	5	2	5
	Residential Medium	1	1	1	1
	Transportation (I-5)	20	48	20	48
Subtotal	--	32	79	32	79
Laguna Hills					
	Commercial Community	7	17	7	18
	Commercial Freeway	13	31	13	31
	Commercial Village	18	43	18	43
	Mixed Use	3	6	3	6
	Office Professional	0.2	0.4	0.2	0.4
	Open Space	4	9	4	9
	Residential Low	4	11	4	11
	Residential Medium Low	0.2	1	0.2	1
	Transportation (I-5)	0.2	1	0.2	1
Subtotal	--	48	119	49	120
Laguna Woods					
	Residential(6)	1	3	1	3
Mission Viejo					
	CIOA Office	1	3	1	3
	CIOA Com Highway/Office	1	3	1	3
	CIOA Com Highway	0.4	1	0.4	1
	CIOA Com Regional	1	3	1	3
	Commercial Bus Park	1	1	1	1
	Commercial Community	1	2	2	5
	Commercial Highway	16	39	14	34
	Commercial Office	0.1	0.3		
	Open Space Recreation	8	19	8	19
	Public Community Facility	4	11	5	13
	Residential Medium	5	11	6	16
	Residential Medium Low	1	1	1	1
	Transportation (I-5)	47	115	52	128
Subtotal	--	85	210	93	227
Laguna Niguel					
	Commercial Comm./Office	4	11	4	11
	Commercial Community	1	4	1	3
	Comm. Industrial Bus Pk	5	13	5	13
	Open Space	2	5	2	5

TABLE 1.5-23
SUMMARY OF LAND USE IMPACTS OF THE I-5 WIDENING ALTERNATIVE

Jurisdiction	Land Use Types	ROW (hectares/acres)		Area Disturbed (hectares/acres)	
	Public/Institutional	1	2	1	2
	Residential Attached	0.1	0.2	0	0
	Residential Detached	0.1	0.3	0	0
	Transportation (I-5)	5	12	3	6
Subtotal	--	19	46	16	39
San Juan Capistrano					
	Commercial General	5	13	5	13
	Commercial Neighborhood	1	3	1	3
	Industrial Light	1	2	1	2
	Industrial Park	3	8	3	8
	Industrial Quasi	4	11	3	8
	Office Research	5	13	5	13
	Open Space Community Pk	2	5	2	5
	Open Space General	11	27	11	27
	Open Space Neigh. Pk	1	1	0	1
	Open Space Recreation	1	3	1	3
	Planned Community	20	49	20	49
	Public and Institutional	3	8	3	8
	Residential High	2	4	2	4
	Residential Low	3	7	3	7
	Residential Medium	2	4	2	4
	Residential Medium High	7	17	7	17
	Residential Medium Low	0.1	0.2	0.1	0.2
	Residential Very Low	0.3	1	0.3	1
	Specific Plan	2	5	2	5
	Transportation (I-5)	60	148	60	148
Subtotal	--	133	328	132	325
Dana Point					
	Open Space	6	15	4	10
	Public Facility	1	3	1	3
	Residential Multifamily	4	9	4	9
	Residential Single Family	7	17	7	17
	Transportation (I-5)	11	27	11	27
Subtotal	--	29	72	27	66
San Clemente					
	Commercial Community	5	12	5	13
	Commercial Neighborhood	11	28	11	28
	Commercial Regional	1	3	1	3
	Government	2	4	2	4
	Industrial Heavy	0.3	1	0.3	1
	Institutional	0.1	0.3	0.1	0.3
	Commercial Mixed-Res	9	21	9	21
	Open Space Golf	0.3	1	0.3	1
	Open Space Private	1	3	1	3
	Open Space Public	1	0.3	0.1	0.3
	Residential Low	8	19	8	19
	Residential Medium	3	8	3	8
	Residential Medium Low	2	4	2	4

TABLE 1.5-23
SUMMARY OF LAND USE IMPACTS OF THE I-5 WIDENING ALTERNATIVE

Jurisdiction	Land Use Types	ROW (hectares/acres)		Area Disturbed (hectares/acres)	
	Transportation (I-5)	99	245	99	245
Subtotal	--	142	348	140	348
County of Orange					
	Open Space	5	12	5	12
MCB Camp Pendleton					
	I-5 Right-of-Way Corridor	2	5	2	5
TOTAL IMPACTS		506	1,247	507	1,250
Sources: SCAG Land Use Data ((2000) and P&D Consultants (2002).					

TABLE 1.5-24
SUMMARY OF IMPACTS TO AGRICULTURAL RESOURCES BY AREA
(hectares/acres)

Alternatives	NRCS Resources		Agricultural Preserve (Williamson Act)		NRCS Resources		Agricultural Preserves (Williamson Act)	
	Total Initial		Total Initial		Total Ultimate		Total Ultimate	
	ha	ac	ha	ac	ha	ac	ha	ac
FEC	51	127	178	441	62	153	183	452
FEC-CV	52	124	178	441	62	153	183	452
FEC-AFV	63	155	178	441	75	185	183	452
FEC-W	34	83	109	269	34	85	111	275
FEC-M	22	56	123	304	25	61	133	328
FEC-OHV	20	51	75	185	25	61	109	270
FEC-APV	49	120	178	441	58	144	183	452
FEC-TV	49	120	178	441	59	145	183	452
CC	18	45	84	208	22	55	110	272
CC-ALPV	18	45	84	208	22	55	110	272
CC-OHV	10	24	59	145	17	42	80	199
A7C	3	8	171	423	4	9	183	451
A7C-7SV	3	8	171	423	4	9	183	451
A7C-OHV	2	6	77	189	3	7	92	228
A7C-ALPV	3	8	171	423	4	9	183	451
A7C-FECV	6	14	171	423	6	16	183	451
A7C-FECV-C	6	15	171	423	6	15	183	451
A7C-FECV-AF	17	41	171	423	19	48	183	451
A7C-FEC-M	3	7	89	220	3	7	92	227
AIO	-	-	-	-	7	16	15	37
AIP	-	-	-	-	9	22	15	37
I-5	-	-	-	-	0	0	-	-
(a) There are no Williamson Act preserves on MCB Camp Pendleton.								

Sources: California Department of Conservation Important Farmland Map, (2000), County of Orange General Plan (2000) and P&D Consultants 2003.

SECTION 2.0
DESCRIPTION OF THE ALTERNATIVES

2.1 INTRODUCTION

This Section describes the alternatives for the South Orange County Transportation Infrastructure Improvement Project (SOCTIIP). A detailed discussion of the project alternatives is provided in the Project Alternatives Technical Report.

2.2 BUILD ALTERNATIVES

2.2.1 OVERVIEW OF THE BUILD ALTERNATIVES

The proposed project involves locating and constructing transportation improvements in south Orange County and north San Diego County. The alternatives under consideration consist of transportation improvement alternatives and two No Action Alternatives. The transportation improvement alternatives include widening of Interstate 5 (I-5), arterial road improvements with and without widening I-5, and toll road corridors which would be southern extensions of the existing State Route 241 (SR 241). SR 241 is one of three existing Orange County toll road corridors operated by the Transportation Corridor Agency (TCA). The northern segment of SR 241 begins at an interchange with Oso Parkway and extends north to State Route 91 (SR 91) in northeast Orange County. The corridor alternatives would extend SR 241 south from its existing terminus at Oso Parkway south to approximately the Orange/San Diego County border.

Two major categories of build alternatives are considered in this technical report:

- Build alternatives which propose a southern extension of existing SR 241, in south Orange County. The corridor extension alternatives being evaluated propose the extension of existing SR 241 south from its existing terminus at Oso Parkway to I-5 in the vicinity of the Orange/San Diego County line. This proposed segment of the corridor is frequently referred to as the Foothill Transportation Corridor-South (FTC-South or FTC-S). The corridor alternatives all propose extension of existing SR 241 south of Oso Parkway, to I-5 or to an intersecting arterial south of Oso Parkway.

- Build alternatives which propose improvements to existing I-5 and/or to Master Plan of Arterial Highways (MPAH) arterials in south Orange County. These Alternatives do not include any extension of existing SR 241 south of Oso Parkway.

In addition, two No Action Alternatives, with different land use and transportation system assumptions, are also described in this Section.

The corridor, arterial and I-5 widening alternatives are described in the following sections. Figure 2.2-1 shows the alignments of the corridor, arterial and I-5 alternatives. Figure 2.2-1 is provided following the last page of text in this Section.

As discussed in this Section, the corridor alternatives are subdivided into unique segments with letter codes. Each segment is unique to each alternative. However, on some segments, the corridor alternatives may share a common alignment but do not necessarily share common disturbance limits. For example, the corridor alignment on the segment immediately south of the terminus of the existing SR 241 is common to all the corridor alternatives. However, the disturbance limits on this segment may vary among the alternatives based on slight differences in the overall profile for each alternative. This is based on objectives to meet federal and state standards and to balance cut and fill earthwork for each alternative. Therefore, each segment of each build alternative is unique in its disturbance limits, even when several alternatives have a common alignment on that segment. Detailed maps of the corridor alignments are provided in the Project Alternatives Technical Report.

2.2.1.1 Far East Corridor Alternatives

The Far East Corridor (FEC) alignments proposed for evaluation are listed below and are discussed in detail in the following sections.

<u>Far East Corridor - Initial Alternatives</u>

Far East Corridor – Complete - Initial (FEC- Initial) Alternative
Far East Corridor - Talega Variation - Initial (FEC-TV-Initial) Alternative
Far East Corridor - Cristianitos Variation - Initial (FEC-CV-Initial) Alternative
Far East Corridor - Agricultural Fields Variation - Initial (FEC-AFV-Initial) Alternative
Far East Corridor - Ortega Highway Variation - Initial (FEC-OHV-Initial) Alternative
Far East Corridor - Avenida Pico Variation - Initial (FEC-APV-Initial) Alternative
Far East Corridor-West-Initial (FEC-W-Initial) Alternative
Far East Corridor-Modified-Initial (FEC-M-Initial) Alternative

<u>Far East Corridor - Ultimate Alternatives</u>

Far East Corridor – Complete - Ultimate (FEC-Ultimate) Alternative
Far East Corridor - Talega Variation - Ultimate (FEC-TV-Ultimate) Alternative
Far East Corridor - Cristianitos Variation - Ultimate (FEC-CV-Ultimate) Alternative
Far East Corridor - Agricultural Fields Variation - Ultimate (FEC-AFV-Ultimate) Alternative
Far East Corridor - Ortega Highway Variation - Ultimate (FEC-OHV-Ultimate) Alternative
Far East Corridor - Avenida Pico Variation - Ultimate (FEC-APV-Ultimate) Alternative
Far East Corridor-West-Ultimate (FEC-W- Ultimate) Alternative
Far East Corridor-Modified- Ultimate (FEC-M- Ultimate) Alternative

<u>Far East Corridor Complete (FEC)-Initial and Ultimate Alternatives</u>

Alignment of the FEC Alternatives

The alignment of the FEC-Initial and Ultimate Alternatives generally follows the alignment of the alternative previously referred to as the CP Alignment. The corridor under the FEC Alternatives is approximately 26 kilometers (km) (16 miles (mi)) long, with an additional

approximately 1.9 km (1.2 mi) of improvements on I-5. Table 2.2-1 summarizes the characteristics of the FEC Alternatives by segment, including the geographic extent of the segment, the length of the segment, the typical initial and ultimate cross sections on the segment, the interchanges on the segment, bridges and other crossings on the segment, and other relevant features of the segment. The individual segments which comprise the FEC-Initial and Ultimate Alternatives are described below.

Segment A. Segment A of the FEC Alternatives extends from the existing terminus of the FTC-N at Oso Parkway, on the east side of Cañada Chiquita to the southeast, south of Coto de Caza, crossing Cañada Gobernadora approximately four km (2.5 mi) north of San Juan Creek. This Segment crosses San Juan Creek and terminates at Ortega Highway. This Segment includes construction of a new connector road approximately 1.8 km (1.1 mi) long extending north from Ortega Highway to the FEC alignment. This Segment includes realignment and potential widening of approximately 1.4 km (0.9 mi) of Ortega Highway. Ortega Highway at the corridor crossing is currently a two lane facility. Under the MPAH, Ortega Highway is designated as a six lane Major Arterial. If Ortega Highway is improved to the Major Arterial designation prior to the implementation of these Alternatives, no further widening of Ortega Highway would be required. If Ortega Highway is not improved to the MPAH designation by the time these Alternatives are implemented, an approximately 1.4 km (0.9 mi) segment of Ortega Highway would be widened, to the MPAH designation, as part of these Alternatives. These Alternatives would also result in the realignment of this same segment of Ortega Highway.

Segment B. Segment B of the FEC Alternatives starts at Ortega Highway approximately 5.5 km (3.5 mi) east of Antonio Parkway/Avenida La Pata. From Ortega Highway, Segment B extends south, east of the Rancho Mission Viejo (RMV) Land Conservancy and Cristianitos Creek, extending southwest and crossing Blind/Gabino Creek and Cristianitos Creek approximately 1.5 km (one mi) north of the Orange/San Diego County line. Segment B crosses the southeast corner of the Talega Valley Planned Community (PC), on an alignment reflected in the Talega Valley Development Agreement, before terminating just south of Avenida Pico.

Segment C. Segment C of the FEC Alternatives starts south of Avenida Pico and the Orange/San Diego County line immediately west of the San Diego Gas and Electric (SDG&E) substation. The alignment travels south, crossing the inland part of the San Onofre State Beach lease on Marine Corps Base (MCB) Camp Pendleton in San Diego County, extending across Cristianitos Road approximately 1.1 km (0.7 mi) north of I-5. This Segment terminates where the corridor crosses San Mateo Creek.

Segment D. Segment D of the FEC Alternatives starts where the corridor crosses San Mateo Creek and extends southeast to I-5, with direct connectors between the corridor and I-5 one km (0.6 mi) south of Basilone Road. I-5 would be widened from 1.0 km (0.6 mi) south of Basilone Road to 2.9 km (1.8 mi) south of Basilone Road.

Construction of the FEC Alternatives

Construction equipment anticipated to be used for construction of all the Corridor Alternatives would be used for clearing and grubbing, grading, excavation, backfilling, materials and

equipment delivery and removal, concrete and asphalt installation, and other construction activities. Staging areas would be used during construction for materials storage, equipment and employee parking, temporary storage of soils and other related activities. Access to the construction areas would be via existing public roads and existing farm/utility access roads.

Far East Corridor - Talega Variation (FEC-TV)-Initial and Ultimate Alternatives

Alignment of the FEC-TV Alternatives

The FEC-TV-Initial and Ultimate Alternatives alignment follows the alignment of the FEC Alternatives from Oso Parkway to south of Ortega Highway (Segment A described earlier). The FEC-TV Alternatives also include segments E and F as described below. The corridor under the FEC-TV Alternatives is approximately 21 km (13 mi) long with approximately 4.6 km (2.9 mi) of improvements on I-5. Table 2.2-2 summarizes the characteristics of the FEC-TV Alternatives by segment.

Segment E. From Ortega Highway, the FEC-TV Alternatives extend southwest across the north part of the RMV Land Conservancy and enter the City of San Clemente approximately 3.2 km (2.0 mi) east of the City of San Juan Capistrano. The FEC-TV alignment then crosses the Talega Valley PC, crossing Avenida Vista Hermosa approximately 0.5 km (0.3 mi) north of Avenida Pico to approximately 0.4 km (0.3 mi) south of Avenida La Pata.

Segment F. From south of Avenida La Pata, Segment F of the FEC-TV Alternatives extends southwest, traversing land owned by the City of San Clemente and several existing residential developments. Segment F continues parallel to and northwest of Avenida Pico, to direct connectors at I-5, 0.9 km (0.6 mi) south of Avenida Pico. This Segment then extends 4.6 km (2.9 mi) south on I-5 to the terminus just north of Cristianitos Road.

Far East Corridor - Cristianitos Variation (FEC-CV) - Initial and Ultimate Alternatives

Alignment of the FEC-CV Alternatives

The alignment of the FEC-CV Alternatives follows the alignment of the FEC Alternatives from Oso Parkway to just after it crosses into San Onofre State Park, south of Avenida Pico (Segments A and B, described earlier). From that point, the FEC-CV Alternatives would become an undivided four lane arterial highway south to I-5. The FEC-CV Alternatives also include segment G, as described below. The corridor under the FEC-CV Alternative is approximately 24 km (14 mi) long. Table 2.2-3 summarizes the characteristics of the FEC-CV Alternatives by segment.

Segment G. Segment G of the FEC-CV Alternatives becomes a four lane undivided collector road just south of the Avenida Pico interchange. From that interchange, the FEC-CV alignment proceeds south to join the existing Cristianitos Road alignment south of the Camp Pendleton Guard Gate to the interchange of Cristianitos Road and I-5. Segment G includes widening (to four lanes) and reconstruction of existing Cristianitos Road south of the Camp Pendleton Guard Gate south to I-5 and reconstruction of the existing I-5/Cristianitos Road interchange.

Far East Corridor - Agricultural Fields (FEC-AFV) - Initial and Ultimate Alternatives

Alignment of the FEC-AFV Alternatives

The alignment of the FEC-AFV Alternatives follows the alignment of the FEC Alternatives from Oso Parkway to just after it crosses into the San Onofre State Beach, south of Avenida Pico (Segments A, B and D, described earlier). The FEC-AFV Alternatives also include Segment H, as described below. The corridor under the FEC-AFV Alternative is approximately 26 km (16 mi) long, with an additional approximately 1.9 km (1.2 mi) of improvements to I-5. Table 2.2-4 summarizes the characteristics of the FEC-AFV Alternatives by segment.

Segment H. Segment H extends southeast from just south of Avenida Pico as it crosses the Orange/San Diego County line. This Segment extends southeast through San Onofre State Beach on MCB Camp Pendleton and crosses Cristianitos Road 0.8 km (0.5 mi) southwest of San Mateo Road. It crosses San Mateo Creek just west of Cristianitos Creek and traverses the agricultural leased land on MCB Camp Pendleton east of San Mateo Creek to the intersection of the corridor with I-5.

Far East Corridor - Ortega Highway Variation (FEC-OHV) - Initial and Ultimate Alternatives

Alignment of the FEC-OHV Alternative

The alignment of the FEC-OHV Alternatives follows the alignment of Segment A (described earlier) of the FEC Alternatives, from Oso Parkway to Ortega Highway. Only Segment A would be constructed under these Alternatives. The corridor under the FEC-OHV Alternatives is approximately 9 km (6 mi) long.

The FEC-OHV Alternatives incorporate Transportation Systems Management (TSM) technology improvements on Ortega Highway from the corridor terminus at Ortega Highway to I-5. The TSM strategies may include traffic signal coordination, real time traffic monitoring and surveillance, and traveler information. No additional lanes or road widening on Ortega Highway, beyond those improvements already assumed in the MPAH (four lanes on Ortega Highway), are assumed under these Alternatives. Ortega Highway is shown on the MPAH as a Major Arterial with six travel lanes. No change to this MPAH designation or the number of travel lanes on Ortega Highway are proposed under these Alternatives. However, the TSM strategies may require construction within the existing Ortega Highway right-of-way to install surveillance, monitoring and information display equipment. Table 2.2-5 summarizes the characteristics of the FEC-OHV Alternatives.

Far East Corridor - Avenida Pico Variation (FEC-APV) - Initial and Ultimate Alternatives

Alignment of the FEC-APV Alternatives

The alignment of the FEC-APV - Initial and Ultimate Alternatives follows the alignment of Segments A and B (described earlier) of the FEC Alternatives from Oso Parkway to Avenida

Pico. Segments A and B are the only segments which would be constructed under these Alternatives. The corridor under the FEC-APV - Initial and Ultimate Alternatives is approximately 17 km (10.6 mi) long. The FEC-APV Alternatives incorporate TSM technology improvements on Avenida Pico from the corridor terminus at Avenida Pico to I-5. No additional lanes or road widening on Avenida Pico, beyond those improvements already assumed in the MPAH (six lanes on Avenida Pico), are assumed under these Alternatives. Avenida Pico is shown on the MPAH as a Major Arterial with six travel lanes. No change to this MPAH designation or the number of travel lanes on Avenida Pico are proposed under these Alternatives. However, the TSM strategies may require construction within the existing Avenida Pico right-of-way to install surveillance, monitoring and information display equipment. Table 2.2-6 summarizes the characteristics of the FEC-APV Alternatives by segment.

Far East Corridor-West-Initial and Ultimate Alternatives

The FEC-W alignment follows the same alignment as the FEC Alternatives on Segments C and D. The FEC-W Alternative includes Segments U, V, C and D. The corridor under the FEC-W Alternatives is approximately 25 km (15 mi) long, with approximately 1.3 km (0.8 mi) of improvements on the I-5. Table 2.2-7 summarizes the characteristics of the FEC-W Alternatives by segment and the individual segments which comprise the FEC-W Alternative are described below.

Segment U. Segment U of the FEC-W Alternatives extends from the existing terminus of the FTC-N at Oso Parkway, on the east side of Cañada Chiquita to the southeast, south of Coto de Caza, crossing Cañada Gobernadora approximately four km (2.5 mi) north of San Juan Creek.

Segment V. Segment V of the FEC-W Alternatives starts at Ortega Highway approximately 4.0 km (2.5 mi) east of Antonio Parkway/Avenida La Pata. From Ortega Highway, Segment V extends south traversing the west side of the RMV Land Conservancy, extending southeast and crosses the southeast corner of the Talega Valley PC before terminating just south of Avenida Pico.

Description of the Far East Corridor-Modified-Initial and Ultimate Alternatives

The FEC-M alignment follows the same alignment as the FEC Alternatives on Segments C and D. The FEC-M Alternative includes Segments W, X, C and D. The corridor under the FEC-M Alternatives is approximately 26 km (16 mi) long, with approximately 1.3 km (0.8 mi) of improvements on the I-5. Table 2.2-8 summarizes the characteristics of the FEC-M Alternatives by segment and the individual segments which comprise the FEC-M Alternative are described below.

Segment W. Segment W of the FEC-M Alternatives extends from the existing terminus of the FTC-N at Oso Parkway, on the east side of Cañada Chiquita to the southeast, south of Coto de Caza, crossing Cañada Gobernadora approximately four km (2.5 mi) north of San Juan Creek. This Segment crosses San Juan Creek and terminates at Ortega Highway. This Segment includes potential widening of approximately 1.4 km (0.9 mi) of Ortega Highway and construction of a new connector road approximately 1.8 km (1.1 mi) long extending north from Ortega Highway

to the FEC-M alignment. Ortega Highway at the corridor crossing is currently a two lane facility. Under the MPAH, Ortega Highway is designated as a six lane Major Arterial. If Ortega Highway is improved to the Major Arterial designation prior to the implementation of these Alternatives, no further widening of Ortega Highway would be required. If Ortega Highway is not improved to the MPAH designation by the time these Alternatives are implemented, an approximately 1.4 km (0.9 mi) segment of Ortega Highway would be widened, to the MPAH designation.

Segment X. Segment X of the FEC-M Alternatives starts at Ortega Highway approximately 5.4 km (3.4 mi) east of Antonio Parkway/Avenida La Pata. From Ortega Highway, Segment X extends south, east of the RMV Land Conservancy and Cristianitos Creek, extending southwest and crossing Cristianitos Creek approximately 2.8 km (1.7 mi) north of the Orange/San Diego County line. Segment X crosses the southeast portion of the RMV Land Conservancy and the southeast corner of the Talega Valley PC before terminating just south of Avenida Pico.

2.2.1.2 Central Corridor Alternatives

The Central Corridor (CC) alignments proposed for evaluation are listed below and are discussed in detail later in this Section.

Central Corridor - Initial Alternatives

Central Corridor – Complete - Initial (CC-Initial) Alternative
Central Corridor - Avenida La Pata Variation - Initial (CC-ALPV-Initial) Alternative
Central Corridor - Ortega Highway Variation - Initial (CC-OHV-Initial) Alternative

Central Corridor - Ultimate Alternatives

Central Corridor – Complete - Ultimate (CC-Ultimate) Alternative
Central Corridor - Avenida La Pata Variation - Ultimate (CC-ALPV-Ultimate) Alternative
Central Corridor - Ortega Highway Variation - Ultimate (CC-OHV-Ultimate) Alternative

Central Corridor - Complete (CC) - Initial and Ultimate Alternatives

Alignment of the CC Alternatives

The alignment of the CC - Initial and Ultimate Alternatives generally follows the alignment of the alternative previously referred to as BX. The CC Alternatives include Segments I, J and K. The corridor under the CC Alternatives is approximately 19 km (12 mi) long, with an additional approximately 4.6 km (2.9 mi) of improvements on I-5. Table 2.2-9summarizes the characteristics of the CC - Initial and Ultimate Alternatives by segment. These Alternatives would also require widening (to the MPAH designation), but no realignment of, approximately 1 km (0.6 mi) of Ortega Highway. Ortega Highway at the corridor crossing is currently a two lane facility. Under the MPAH, Ortega Highway is designated as a six lane Major Arterial. If Ortega Highway is improved to the Major Arterial designation prior to the implementation of these Alternatives, no further widening of Ortega Highway would be required. If Ortega Highway is

not improved to the MPAH designation by the time these Alternatives are implemented, an approximately 1 km (0.6 mi) segment of Ortega Highway would be widened, to the MPAH designation, as part of these Alternatives. These Alternatives would not result in the realignment of this same segment of Ortega Highway. The individual segments which comprise the CC Alternatives are described below.

Segment I. Segment I extends from the existing terminus of the FTC-N at Oso Parkway, crosses Cañada Chiquita approximately 2.1 km (1.3 miles) south of Oso Parkway, extending along the west side of Cañada Chiquita, crossing San Juan Creek and Ortega Highway approximately 0.4 km (0.25 mile) east of Antonio Parkway/Avenida La Pata.

Segment J. Segment J extends south from Ortega Highway, paralleling Avenida La Pata, crossing through Prima Deshecha Landfill, south to Avenida Vista Hermosa, traversing property owned by the City of San Clemente and terminating 0.43 km (0.27 mi) south of Avenida La Pata.

Segment K. Segment K extends southwest from the crossing of Avenida La Pata, traversing several existing residential developments. Segment K continues parallel to and northwest of Avenida Pico, to direct connectors at I-5, 0.9 km (0.6 mi) south of Avenida Pico. This Segment then extends 4.6 km (2.9 mi) south on I-5 to just north of Cristianitos Road.

Central Corridor - Avenida La Pata Variation (CC-ALPV) - Initial and Ultimate Alternatives

Alignment of the CC-ALPV Alternatives

The alignment of the CC-ALPV - Initial and Ultimate Alternatives includes Segments I and J (described earlier) only. The corridor under the CC-ALPV Alternatives is approximately 14 km (8.7 mi) long. Table 2.2-10 summarizes the characteristics of the CC-ALPV-Initial and Ultimate Alternatives by segment. The CC-ALPV Alternatives incorporate TSM technology improvements on Avenida Vista Hermosa from the corridor terminus at Avenida Vista Hermosa to Avenida La Pata, on Avenida La Pata from Avenida Vista Hermosa to Avenida Pico, and on Avenida Pico from Avenida La Pata to I-5. No additional lanes or road widening on Avenida Vista Hermosa, Avenida La Pata and Avenida Pico, beyond those improvements already assumed in the MPAH, are assumed under these Alternatives. Avenida Vista Hermosa is shown on the MPAH as a Primary Arterial, with four travel lanes and Avenida La Pata and Avenida Pico are shown on the MPAH as Major Arterials with six travel lanes. No changes to these MPAH designations or number of travel lanes on these arterial segments are proposed under these Alternatives. However, the TSM strategies may require construction within the existing arterial rights-of-way to install surveillance, monitoring and information display equipment.

Central Corridor - Ortega Highway Variation (OHV) - Initial and Ultimate Alternatives

Alignment of the CC-OHV Alternatives

The CC-OHV Alternative includes only Segment I (described earlier). The corridor under the CC-OHV Alternative is approximately 8 km (5 mi) long. Table 2.2-11 summarizes the characteristics of the CC-OHV Alternative. The CC-OHV Alternatives incorporate TSM

technology improvements on Ortega Highway from the corridor terminus at Ortega Highway to I-5. No additional lanes or road widening on Ortega Highway, beyond those improvements already assumed in the MPAH (four lanes on Ortega Highway), are assumed under these Alternatives. Ortega Highway is shown on the MPAH as a Major Arterial with six travel lanes. No change to this MPAH designation or the number of travel lanes on Ortega Highway are proposed under these Alternatives. However, the TSM strategies may require construction within the existing Ortega Highway right-of-way to install surveillance, monitoring and information display equipment.

2.2.1.3 Alignment 7 Corridor Alternatives

The Alignment 7 Corridor (A7C) alignments proposed for evaluation are listed below and are discussed in detail in this Section.

<u>Alignment 7 Corridor – Initial Alternatives</u>

Alignment 7 Corridor – Complete - Initial (A7C-Initial) Alternative
Alignment 7 Corridor - 7 Swing Variation - Initial (A7C-7SV-Initial) Alternative
Alignment 7 Corridor - Far East Crossover Variation - Initial (A7C-FECV-Initial) Alternative
Alignment 7 Corridor - Far East Crossover (Cristianitos) Variation - Initial (A7C-FECV-C-Initial) Alternative
Alignment 7 Corridor - Far East Crossover (Agricultural Fields) Variation - Initial (A7C-FECV-AF-Initial) Alternative
Alignment 7 Corridor - Ortega Highway Variation - Initial (A7C-OHV-Initial) Alternative
Alignment 7 Corridor - Avenida La Pata Variation - Initial (A7C-ALPV-Initial) Alternative
Alignment 7 Corridor-Far East Crossover-Modified-Initial (A7C-FEC-M-Initial) Alternative

<u>Alignment 7 Corridor - Ultimate Alternatives</u>

Alignment 7 Corridor - Complete - Ultimate (A7C-Ultimate) Alternative
Alignment 7 Corridor - 7 Swing Variation - Ultimate (A7C-7SV-Ultimate) Alternative
Alignment 7 Corridor - Far East Crossover Variation - Ultimate (A7C-FECV-Ultimate) Alternative
Alignment 7 Corridor - Far East Crossover (Cristianitos) Variation - Ultimate (A7C-FECV-C-Ultimate) Alternative
Alignment 7 Corridor - Far East Crossover (Agricultural Fields) Variation - Ultimate (A7C-FECV-AF-Ultimate) Alternative
Alignment 7 Corridor - Ortega Highway Variation - Ultimate (A7C-OHV-Ultimate) Alternative
Alignment 7 Corridor - Avenida La Pata Variation - Ultimate (A7C-ALPV-Ultimate) Alternative
Alignment 7 Corridor-Far East Crossover-Modified-Ultimate (A7C-FEC-M-Ultimate) Alternative

Alignment 7 Corridor - Complete (A7C) - Initial and Ultimate Alternatives

Alignment of the A7C Alternatives

The alignment of the A7C-Initial and Ultimate Alternatives includes Segments L, M and N. The corridor under the A7C Alternatives is approximately 19 km (12 mi) long, with an additional approximately 4.6 km (2.9 mi) of improvements on I-5. Table 2.2-12 summarizes the characteristics of the A7C-Initial and Ultimate Alternatives by segment. The individual segments which comprise the A7C Alternatives are described below.

Segment L. Segment L extends from the existing terminus of the FTC-N at Oso Parkway, on the east side of Cañada Chiquita and east of the Cañada Chiquita Water Reclamation Plant. It then extends south, across San Juan Creek to Ortega Highway, approximately 1.7 km (1.1 mi) east of the intersection of Antonio Parkway/Avenida La Pata. This Segment includes construction of a new connector road approximately 2.2 km (1.4 mi) long, extending east from Antonio Parkway to the A7C alignment.

Segment M. Segment M extends south from Ortega Highway and across the Prima Deshecha Landfill, entering the City of San Clemente and crossing the Talega PC. Segment M then extends southeast to Avenida Vista Hermosa approximately 0.5 km (0.3 mi) northwest of Avenida Pico.

Segment N. From the crossing of Avenida Vistas Hermosa, Segment N extends southwest, traversing land owned by the City of San Clemente and several existing residential developments. Segment N continues parallel to and northwest of Avenida Pico, to direct connectors at I-5. Segment N includes widening of I-5 from south of Avenida Pico to just north of Cristianitos Road.

Alignment 7 Corridor – 7 Swing Variation (A7C-7SV) - Initial and Ultimate Alternatives

Alignment of the A7C-7SV Alternatives

The alignment of the A7C-7SV-Initial and Ultimate Alternatives includes Segments L (described earlier), O and P. The corridor under the A7C-7SV Alternatives is approximately 18 km (11 mi) long, with an additional approximately 4.6 km (2.9 mi) of improvements on I-5. Table 2.2-13 summarizes the characteristics of the A7C-7SV-Initial and Ultimate Alternatives by segment. Segments O and P are described below.

Segment O. Segment O extends from Ortega Highway south across the Prima Deshecha Landfill to Avenida Vista Hermosa, traversing land owned by the City of San Clemente and terminating 0.43 km (0.27 mi) south of Avenida La Pata.

Segment P. Segment P extends southwest from the crossing of Avenida La Pata, traversing several existing residential developments. Segment P continues parallel to and northwest of Avenida Pico, to direct connectors at I-5. Segment P includes widening of I-5 from south of Avenida Pico to just north of Cristianitos Road.

Alignment 7 - Far East Crossover Variation (A7C-FECV) - Initial and Ultimate Alternatives

Alignment of the A7C-FECV Alternatives

The alignment of the A7C-FECV Initial and Ultimate Alternatives includes Segments L (described earlier), Q, R and D (described earlier). The corridor under the A7C-FECV Alternatives is approximately 25 km (15 mi) long, with an additional approximately 1.9 km (1.2 mi) of improvements on I-5. Table 2.2-14 summarizes the characteristics of the A7C-FECV-Initial and Ultimate Alternatives by segment. Segments Q and R are described below.

Segment Q. Segment Q extends from south of Ortega Highway, across Prima Deshecha Landfill, through the southeast corner of the Rolling Hills (Talega) PC, through the southeast corner of the RMV Land Conservancy and south to Avenida Pico.

Segment R. Segment R starts at Avenida Pico and the Orange/San Diego County line immediately west of the SDG&E substation. The alignment travels south, crossing the inland part of San Onofre State Beach on MCB Camp Pendleton in San Diego County, extending across Cristianitos Road approximately 1.1 km (0.7 mi) north of I-5. This segment terminates where the corridor crosses San Mateo Creek.

Alignment 7 Corridor - Far East Crossover (Cristianitos) Variation (A7C-FECV-C) - Initial and Ultimate Alternatives

Alignment of the A7C-FECV-C Alternatives

The alignment of the A7C-FECV-C-Initial and Ultimate Alternatives includes Segments L, Q (both described earlier) and S. The corridor under the A7C-FEC-C Alternatives is approximately 23 km (14.3 mi) long. Table 2.1-15 summarizes the characteristics of the A7C-FECV-C Alternatives by segment. Segment S is described below.

Segment S. Segment S becomes a four lane undivided collector road south of the Avenida Pico interchange. From that interchange, the alignment would proceed south to join the existing Cristianitos Road alignment south of the Camp Pendleton Guard Gate to the interchange of Cristianitos Road and I-5. Segment S includes widening and reconstruction of existing Cristianitos Road from south of the Camp Pendleton Guard Gate south to I-5 and reconstruction of the existing I-5/Cristianitos Road interchange.

Alignment 7 Corridor - Far East Crossover (Agricultural Fields) Variation (A7C-FECV-AF) - Initial and Ultimate Alternatives

Alignment of the A7C-FECV-AF Alternatives

The alignment of the A7C-FECV-AF-Initial and Ultimate Alternatives includes Segments L, Q (both described earlier), T and D (described earlier). The corridor under the A7C-FECV-AF

Alternatives is approximately 25 km (15 miles) long. Table 2.2-16 summarizes the characteristics of the A7C-FECV-AF Alternatives by segment. Segment T is described below.

Segment T. Segment T extends southeast from Avenida Pico as it crosses the Orange/San Diego County line. This Segment then extends southeast through San Onofre State Beach on MCB Camp Pendleton, crossing Cristianitos Road 0.8 km (0.5 mi) southwest of San Mateo Road. It then crosses San Mateo Creek just west of Cristianitos Creek and traverses the agricultural leased land on MCB Camp Pendleton east of San Mateo Creek.

Alignment 7 - Ortega Highway Variation (A7C-OHV) - Initial and Ultimate Alternatives

Alignment of the A7C-OHV Alternatives

The alignment of the A7C-OHV Alternatives includes Segment L only (described earlier). The A7C-OHV Alternatives incorporate TSM technology improvements on Ortega Highway from the corridor terminus at Ortega Highway to I-5. No additional lanes or road widening on Ortega Highway, beyond those improvements already assumed in the MPAH (four lanes on Ortega Highway), are assumed under these Alternatives. Ortega Highway is shown on the MPAH as a Major Arterial with six travel lanes. No change to this MPAH designation or the number of travel lanes on Ortega Highway are proposed under these Alternatives. However, the TSM strategies may require construction within the existing arterial right-of-way to install surveillance, monitoring and information display equipment. The corridor under the A7C-OHV Alternatives is approximately 7 km (4 mi) long. Table 2.2-17 summarizes the characteristics of the A7C-OHV Alternatives for Segment L.

Alignment 7 - Avenida La Pata Variation (A7C-ALPV) - Initial and Ultimate Alternatives

Alignment of the A7C-ALPV Alternative

The alignment of the A7C-ALPV Alternatives includes Segments L and M (described earlier). Table 2.2-18 summarizes the characteristics of the A7C-ALPV Alternatives by segment. The A7C-ALPV Alternatives incorporate TSM technology improvements on Avenida Vista Hermosa from the corridor terminus at Avenida Vista Hermosa to Avenida La Pata, on Avenida La Pata from Avenida Vista Hermosa to Avenida Pico and on Avenida Pico from Avenida La Pata to I-5. No additional lanes or road widening on Avenida Vista Hermosa, Avenida La Pata or Avenida Pico, beyond those improvements already assumed in the MPAH, are assumed under these Alternatives. The corridor under the A7C-ALPV Alternatives is approximately 14 km (9 mi) long. Avenida Vista Hermosa is shown on the MPAH as a Primary Arterial, with four travel lanes and Avenida La Pata and Avenida Pico are shown on the MPAH as Major Arterials with six travel lanes. No changes to these MPAH designations or number of travel lanes on these arterial segments are proposed under these Alternatives. However, the TSM strategies may require construction within the existing arterial right-of-way to install surveillance, monitoring and information display equipment.

Alignment 7 Corridor-Far East Crossover-Modified (A7C-FEC-M)-Initial and Ultimate Alternatives

The A7C-FEC-M alignment follows an alignment similar to the A7C-FECV Alternatives on Segments L and Q and the same alignment on Segments C and D. The A7C-FEC-M Alternative includes Segments Y, Z, C and D. The corridor under the A7C-FEC-M Alternatives is approximately 26 km (16 mi) long, with approximately 1.3 km (0.8 mi) of improvements on the I-5. Table 2.2-19 summarizes the characteristics of the A7C-FEC-M Alternatives by segment.

Segment Y. Segment Y extends from the existing terminus of the FTC-N at Oso Parkway, on the east side of Cañada Chiquita and east of the Cañada Chiquita Water Reclamation Plant. It then extends south, across San Juan Creek to Ortega Highway, approximately 2.1 km (1.3 mi) east of the intersection of Antonio Parkway/Avenida La Pata.

Segment Z. Segment Z extends southeast from Ortega Highway, then south traversing the west side of the RMV Land Conservancy and then southeast and crosses the southeast corner of the Rolling Hills (Talega) PC before terminating just south of Avenida Pico.

2.2.1.4 Arterial Improvements Alternatives

As described earlier, the arterial improvement alternatives are:

Arterial Improvements Only (AIO) Alternative
Arterial Improvements Plus HOV and Spot Mixed Flow Lanes on I-5 (AIP) Alternative

Arterial Improvements Only Alternative

Arterial Improvements Under the AIO Alternative

The AIO Alternative assumes full build out of the Master Plan of Arterial Highways (MPAH) and the Regional Transportation Plan (RTP). The AIO Alternative incorporates the following additional improvements to the transportation system:

- Expansion of Antonio Parkway/Avenida La Pata to an eight lane Smart Street from Oso Parkway south to San Juan Creek Road, and to a six lane Smart Street from San Juan Creek Road south to Avenida Pico. Antonio Parkway/Avenida La Pata currently exists from south of Ortega Highway to the north. The MPAH shows Antonio Parkway/La Pata Avenue being extended south to south of Avenida Pico, with a six or four lane cross section. The AIO Alternative proposes adding one lane in each direction on Antonio Parkway/La Pata Avenue from Oso Parkway to San Juan Creek Road.

- Smart street improvements/TSM strategies on Ortega Highway, Camino Las Ramblas and Avenida Pico between Antonio Parkway/Avenida La Pata and I-5. Smart streets include a combination of advanced traffic management strategies such as traffic signal coordination, real time traffic monitoring and surveillance, and traveler information; and modest physical improvements such as additional turn lanes at intersections and select grade separations.

- Focused improvements are proposed for the intersections of Antonio Parkway/Avenida La Pata with Avenida Pico, Ortega Highway, Crown Valley Parkway and Oso Parkway. These improvements would include either left turn flyovers or full grade separated intersections.

AIO, AIP and I-5 Alternatives

Construction equipment anticipated to be used for construction of all the Corridor Alternatives. This equipment would be used for clearing and grubbing, grading, excavation, backfilling, materials and equipment delivery and removal, concrete and asphalt installation, and other construction activities. Staging areas would be used during construction for materials storage, equipment and employee parking, temporary storage of soils and other related activities. Access to the construction areas would be via existing public roads and existing farm/utility access roads.

Arterial Improvements Plus HOV and Spot Mixed Flow Lanes on I-5 Alternative

Arterial and I-5 Improvements Under the AIP Alternative

The AIP Alternative assumes full build out of the MPAH and the RTP. The AIP Alternative assumes the same arterial improvements described above for the AIO Alternative and would include the following additional improvements to the transportation system:

- The addition of one HOV lane on I-5 in each direction between El Toro Road and Cristianitos Road.

- The addition of spot mixed flow (auxiliary) lanes on the segment of I-5 between San Juan Creek Road and Ortega Highway and between Avenida Pico and El Camino Real.

- A number of bridges, interchanges and other structures on the segment of the I-5 from south of the I-5/I-405 to Cristianitos Road would be reconstructed.

2.2.1.5 I-5 Alternative

I-5 Improvements Under the I-5 Alternative

The I-5 Alternative assumes full build out of the MPAH and the RTP. The I-5 Alternative assumes the following improvements to I-5:

- The addition of either one or two general purpose lanes in each direction between Cristianitos Road and north of Lake Forest Drive; and the provision of one HOV lane in each direction, except where HOV lanes are already programmed between Camino Las Ramblas and Avenida Pico. Additional mixed flow (auxiliary) lanes will be provided on several segments of I-5.

- A number of bridges, interchanges and other structures on the segment of the I-5 from south of the I-5/I-405 to Cristianitos Road would be reconstructed.

2.3 NO ACTION ALTERNATIVES

2.3.1 NO ACTION ALTERNATIVE – OCP-2000

This No Action Alternative assumes the following:

- Build out of the Land Use Elements (LUEs) of the General Plans for the cities and unincorporated Orange County.

- Orange County Projections (OCP)-2000 population and employment projections for 2025, which assume substantial development in Community Analysis Areas (CAAs) 59, 60 and 70. This specifically assumes the construction of approximately 35,888 additional dwelling units (dus) in CAAs 59, 60 and 70 by 2025, including a total of 21,000 dus on the RMV site.

- Build out of the MPAH, with all arterials constructed to their ultimate cross sections consistent with the MPAH.

- Build out of the RTP improvements in South Orange County.

- No extension of the existing FTC south of its existing terminus at Oso Parkway.

- An on-site circulation system on the RMV property, to support the 21,000 dwelling units (dus) forecasted in OCP-2000. This on-site circulation system will be defined conceptually in the traffic analysis.

2.3.2 NO ACTION ALTERNATIVE – RMV DEVELOPMENT PLAN

This No Action Alternative assumes:

- Build out of the LUEs of the General Plans for the cities and unincorporated Orange County.

- OCP-2000 population and employment projections for 2025, which assumed substantial development in CAAs 59, 60 and 70. Under this No Action Alternative, the 21,000 dus assumed on the RMV under OCP-2000 would be excluded and the 14,000 dus proposed on the RMV by the RMV Company would be included.

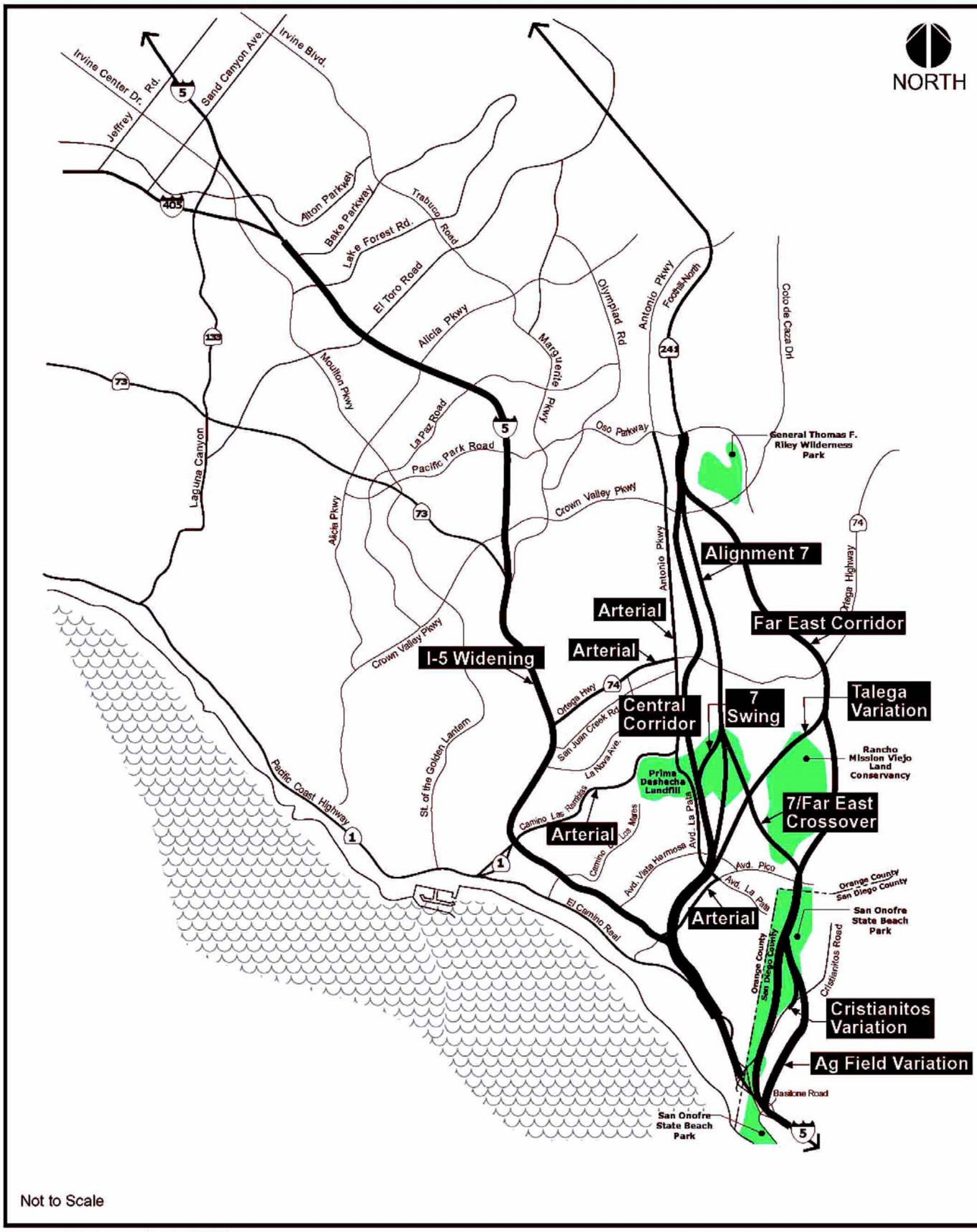
- Build out of the MPAH, with all arterials constructed to their ultimate cross sections consistent with the MPAH.

- Build out of the RTP improvements in south Orange County.

- No extension of the existing FTC south of its existing terminus at Oso Parkway.

- An on-site circulation system on the RMV property, to support the 14,000 dus proposed by the Company, based on the on-site circulation system defined by the RMV for the 14,000 du development plan.

These No Action Alternatives are summarized in Table 2.3-1.



Source: P&D Consultants (2001).

Alignments of the Build Alternatives

TABLE 2.2-1
CHARACTERISTICS OF THE FAR EAST CORRIDOR – COMPLETE - INITIAL AND ULTIMATE ALTERNATIVES

Segment	Geographic Extent	Length in km (mi)	Typical Corridor Cross Sections	Interchanges	Bridges and Other Crossings	Other Relevant Features
A	Oso Parkway southeast to Ortega Highway.	9.4 km (5.8 mi)	Initial: Four GP lanes. Would accommodate two future HOV lanes. Ultimate: Eight Lanes (six GP and two HOV).	Oso Parkway. Ortega Highway (connector road). Crown Valley Parkway (future interchange constructed by others; not a part of these alternatives).	Bridge over Cañada Gobernadora. Bridge over San Juan Creek at the mainline. Bridge over San Juan Creek at the Ortega Highway connector road.	Mainline toll plaza north of Ortega Highway. Ramp toll plazas on the southbound on ramp and northbound off ramp at Ortega Highway. Realignment and potential widening (to MPAH designation) of approximately 1.4 km (0.9 mi) of Ortega Highway. Approximately 1.8 km (1.1 mi) long new connector road from Ortega Highway to the FEC alignment.
B	From Ortega Highway to just south of Avenida Pico.	7.2 km (4.5 mi)	Initial: Four GP lanes. Would accommodate two future HOV lanes. Ultimate: Eight Lanes (six GP and two HOV).	Avenida Pico.	Bridge over Blind/Gabino Creek. Cristianitos/Ford Road undercrossing. Bridge over Cristianitos Creek.	
C	From just south of Avenida Pico to where the corridor crosses I-5.	8.1 km (5.0 mi)	Initial: Four GP lanes. Would accommodate two future HOV lanes. Ultimate north of Cristianitos Road: Eight lanes (six GP and two HOV). Ultimate south of Cristianitos Road: Six lanes (four GP and two HOV).	Avenida Pico. Cristianitos Road (to and from the north only).	Bridge over San Mateo Creek at I-5. Widening of I-5 bridges over San Mateo Creek.	Ramp toll plazas on the southbound on ramp and the northbound off ramp at Avenida Pico.

TABLE 2.2-1
CHARACTERISTICS OF THE FAR EAST CORRIDOR – COMPLETE - INITIAL AND ULTIMATE ALTERNATIVES

Segment	Geographic Extent	Length in km (mi)	Typical Corridor Cross Sections	Interchanges	Bridges and Other Crossings	Other Relevant Features
D	From the intersection of the corridor with I-5 south on I-5 to the terminus south of Basilone Road.	3.1 km (1.9 mi) [1.2 km (0.7 mi) of corridor; 1.9 km (1.2 mi) of I-5 improvements]	Initial: Four GP lanes. Would accommodate two future HOV lanes. Ultimate: Six lanes (four GP and two HOV).	I-5 connector to and from the south only.	Bridge over San Onofre Creek at I-5. Widening of I-5 bridge over San Onofre Creek.	Reconstruction of the existing I-5/Basilone Road interchange. No direct connection to and from Basilone Road.

Notes:
1. GP = General purpose lanes
   HOV = High Occupancy Vehicle
2. Some interchanges are shown as occurring on two segments because they are at the terminal ends of the segments and, therefore, would be on the end of each segment.

Sources: CDMG and P&D Consultants (2002).

TABLE 2.2-2
CHARACTERISTICS OF THE FAR EAST CORRIDOR – TALEGA VARIATION - INITIAL AND ULTIMATE ALTERNATIVES

Segment	Geographic Extent	Length in km (mi)	Typical Corridor Cross Sections	Interchanges	Bridges and Other Crossings	Other Relevant Features
A	Oso Parkway to Ortega Highway.	9.4 km (5.8 mi)	Initial: Four GP lanes. Would accommodate two future HOV lanes. Ultimate: Eight Lanes (six GP and two HOV).	Oso Parkway. Ortega Highway (connector road). Crown Valley Parkway (future interchange constructed by others; not a part of these alternatives).	Bridge over Cañada Gobernadora. Bridge over San Juan Creek at the mainline. Bridge over San Juan Creek at the Ortega Highway connector road.	Mainline toll plaza north of Ortega Parkway. Ramp toll plazas on the southbound on ramp and northbound off ramp at Ortega Highway. Realignment and potential widening (to MPAH designation) of approximately 1.4 km (0.9 mi) of Ortega Highway. Approximately 1.8 km (1.1 mi) long new connector road from Ortega Highway to the FEC-TV alignment.
E	From Ortega Highway to 0.43 km (0.27 mi) south of Avenida La Pata.	8.2 km (5.1 mi)	Initial: Four GP lanes. Would accommodate two future HOV lanes. Ultimate: Eight Lanes (six GP and two HOV).	Avenida Vista Hermosa.	Avenida La Pata undercrossing. Via Sonrisa/Onda overcrossing.	Ramp toll plazas on the southbound on ramp and the northbound off ramp at Avenida Vista Hermosa.
F	From 0.43 (0.27 mi) km south of Avenida La Pata south to I-5, extending south on I-5 to Cristianitos Road.	8.0 km (5.0 mi) [3.4 km (2.1 mi) of corridor; 4.6 km (2.9 mi) of improvements on I-5]	Initial: Four GP lanes. Would accommodate two future HOV lanes. Ultimate: Eight lanes (six GP and two HOV) to Calle del Cerro and six lanes (four GP and two HOV) from Calle del Cerro to I-5.	Calle del Cerro (connection to Avenida Pico). I-5 connector (to and from the south only).	Camino Vera Cruz overcrossing. Calle Frontera overcrossing. Avenida San Luis Rey on I-5 overcrossing. Avenida Mendocino on I-5 overcrossing.	Reconstruction of the following interchanges on I-5: Avenida Pico, Avenida Palizada, Avenida Presidio, El Camino Real, Avenida Mendocino (northbound only; no structure) and Avenida Calafia (southbound only; no structure).

Notes:
1. GP = General purpose lanes HOV = High Occupancy Vehicle
2. Some interchanges are shown as occurring on two segments because they are at the terminal ends of the segments and, therefore, would be on the end of each segment.

Sources: CDMG and P&D Consultants (2002).

TABLE 2.2-3
CHARACTERISTICS OF THE FAR EAST CORRIDOR – CRISTIANITOS VARIATION - INITIAL AND ULTIMATE ALTERNATIVES

Segment	Geographic Extent	Length in km (mi)	Typical Corridor Cross Sections	Interchanges	Bridges and Other Crossings	Other Relevant Features
A	Oso Parkway southeast to Ortega Highway.	9.4 km (5.8 mi)	Initial: Four GP lanes. Would accommodate two future HOV lanes. Ultimate: Eight Lanes (six GP and two HOV).	Oso Parkway. Ortega Highway (connector road). Crown Valley Parkway (future interchange to be constructed by others; not a part of these alternatives).	Bridge over Cañada Gobernadora. Bridge over San Juan Creek at the mainline. Bridge over San Juan Creek the Ortega Highway connector road.	Mainline toll plaza north of Ortega Highway. Ramp toll plazas on the southbound on ramp and northbound off ramp at Ortega Highway. Realignment and potential widening (to MPAH designation) of approximately 1.4 km (0.9 mi) of Ortega Highway. Approximately 1.8 km (1.1 mi) long new connector road from Ortega Highway to the FEC-CV alignment.
B	From Ortega Highway to just south of Avenida Pico.	7.2 km (4.5 mi)	Initial: Four GP lanes. Would accommodate two future HOV lanes. Ultimate: Eight Lanes (six GP and two HOV).	Avenida Pico.	Bridge over Blind/Gabino Creek. Cristianitos/Ford Road undercrossing. Bridge over Cristianitos Creek.	
G	From just south of Avenida Pico to the terminus on Cristianitos Road at I-5.	7.3 km (4.5 mi)	Initial and Ultimate: Four Lane Collector Road	Intersection with Cristianitos Road.	Widening of I-5 bridges over San Mateo Creek.	Widening of existing Cristianitos Road from the Corridor terminus south to I-5 and reconstruction of the existing I-5/Cristianitos Road interchange.

Notes:
1. GP = General purpose lanes
   HOV = High Occupancy Vehicle

Sources: CDMG and P&D Consultants (2002).

TABLE 2.2-4
CHARACTERISTICS OF THE FAR EAST CORRIDOR – AGRICULTURAL FIELDS VARIATION - INITIAL AND ULTIMATE ALTERNATIVES

Segment	Geographic Extent	Length in km (mi)	Typical Corridor Cross Sections	Interchanges	Bridges and Other Crossings	Other Relevant Features
A	Oso Parkway to southeast to Ortega Highway.	9.4 km (5.8 mi)	Initial: Four GP lanes. Would accommodate two future HOV lanes. Ultimate: Eight lanes (six GP and two HOV).	Oso Parkway. Ortega Highway (connector road). Crown Valley Parkway (future interchange to be constructed by others; not a part of these alternatives).	Bridge over Cañada Gobernadora. Bridge over San Juan Creek at the mainline. Bridge over San Juan Creek at the Ortega Highway connector road.	Mainline toll plaza north of Ortega Highway. Ramp toll plazas on the southbound on ramp and northbound off ramp at Ortega Highway. Realignment and potential widening (to MPAH designation) of approximately 1.4 km (0.9 mi) of Ortega Highway. Approximately 1.8 km (1.1 mi) long new connector road from Ortega Highway to the FEC-AFV alignment.
B	From Ortega Highway to just south of Avenida Pico.	7.2 km (4.5 mi)	Initial: Four GP lanes. Would accommodate two future HOV lanes. Ultimate: Eight lanes (six GP and two HOV).	Avenida Pico.	Bridge over Blind/Gabino Creek. Bridge over Cristianitos Creek.	
H	From just south of Avenida Pico southeast to the intersection of the corridor with I-5.	8.1 km (5.0 mi)	Initial: Four GP lanes. Would accommodate two future HOV lanes. Ultimate north of Cristianitos Road: Eight lanes (six GP and two HOV). Ultimate south of Cristianitos Road: Six Lanes (four GP and two HOV).	Avenida Pico. Cristianitos Road.	Bridge over San Mateo Creek at I-5. Widening of I-5 bridges over San Mateo Creek.	Ramp toll plazas on the southbound on ramp and the northbound off ramp at Avenida Pico.

TABLE 2.2-4
CHARACTERISTICS OF THE FAR EAST CORRIDOR – AGRICULTURAL FIELDS VARIATION - INITIAL AND ULTIMATE ALTERNATIVES

Segment	Geographic Extent	Length in km (mi)	Typical Corridor Cross Sections	Interchanges	Bridges and Other Crossings	Other Relevant Features
D	From the intersection of the corridor with I-5 south on I-5 to the terminus south of Basilone Road.	3.1 km (1.9 mi) [1.2 km (0.7 mi) of corridor and 1.9 km (1.2 mi) of improvements on I-5]	Initial: Four GP lanes. Would accommodate two future HOV lanes. Ultimate: Six lanes (four GP and two HOV).	I-5 connector (to and from the south only.).	Bridge over San Onofre Creek at I-5. Widening of I-5 bridge over San Onofre Creek.	Reconstruction of the existing I-5/Basilone Road interchange. No direct connection to/from Basilone Road.

Notes:
1. GP = General purpose lanes
   HOV = High Occupancy Vehicle

Sources: CDMG and P&D Consultants (2002).

TABLE 2.2-5
CHARACTERISTICS OF THE FAR EAST CORRIDOR – ORTEGA HIGHWAY VARIATION - INITIAL AND ULTIMATE ALTERNATIVES

Segment	Geographic Extent	Length in km (mi)	Typical Corridor Cross Sections	Interchanges	Bridges and Other Crossings	Other Relevant Features
A	Oso Parkway southeast to Ortega Highway.	9.4 km (5.8 mi)	Initial: Four GP lanes. Would accommodate two future HOV lanes. Ultimate: Eight lanes (six GP and two HOV).	Oso Parkway. Ortega Highway. Crown Valley Parkway (future interchange to be constructed by others; not a part of these alternatives).	Bridge over Cañada Gobernadora. Bridge over San Juan Creek.	Mainline toll plaza north of Ortega Highway. TSM improvements anticipated on Ortega Highway from the corridor to I-5.

Notes:
1. GP = General purpose lanes
   HOV = High Occupancy Vehicle

Sources: CDMG and P&D Consultants (2002).

TABLE 2.2-6
CHARACTERISTICS OF THE FAR EAST CORRIDOR – AVENIDA PICO VARIATION - INITIAL AND ULTIMATE ALTERNATIVES

Segment	Geographic Extent	Length in km (mi)	Typical Corridor Cross Sections	Interchanges	Bridges and Other Crossings	Other Relevant Features
A	Oso Parkway southeast to Ortega Highway.	9.4 km (5.8 mi)	Initial: Four GP lanes. Would accommodate two future HOV lanes. Ultimate: Eight Lanes (six GP and two HOV).	Oso Parkway. Ortega Highway (connector road). Crown Valley Parkway (future interchange to be constructed by others; not a part of these alternatives).	Bridge over Cañada Gobernadora. Bridge over San Juan Creek at the mainline. Bridge over San Juan Creek at the Ortega Highway connector road.	Mainline toll plaza north of Ortega Highway. Ramp toll plazas on the southbound on ramp and northbound off ramp at Ortega Highway. Realignment and potential widening (to MPAH designation) of approximately 1.4 km (0.9 mi) of Ortega Highway. Approximately 1.8 km (1.1 mi) long new connector road from Ortega Highway to the FEC-APV alignment.
B	From Ortega Highway to Avenida Pico.	7.3 km (4.5 mi)	Initial: Four GP lanes. Would accommodate two future HOV lanes. Ultimate: Eight Lanes (six GP and two HOV).		Bridge over Blind/Gabino Creek. Bridge over Cristianitos Creek.	TSM improvements anticipated on Avenida Pico from the corridor to I-5. Direct connection to Avenida Pico.

Notes:
1. GP = General purpose lanes
   HOV = High Occupancy Vehicle

Sources: CDMG and P&D Consultants (2002).

TABLE 2.2-7
CHARACTERISTICS OF THE FAR EAST CORRIDOR – WEST-INITIAL AND ULTIMATE ALTERNATIVES

Segment	Geographic Extent	Length in km (mi)	Typical Corridor Cross Sections	Interchanges	Bridges and Other Crossings	Other Relevant Features
U	Oso Parkway southeast to Ortega Highway.	9.2 km (5.7 mi)	Initial: Four GP lanes. Could accommodate two future HOV lanes. Ultimate: Eight Lanes (six GP and two HOV).	Oso Parkway. New Ortega Highway C Street Crown Valley Parkway (future interchange constructed by others; not a part of these alternatives).	Bridge over Cañada Gobernadora. Bridge over San Juan Creek.	Mainline toll plaza north of Ortega Highway. Ramp toll plazas on the southbound on ramp and northbound off ramp at new Ortega Highway. Ramp toll plazas on the southbound on ramp and northbound off ramp at C Street
V	From Ortega Highway to just south of Avenida Pico.	6.8 km (4.2 mi)	Initial: Four GP lanes. Could accommodate two future HOV lanes. Ultimate: Eight Lanes (six GP and two HOV).	Avenida Pico.	Cristianitos Road undercrossing.	
C	From just south of Avenida Pico to where the corridor crosses the San Mateo Creek.	8.1 km (5.0 mi)	Initial: Four GP lanes. Could accommodate two future HOV lanes. Ultimate north of Cristianitos Road: Eight lanes (six GP and two HOV). Ultimate south of Cristianitos Road: Six lanes (four GP	Avenida Pico. Cristianitos Road (to and from the north only).	Bridge over San Mateo Creek at I-5. Widening of I-5 bridges over San Mateo Creek (ultimate only).	Ramp toll plazas on the southbound on ramp and the northbound off ramp at Avenida Pico.

TABLE 2.2-7
CHARACTERISTICS OF THE FAR EAST CORRIDOR – WEST-INITIAL AND ULTIMATE ALTERNATIVES

Segment	Geographic Extent	Length in km (mi)	Typical Corridor Cross Sections	Interchanges	Bridges and Other Crossings	Other Relevant Features
			and two HOV).			
D	From where the corridor crosses San Mateo Creek, southeast to I-5 and south on I-5 to the terminus south of Basilone Road.	2.6 km (1.6 mi) [1.3 km (0.8 mi) of corridor; 1.3 km (0.8 mi) of I-5 improvements]	Initial: Four GP lanes. Could accommodate two future HOV lanes. Ultimate: Six lanes (four GP and two HOV).	I-5 connector to and from the south only.	Bridge over San Onofre Creek at I-5. Widening of I-5 bridge over San Onofre Creek.	Reconstruction of the existing I-5/Basilone Road interchange. No direct connection to and from Basilone Road.

Note: Some interchanges are shown as occurring on two segments because they are at the terminal ends of the segments and therefore would be on the end of each segment.
Source: CDMG and P&D Consultants (2003).

TABLE 2.2-8
CHARACTERISTICS OF THE FAR EAST CORRIDOR – MODIFIED-INITIAL AND ULTIMATE ALTERNATIVES

Segment	Geographic Extent	Length in km (mi)	Typical Corridor Cross Sections	Interchanges	Bridges and Other Crossings	Other Relevant Features
W	Oso Parkway southeast to Ortega Highway.	9.4 km (5.8 mi)	Initial: Four GP lanes. Could accommodate two future HOV lanes. Ultimate: Eight Lanes (six GP and two HOV).	Oso Parkway. New Ortega Highway Crown Valley Parkway (future interchange constructed by others; not a part of these alternatives). C Street	Bridge over Cañada Gobernadora. Bridge over San Juan Creek at the mainline. Bridge over San Juan Creek at the Ortega Highway connector road.	Mainline toll plaza north of Ortega Highway. Ramp toll plazas on the southbound on ramp and northbound off ramp at Ortega Highway. Ramp toll plazas on the southbound on ramp and northbound off ramp at C Street.
X	From Ortega Highway to just south of Avenida Pico.	7.2 km (4.5 mi)	Initial: Four GP lanes. Could accommodate two future HOV lanes. Ultimate: Eight Lanes (six GP and two HOV).	Avenida Pico.	Bridge over Cristianitos Creek and Cristianitos Road.	
C	From just south of Avenida Pico to where the corridor crosses the San Mateo Creek.	8.1 km (5.0 mi)	Initial: Four GP lanes. Could accommodate two future HOV lanes. Ultimate north of Cristianitos Road: Eight lanes (six GP and two HOV). Ultimate south of Cristianitos Road: Six lanes (four GP and two HOV).	Avenida Pico. Cristianitos Road (to and from the north only).	Bridge over San Mateo Creek at I-5. Widening of I-5 bridges over San Mateo Creek (ultimate only).	Ramp toll plazas on the southbound on ramp and the northbound off ramp at Avenida Pico.

TABLE 2.2-8
CHARACTERISTICS OF THE FAR EAST CORRIDOR – MODIFIED-INITIAL AND ULTIMATE ALTERNATIVES

Segment	Geographic Extent	Length in km (mi)	Typical Corridor Cross Sections	Interchanges	Bridges and Other Crossings	Other Relevant Features
D	From where the corridor crosses San Mateo Creek, southeast to I-5 and south on I-5 to the terminus south of Basilone Road.	2.6 km (1.6 mi) [1.3 km (0.8 mi) of corridor; 1.3 km (0.8 mi) of I-5 improvements].	Initial: Four GP lanes. Could accommodate two future HOV lanes. Ultimate: Six lanes (four GP and two HOV).	I-5 connector to and from the south only.	Bridge over San Onofre Creek at I-5. Widening of I-5 bridge over San Onofre Creek.	Reconstruction of the existing I-5/Basilone Road interchange. No direct connection to and from Basilone Road.

Note: Some interchanges are shown as occurring on two segments because they are at the terminal ends of the segments and therefore would be on the end of each segment.
Source: CDMG and P&D Consultants (2002).

TABLE 2.2-9
CHARACTERISTICS OF THE CENTRAL CORRIDOR – COMPLETE - INITIAL AND ULTIMATE ALTERNATIVES

Segment	Geographic Extent	Length in km (mi)	Typical Corridor Cross Sections	Interchanges	Bridges and Other Crossings	Other Relevant Features
I	Oso Parkway south to Ortega Highway.	7.7 km (4.8 mi)	Initial: Four GP lanes. Would accommodate two future HOV lanes. Ultimate: Eight Lanes (six GP and two HOV).	Oso Parkway. Ortega Highway. Crown Valley Parkway (future interchange to be constructed by others; not a part of these alternatives).	One bridge over San Juan Creek at the mainline. Two ramp bridges over San Juan Creek.	Mainline toll plaza north of Ortega Highway. Potential widening (to MPAH designation) of approximately 1.0 km (0.6 mi) of Ortega Highway.
J	From Ortega Highway south across the Landfill south to 0.43 km (0.27 mi) south of Avenida La Pata.	7.5 km (4.7 mi)	Initial: Four GP lanes. Would accommodate two future HOV lanes. Ultimate: Eight Lanes (six GP and two HOV).	Ortega Highway. Avenida Vista Hermosa.	Avenida La Pata and Via Sonrisa/Onda overcrossings.	Ramp toll plazas on the southbound on ramp and the northbound off ramp at Ortega Highway. Ramp toll plazas on the southbound on ramp and north bound off ramp at Avenida Vista Hermosa. Crosses Prima Deshecha Landfill.
K	From 0.43 km (0.27 mi) km south of Avenida La Pata	8.0 km (5.0 mi) [3.4 km (2.1 mi) of	Initial: Four GP lanes. Would accommodate two future HOV lanes.	Calle del Cerro (Avenida Pico).	Camino Vera Cruz overcrossing.	Reconstruction of the following interchanges with I-5: Avenida Pico, Avenida

TABLE 2.2-9
CHARACTERISTICS OF THE CENTRAL CORRIDOR – COMPLETE - INITIAL AND ULTIMATE ALTERNATIVES

Segment	Geographic Extent	Length in km (mi)	Typical Corridor Cross Sections	Interchanges	Bridges and Other Crossings	Other Relevant Features
	south to I-5 and south on I-5 to Cristianitos Road.	corridor; 4.6 km (2.9 mi) of improvements on I-5]	Ultimate: Eight Lanes (six GP and two HOV) to Calle del Cerro and six lanes (four GP and two HOV) from Calle del Cerro to I-5.	I-5 connector (to and from the south only).	Calle Frontera overcrossing.	Palizada, Avenida Presidio, El Camino Real, Avenida Mendocino (northbound only; no structure) and Avenida Calafia (south bound only; no structure).
					Avenida San Luis Rey on I-5 overcrossing. Avenida Mendocino on I-5 overcrossing.	

Notes:
1. GP = General purpose lanes
   HOV = High Occupancy Vehicle
2. Some interchanges are shown as occurring on two segments because they are at the terminal ends of the segments and, therefore, would be on the end of each segment.

Sources: CDMG and P&D Consultants (2002).

TABLE 2.2-10
CHARACTERISTICS OF THE CENTRAL CORRIDOR – AVENIDA LA PATA VARIATION - INITIAL AND ULTIMATE ALTERNATIVES

Segment	Geographic Extent	Length in km (mi)	Typical Corridor Cross Sections	Interchanges	Bridges and Other Crossings	Other Relevant Features
I	Oso Parkway south to Ortega Highway.	7.7 km (4.8 mi)	Initial: Four GP lanes. Would accommodate two future HOV lanes. Ultimate: Eight Lanes (six GP and two HOV).	Oso Parkway. Ortega Highway. Crown Valley Parkway (future interchange to be constructed by others; not a part of these alternatives).	One bridge over San Juan Creek at the mainline. Two ramp bridges over San Juan Creek at the Ortega Highway connector road.	Mainline toll plaza north of Ortega Highway. Potential widening (to MPAH designation) of approximately 1.0 km (0.6 mi) of Ortega Highway.
J	From Ortega Highway south across the Prima Deshecha Landfill south to Avenida Vista Hermosa.	6.7 km (4.2 mi)	Initial: Four GP lanes. Would accommodate two future HOV lanes. Ultimate: Eight Lanes (six GP and two HOV).	Ortega Highway. Avenida Vista Hermosa.		Ramp toll plazas on the southbound on ramp and the northbound off ramp at Ortega Highway. TSM improvements anticipated on Avenida Vista Hermosa from the corridor to Avenida La Pata; on Avenida La Pata from Avenida Vista Hermosa to Avenida Pico and on Avenida Pico from Avenida La Pata to I-5. Crosses Prima Deshecha Landfill.

Notes:
1. GP = General purpose lanes
   HOV = High Occupancy Vehicle
2. Some interchanges are shown as occurring on two segments because they are at the terminal ends of the segments and, therefore, would be on the end of each segment.

Sources: CDMG and P&D Consultants (2002).

TABLE 2.2-11
CHARACTERISTICS OF THE CENTRAL CORRIDOR – ORTEGA HIGHWAY VARIATION - INITIAL AND ULTIMATE ALTERNATIVES

Segment	Geographic Extent	Length in km (mi)	Typical Corridor Cross Sections	Interchanges	Bridges and Other Crossings	Other Relevant Features
I	Oso Parkway south to Ortega Highway.	7.7 km (4.8 mi)	Initial: Four GP lanes. Would accommodate two future HOV lanes. Ultimate: Eight Lanes (six GP and two HOV).	Oso Parkway. Ortega Highway. Crown Valley Parkway (future interchange to be constructed by others; not a part of these alternatives).	One bridge over San Juan Creek at the mainline. Two ramp bridges over San Juan Creek at the Ortega Highway connector road.	Mainline toll plaza north of Ortega Highway. TSM improvements anticipated on Ortega Highway from the corridor to I-5.

Notes:
1. GP = General Purpose lanes
HOV = High Occupancy Vehicle

Sources: CDMG and P&D Consultants (2002).

TABLE 2.2-12
CHARACTERISTICS OF THE ALIGNMENT 7 CORRIDOR – COMPLETE - INITIAL AND ULTIMATE ALTERNATIVES

Segment	Geographic Extent	Length in km (mi)	Typical Corridor Cross Sections	Interchanges	Bridges and Other Crossings	Other Relevant Features
L	Oso Parkway south to Ortega Highway.	7.4 km (4.6 mi)	Initial: Four GP lanes. Would accommodate two future HOV lanes. Ultimate: Eight lanes (six GP and two HOV).	Oso Parkway. Ortega Highway (connector road). Crown Valley Parkway (future interchange to be constructed by others; not a part of these alternatives).	One bridge over San Juan Creek at the mainline. Bridge over Canada Chiquita at East-West Connector Road.	Mainline toll plaza north of Ortega Highway. Approximately 2.2 km (1.4 mi) long new connector road from Antonio Parkway to the A7C alignment. Ramp toll plazas on the southbound on ramp and the northbound off ramp at Ortega Highway
M	From Ortega Highway south to 0.4 km (0.3 mi) south of Avenida La Pata.	7.7 km (4.8 mi)	Initial: Four GP lanes. Would accommodate two future HOV lanes. Ultimate: Eight lanes (six GP and two HOV).	Ortega Highway. Avenida Vista Hermosa.	Avenida La Pata overcrossing. Via Sonrisa/Via Onda overcrossing.	Ramp toll plazas on the southbound on ramp and the northbound off ramp at Avenida Vista Hermosa.
N	From 0.4 km (0.3 mi) south of Avenida La Pata south to I-5, and south on I-5 to Cristianitos Road.	8.0 km (5.0 mi) [3.4 km (2.1 mi) of corridor; 4.6 km (2.9 mi) of improvements on I-5).	Initial: Four GP lanes. Would accommodate two future HOV lanes. Ultimate: Eight lanes (six GP and two HOV) to Calle del Cerro and six lanes (four GP and two HOV) from Calle del Cerro to I-5.	Calle del Cerro (Avenida Pico connection). I-5 connector (to and from the south only).	Camino Vera Cruz undercrossing. Calle Frontera undercrossing. Avenida San Luis Rey on I-5 overcrossing. Avenida Mendocino on I-5 overcrossing.	Reconstruction of the following interchanges on I-5: Avenida Pico, Avenida Palizada, Avenida Presidio, El Camino Real, Avenida Mendocino (northbound only; no structure) and Avenida Calafia (southbound only; no structure).

Notes:
1. GP = General purpose lanes
   HOV = High Occupancy Vehicle
2. Some interchanges are shown as occurring on two segments because they are at the terminal ends of the segments and, therefore, would be on the end of each segment.

Sources: CDMG and P&D Consultants (2002).

TABLE 2.2-13
CHARACTERISTICS OF THE ALIGNMENT 7 CORRIDOR – 7 SWING VARIATION - INITIAL AND ULTIMATE ALTERNATIVES

Segment	Geographic Extent	Length in km (mi)	Typical Corridor Cross Sections	Interchanges	Bridges and Other Crossings	Other Relevant Features
L	Oso Parkway south to Ortega Highway.	7.4 km (4.6 mi)	Initial: Four GP lanes. Would accommodate two future HOV lanes. Ultimate: Eight Lanes (six GP and two HOV).	Oso Parkway. Ortega Highway (connector road). Crown Valley Parkway (future interchange to be constructed by others; not a part of these alternatives).	One bridge over San Juan Creek at the mainline. Bridge over Canada Chiquita at the East-West Connector Road.	Mainline toll plaza north of Ortega Highway. Approximately 2.2 km (1.4 mi) long new connector from Antonio Parkway to the A7C alignment. Ramp toll plazas on the southbound on ramp and the northbound off ramp at Ortega Highway.
O	From Ortega Highway south to 0.43 km (0.27 mi) south of Avenida La Pata.	7.2 km (4.5 mi)	Initial: Four GP lanes. Would accommodate two future HOV lanes. Ultimate: Eight Lanes (six GP and two HOV).	Ortega Highway. Avenida Vista Hermosa.	Avenida La Pata and Via Sonrisa/Onda overcrossings.	Ramp toll plazas on the southbound on ramp and the northbound off ramp at Avenida Vista Hermosa. Crosses Prima Deshecha Landfill.
P	From 0.43 (0.27 mi) km south of Avenida La Pata south to I-5 and south on I-5 to Cristianitos Road.	8.0 km (5.0 mi) [3.4 km (2.1 mi) of corridor; 4.6 km (2.9 mi) of improvements on I-5).	Initial: Four GP lanes. Would accommodate two future HOV lanes. Ultimate: Eight Lanes (six GP and two HOV) to Calle del Cerro and six lanes (four GP and two HOV) from Calle del Cerro to I-5.	Calle del Cerro (Avenida Pico connection). I-5 connector (to and from the south only).	Camino Vera Cruz overcrossing. Calle Frontera overcrossing. Avenida San Luis Rey on I-5 overcrossing. Avenida Mendocino on I-5 overcrossing.	Reconstruction of the following interchanges on I-5: Avenida Pico, Avenida Palizada, Avenida Presidio, El Camino Real, Avenida Mendocino (northbound only; no structure) and Avenida Calafia (southbound only; no structure).

Notes:
1. GP = General purpose lanes
   HOV = High Occupancy Vehicle
2. Some interchanges are shown as occurring on two segments because they are at the terminal ends of the segments and, therefore, would be on the end of each segment.

Sources: CDMG and P&D Consultants (2002).

TABLE 2.2-14
CHARACTERISTICS OF THE ALIGNMENT 7 CORRIDOR – FAR EAST CROSSOVER VARIATION - INITIAL AND ULTIMATE ALTERNATIVES

Segment	Geographic Extent	Length in km (mi)	Typical Corridor Cross Sections	Interchanges	Bridges and Other Crossings	Other Relevant Features
L	Oso Parkway south to Ortega Highway.	7.4 km (4.6 mi)	Initial: Four GP lanes. Would accommodate two future HOV lanes. Ultimate: Eight lanes (six GP and two HOV).	Oso Parkway. Ortega Highway (connector road). Crown Valley Parkway (future interchange to be constructed by others; not a part of these alternatives).	One bridge over San Juan Creek at the mainline. Bridge over Canada Chiquita at the East-West Connector Road.	Mainline toll plaza north of Ortega Highway. Approximately 2.2 km (1.4 mi) long new connector from Antonio Parkway to the A7C alignment. Ramp toll plazas on the southbound on ramp and the northbound off ramp at Ortega Highway.
Q	From Ortega Highway south to just south of Avenida Pico.	7.9 km (4.9 mi)	Initial: Four GP lanes. Would accommodate two future HOV lanes. Ultimate: Eight lanes (six GP and two HOV).	Ortega Highway. Avenida Pico.		
R	From just south of Avenida Pico to where the corridor crosses San Mateo Creek.	8.1 km (5.0 mi)	Initial: Four GP lanes. Would accommodate two future HOV lanes. Ultimate: Eight lanes (six GP and two HOV) south to Cristianitos Road and six lanes (four GP and two HOV) south of Cristianitos Road.	Avenida Pico. Cristianitos Road (to and from the north only).	Bridge over San Mateo Creek at I-5. Widening of I-5 bridges over San Mateo Creek.	Ramp toll plazas on the southbound on ramp and the northbound off ramp at Avenida Pico.
D	From where the corridor crosses San Mateo Creek southeast I-5 and south on I-5 to the terminus south of Basilone Road.	3.1 km (1.9 mi) [1.2 km (0.7 mi) of corridor; 1.9 km (1.2 mi) of improvements to I-5).	Initial: Four GP lanes. Would accommodate two future HOV lanes. Ultimate: Six lanes (four GP and two HOV).	I-5 connector (to and from the south only).	Bridge over San Onofre Creek at I-5. Widening of I-5 bridge over San Onofre Creek.	Reconstruction of the existing I-5/Basilone Road interchange. No direct connectors to/from Basilone Road.

Notes:
1. GP = General purpose lanes.
HOV= High Occupancy Vehicle Lanes.
2. Some interchanges are shown as occurring on two segments because they are at the terminal ends of the segments and, therefore, would be on the end of each segment.

Sources: CDMG and P&D Consultants (2002).

TABLE 2.2-15
CHARACTERISTICS OF THE ALIGNMENT 7 CORRIDOR – FAR EAST CROSSOVER (CRISTIANITOS) VARIATION - INITIAL AND ULTIMATE ALTERNATIVES

Segment	Geographic Extent	Length in km (mi)	Typical Corridor Cross Sections	Interchanges	Bridges and Other Crossings	Other Relevant Features
L	Oso south to Ortega Highway.	7.4 km (4.6 mi)	Initial: Four GP lanes. Would accommodate two future HOV lanes. Ultimate: Eight lanes (six GP and two HOV).	Oso Parkway. Ortega Highway (connector road). Crown Valley Parkway (future interchange to be constructed by others; not a part of these alternatives).	One bridge over San Juan Creek at the mainline. Bridge over Canada Chiquita at the East-West Connector Road.	Mainline toll plaza north of Ortega Highway. Approximately 2.2 km (1.4 mi) long new connector from Antonio Parkway to the A7C alignment. Ramp toll plazas on the southbound on ramp and the northbound off ramp at Ortega Highway.
Q	From Ortega Highway south to just south of Avenida Pico.	7.9 km (4.9 mi)	Initial: Four GP lanes. Would accommodate two future HOV lanes. Ultimate: Eight lanes (six GP and two HOV).	Ortega Highway. Avenida Pico.		Crosses Prima Deshecha Landfill.
S	From just south of Avenida Pico to the corridor terminus on Cristianitos Road at I-5.	7.4 km (4.6 mi)	Initial and Ultimate: Four Lane Collector Road.	Intersection with Cristianitos Road.		Widening of existing Cristianitos Road from the Corridor terminus south to I-5 and reconstruction of the existing I-5/Cristianitos interchange.

Notes:
1. GP = General purpose lanes.
   HOV= High Occupancy Vehicle Lanes.
2. Some interchanges are shown as occurring on two segments because they are at the terminal ends of the segments and, therefore, would be on the end of each segment.

Sources: CDMG and P&D Consultants (2002).

TABLE 2.2-16
CHARACTERISTICS OF THE ALIGNMENT 7 CORRIDOR – FAR EAST CROSSOVER (AGRICULTURAL FIELDS) VARIATION - INITIAL AND ULTIMATE ALTERNATIVES

Segment	Geographic Extent	Length in km (mi)	Typical Corridor Cross Sections	Interchanges	Bridges and Other Crossings	Other Relevant Features
L	Oso Parkway south to Ortega Highway.	7.4 km (4.6 mi)	Initial: Four GP lanes. Would accommodate two future HOV lanes. Ultimate: Eight lanes (six GP and two HOV).	Oso Parkway. Ortega Highway (connector road). Crown Valley Parkway (future interchange to be constructed by others; not a part of these alternatives).	One bridge over San Juan Creek at the mainline. Bridge over Canada Chiquita at the East-West Connector Road.	Mainline toll plaza north of Ortega Highway. Approximately 2.2 km (1.4 mi) long new connector from Antonio Parkway to the A7C alignment. Ramp toll plazas on the southbound on ramp and the northbound off ramp at Ortega Highway.
Q	From Ortega Highway south to just south of Avenida Pico.	7.9 km (4.9 mi)	Initial: Four GP lanes. Would accommodate two future HOV lanes. Ultimate: Eight lanes (six GP and two HOV).	Ortega Highway. Avenida Pico.		Crosses Prima Deshecha Landfill.
T	From just south of Avenida Pico southeast to the intersection of the corridor with I-5.	8.3 km (5.2 mi)	Initial: Four GP lanes. Would accommodate two future HOV lanes. Ultimate north of Cristianitos Road: Eight lanes (six GP and two HOV). Ultimate south of Cristianitos Road: Six lanes (four GP and two HOV).	Avenida Pico. Cristianitos Road.	Bridge over San Mateo Creek at I-5. Widening of I-5 bridges over San Mateo Creek.	Ramp toll plazas on the southbound on ramp and the northbound off ramp at Avenida Pico.

TABLE 2.2-16
CHARACTERISTICS OF THE ALIGNMENT 7 CORRIDOR – FAR EAST CROSSOVER (AGRICULTURAL FIELDS) VARIATION - INITIAL AND ULTIMATE ALTERNATIVES

Segment	Geographic Extent	Length in km (mi)	Typical Corridor Cross Sections	Interchanges	Bridges and Other Crossings	Other Relevant Features
D	From the intersection of the corridor with I-5 south on I-5 to the terminus south of Basilone Road.	3.1 km (1.9 mi) [1.2 km (0.7 mi) of corridor; 1.9 km (1.2 mi) of improvements on I-5).	Initial: Four GP lanes. Would accommodate two future HOV lanes. Ultimate: Six Lanes (four GP and two HOV).	I-5 connector (to and from the south only).	Bridge over San Onofre Creek at I-5. Widening of I-5 bridge over San Onofre Creek.	Reconstruction of the existing I-5/Basilone Road interchange. No direct connection to Basilone Road.

Notes:
1. GP= General purpose lanes.
   HOV= High Occupancy Vehicle lanes.
2. Some interchanges are shown as occurring on two segments because they are at the terminal ends of the segments and, therefore, would be on the end of each segment.

Sources: CDMG and P&D Consultants (2002).

TABLE 2.2-17
CHARACTERISTICS OF THE ALIGNMENT 7 CORRIDOR – ORTEGA HIGHWAY VARIATION - INITIAL AND ULTIMATE ALTERNATIVES

Segment	Geographic Extent	Length in km (mi)	Typical Corridor Cross Sections	Interchanges	Bridges and Other Crossings	Other Relevant Features
L	Oso Parkway south to Ortega Highway.	7.4 km (4.6 mi)	Initial: Four GP lanes. Would accommodate two future HOV lanes. Ultimate: Eight Lanes (six GP and two HOV).	Oso Parkway. Ortega Highway. Crown Valley Parkway (future interchange to be constructed by others; not a part of these alternatives).	One bridge over San Juan Creek at the mainline. Two ramp bridges over San Juan Creek.	Mainline toll plaza north of Ortega Highway. TSM improvements anticipated on Ortega Highway from the corridor to I-5.

Notes:
1. GP = General purpose lanes.
HOV= High Occupancy Vehicle lanes.
Sources: CDMG and P&D Consultants (2002).

TABLE 2.2-18
CHARACTERISTICS OF THE ALIGNMENT 7 CORRIDOR – AVENIDA LA PATA VARIATION - INITIAL AND ULTIMATE ALTERNATIVES

Segment	Geographic Extent	Length in km (mi)	Typical Corridor Cross Sections	Interchanges	Bridges and Other Crossings	Other Relevant Features
L	Oso Parkway south to Ortega Highway.	7.4 km (4.6 mi)	Initial: Four GP lanes. Would accommodate two future HOV lanes. Ultimate: Eight Lanes (six GP and two HOV).	Oso Parkway. Ortega Highway (connector road). Crown Valley Parkway (future interchange to be constructed by others; not a part of these alternatives).	One bridge over San Juan Creek at the mainline. Bridge over Canada Chiquita at the East-West Connector Road.	Mainline toll plaza north of Ortega Highway. Approximately 2.2 km (1.4 mi) long new connector from Antonio Parkway to the A7C alignment. Ramp toll plazas on the southbound on ramp and the northbound off ramp at Ortega Highway.
M	From Ortega Highway south to Avenida Vista Hermosa.	6.5 km (4.0 mi)	Initial: Four GP lanes. Would accommodate two future HOV lanes. Ultimate: Eight Lanes (six GP and two HOV).	Ortega Highway. Avenida Vista Hermosa.		TSM improvements anticipated on Avenida Vista Hermosa from the corridor to Avenida La Pata, on Avenida La Pata from Avenida Vista Hermosa to Avenida Pico and on Avenida Pico from Avenida La Pata to I-5.

Notes:
1. GP = General purpose lanes.
   HOV= High Occupancy Vehicle lanes.
2. Some interchanges are shown as occurring on two segments because they are at the terminal ends of the segments and, therefore, would be on the end of each segment.

Sources: CDMG and P&D Consultants (2002).

TABLE 2.2-19
CHARACTERISTICS OF THE ALIGNMENT 7 CORRIDOR-FAR EAST CROSSOVER-MODIFIED-INITIAL AND ULTIMATE ALTERNATIVES

Segment	Geographic Extent	Length in km (mi)	Typical Corridor Cross Sections	Interchanges	Bridges and Other Crossings	Other Relevant Features
Y	Oso Parkway south to Ortega Highway.	8.4 km (5.2 mi)	Initial: Four GP lanes. Could accommodate two future HOV lanes. Ultimate: Eight lanes (six GP and two HOV).	Oso Parkway. New Ortega Highway. C Street. Crown Valley Parkway (future interchange to be constructed by others; not a part of these alternatives).	Bridge over San Juan Creek at the mainline. Ortega Highway undercrossing.	Mainline toll plaza north of Ortega Highway. Ramp toll plazas on the southbound on ramp and the northbound off ramp at New Ortega Highway (connector). Ramp toll plazas on the southbound on ramp and the northbound off ramp at C Street.
Z	From Ortega Highway south to just south of Avenida Pico.	7.8 km (4.8 mi)	Initial: Four GP lanes. Could accommodate two future HOV lanes. Ultimate: Eight lanes (six GP and two HOV).	Avenida Pico.	Quarry Access Road undercrossing.	
C	From just south of Avenida Pico to where the corridor crosses San Mateo Creek.	8.1 km (5.0 mi)	Initial: Four GP lanes. Could accommodate two future HOV lanes. Ultimate: Eight lanes (six GP and two HOV) south to Cristianitos Road and six lanes (four GP and two HOV) south of Cristianitos Road.	Avenida Pico. Cristianitos Road (to and from the north only).	Bridge over San Mateo Creek at I-5. Widening of I-5 bridges over San Mateo Creek (ultimate only).	Ramp toll plazas on the southbound on ramp and the northbound off ramp at Avenida Pico.

TABLE 2.2-19
CHARACTERISTICS OF THE ALIGNMENT 7 CORRIDOR-FAR EAST CROSSOVER-MODIFIED-INITIAL AND ULTIMATE ALTERNATIVES

Segment	Geographic Extent	Length in km (mi)	Typical Corridor Cross Sections	Interchanges	Bridges and Other Crossings	Other Relevant Features
D	From where the corridor crosses San Mateo Creek, southeast to I-5 and south on I-5 to the terminus south of Basilone Road.	2.6 km (1.6 mi) [1.3 km (0.8 mi) of corridor; 1.3 km (0.8 mi) of improvements to I-5].	Initial: Four GP lanes. Could accommodate two future HOV lanes. Ultimate: Six lanes (four GP and two HOV).	I-5 connector (to and from the south only).	Bridge over San Onofre Creek at I-5. Widening of I-5 bridge over San Onofre Creek.	Reconstruction of the existing I-5/Basilone Road interchange. No direct connection to/from Basilone Road.

Notes:
3. GP = General purpose lanes
   HOV = High Occupancy Vehicle
4. Some interchanges are shown as occurring on two segments because they are at the terminal ends of the segments and, therefore, would be on the end of each segment.

Source: CDMG and P&D Consultants (2002).

TABLE 2.3-1
NO ACTION ALTERNATIVES

MPAH (1), RTP and Other Circulation Assumptions	Land Use Element Assumptions	OCP-2000 Assumptions
NO ACTION ALTERNATIVE - OCP - 2000		
Build out of the MPAH and the RTP. On-site circulation on the RMV property will be defined conceptually in the traffic analysis.	Build out of the General Plans, plus additional growth assumed in OCP-2000.	OCP-2000, including 35,888 additional dus in CAAs 59, 60 and 70. This Alternative assumes development of approximately 21,000 dus on the RMV.
NO ACTION ALTERNATIVE - RMV DEVELOPMENT PLAN		
Build out of the MPAH and the RTP. On-site circulation on the RMV property, based on the on site circulation system defined by the RMV for the 14,000 du development plan.	Build out of the General Plans and the 14,000 dus proposed by the RMV Company for the RMV site.	OCP-2000 including 35,888 additional dus in CAA 59, 60 and 70, excluding the 21,000 dus on the RMV site. This Alternative would include the 14,000 dus proposed as part of the RMV development plan.

Notes:

MPAH: Master Plan of Arterial Highways
RTP: Regional Transportation Plan
OCP: Orange County Projections
dus: Dwelling units
RMV: Rancho Mission Viejo
CAAs: Community Analysis Areas
LUEs: Land Use Elements
EIS: Environmental Impact Statement
SEIR: Subsequent Environmental Impact Report

Source: Phase II Collaborative (2002).

SECTION 3.0
EXISTING ENVIRONMENT

3.1 STUDY AREA

The study area for the South Orange County Transportation Infrastructure Improvement Project (SOCTIIP) encompasses the southeast part of Orange County and the northernmost part of San Diego County, and nine cities bordering Interstate 5 (I-5) between its confluence with Interstate 405 (I-405) in central Orange County and its intersection with Basilone Road in San Diego County. Also included in the SOCTIIP study area is the City of Rancho Santa Margarita which does not border I-5. Figure 3.1-1 shows the SOCTIIP study area and the local jurisdictions in the study area. Figures are provided following the last page of text in this Section.

As shown in Figure 3.1-1, the jurisdictions and agencies in the study area are:

- County of Orange
- Marine Corps Base (MCB) Camp Pendleton
- California Department of State Parks and Recreation
- Cities of:
  - San Clemente
  - San Juan Capistrano
  - Dana Point
  - Rancho Santa Margarita
  - Mission Viejo
  - Laguna Niguel
  - Laguna Woods
  - Laguna Hills
  - Lake Forest
  - Irvine

3.2 BACKGROUND OF THE STUDY AREA

3.2.1 HISTORY OF GROWTH IN ORANGE COUNTY

Maps of the SOCTIIP study area indicate that there are a number of areas that do not reflect the typical urban development patterns of Orange County. These areas include parks, reserves, Cleveland National Forest and the decommissioned Marine Corps Air Stations (MCASs) at Tustin and El Toro. Additionally, two large undeveloped private landholdings in central and southern Orange County, The Irvine Company and Rancho Mission Viejo LLC (RMV) lands, respectively, represent the majority of the remaining undeveloped land in the County of Orange.

The study area for the SOCTIIP has been subject to relatively rapid development in the last 15 years. The rapid growth in southern Orange County predominately occurred from the mid 1980s to the present. This is illustrated by the large number of new cities established in south Orange County during this period. With the exception of the Cities of Irvine, Laguna Beach, San Clemente, Laguna Hills and San Juan Capistrano, virtually all the cities in the SOCTIIP study area were incorporated in the late 1980s or 1990s. These are the Cities of Lake Forest (incorporated 1991), Mission Viejo (1988), Dana Point (1989), Laguna Niguel (1989), Laguna Woods (1999) and Rancho Santa Margarita (2000). Most of these incorporations consisted of one large planned community or the consolidation of several planned communities into one city.

In addition, the growth and annexation patterns for the Cities of San Juan Capistrano and San Clemente extend predominately inland.

3.2.2 EVOLUTION OF A CITY IN THE CONTEXT OF SOUTH ORANGE COUNTY

To understand the impetus for the recent incorporations by many Orange County communities, it is important to understand the maturing process of an area or community and when it is eligible and/or desirable to incorporate. Until an area becomes a city, it is under the jurisdiction of the County of Orange with political representation by the County of Orange Board of Supervisors. Once an area becomes a city, it is then represented by the local electorate, usually a city council elected by the residents of the newly established city.

Nearly all the new south Orange County cities began as planned communities. Virtually all were ranches, farms or both within the last 20 years, some with small communities supporting those operations. The land in these unincorporated communities was then subdivided and developed. As the communities matured and built out, they were incorporated as individual cities.

The Local Agency Formation Commission (LAFCO) oversees the incorporation process. Generally, several key requirements must be in place for a city to incorporate. The most crucial is a well established and steady revenue stream. Property taxes and retail sales tax are the primary generators of these revenues. An area that is petitioning LAFCO for incorporation must demonstrate that it is fiscally solvent and self-supporting. Once LAFCO approves a petition for incorporation (cityhood), an election occurs for the affected area. The initiative must pass by a two-thirds majority to become effective.

3.2.3 OCP-2000 GROWTH PROJECTIONS

Orange County Projections-2000 (OCP-2000) are the regionally adopted growth projections for Orange County which are prepared and published by the Center for Demographic Research (CDR) at California State University, Fullerton. These projections are necessary for a wide variety of regional and local planning applications. OCP-2000 divides Orange County into Regional Statistical Areas (RSAs). The SOCTIIP study area includes RSA D-40, RSA C-43 and part of RSA E-44, as shown in Figure 3.2-1. RSA D-40 includes all the coastal cities of south Orange County up to the Newport Beach border, encompassing a total of approximately 23,370 hectares (ha) (57,750 acres (ac)). RSA C-43 encompasses 61,108 ha (151,000 ac) in eastern Orange County. RSA C-43 includes lands in Cleveland National Forest and the relatively less intensely developed areas in the foothills of the Santa Ana Mountains. RSA E-44 encompasses 17,475 ha (43,148 ac) including the recently closed MCAS El Toro and part of the City of Irvine.

OCP-2000 projects growth for three different parameters: population, dwelling units (dus) and employment. Table 3.2-1 shows the OCP-2000 projections for RSAs 40, 43 and 44 for these three parameters in five-year increments to 2025.

These projections show substantial growth in RSA 43 in both population and dus by 2025. The projections can be interpreted as indicating land use changes over the next 25 years in RSA 43 to accommodate this population growth. Currently, a large part of RSA 43 (8,910 ha, 22,000 ac),

excluding Cleveland National Forest, is privately owned by the RMV Company. The OCP-2000 projections assume both buildout of currently approved planned developments reflected in locally adopted General Plans and buildout of areas with the likely potential for development based on the input of local jurisdictions and major landowners such as RMV.

TABLE 3.2-1
OCP-2000 PROJECTIONS FOR RSAS 40, 43 AND 44

RSA	POPULATION						
	JULY 2000	JULY 2005	JULY 2010	JULY 2015	JULY 2020	JULY 2025	Change from 2000 to 2025
40	292,366	306,811	320,929	327,151	334,054	339,012	46,646
43	251,981	274,226	310,245	338,829	349,465	363,236	111,255
44*	165,226	204,5832	220,646	229,860	243,864	249,044	83,818
	DWELLING UNITS						
40	126,509	129,790	134,112	135,298	136,526	137,557	10,848
43	88,480	95,339	109,461	117,311	122,408	127,490	39,010
44*	61,095	74,630	80,024	84,016	87,026	88,441	27,346
	EMPLOYMENT (Jobs)						
40	125,880	143,214	155,510	166,010	171,477	175,477	49,597
43	81,146	98,966	109,666	117,026	126,183	134,528	53,382
44*	179,046	229,643	265,437	299,839	320,319	341,921	162,875
*RSA 44 encompasses east Irvine and Great Park Plan (formerly known as MCAS El Toro).							

Source: OCP-2000 (Center for Demographic Research, 2000).

3.2.4 DEVELOPMENT TRENDS

Based on the development history in southern Orange County, it is reasonable to expect that the currently undeveloped lands in the SOCTIIP study area, specifically RMV, will be developed at some time in the near future. OCP-2000 projects 21,000 dus and an additional 23,000 jobs on the 10,125 ha (25,000 ac) RMV property by 2025. Although the Orange County General Plan Land Use Element (LUE) does not reflect these projections, OCP-2000 does consider input from either the County or the landowner. RMV submitted an application to the County of Orange in 2001 for entitlements for land use intensification of the RMV property including a proposed 14,000 dus and approximately 465,000 square meters (five million square feet) of other development such as business park, neighborhood commercial and urban activity center. Given these growth and development trends, the development application from the landowner and the OCP-2000 projections, it is reasonable to assume that RMV will also be developed in the foreseeable future.

The Las Flores, Coto de Caza and Ladera Ranch Planned Communities (PCs) are adjacent to RMV. Coto de Caza is nearly built out. Ladera Ranch and the Champion Hills/Rolling Hills development (collectively "Talega") are expected to be built out by 2007. The Forster Ranch PC in the City of San Clemente is expected to be built out within five years. These are all previously approved developments that are in the process of building out to their planned levels.

The following Section provides an inventory of the existing General Plan land uses for each jurisdiction in the SOCTIIP study area based on the applicable General Plan LUEs. This Section also provides information on other resources and regulatory policies relative to agricultural

resources, the Coastal Zone, and Wild and Scenic Rivers. The following discussion also provides an assessment and inventory of existing and planned land uses in unincorporated Orange County and incorporated cities that are along the alignments of the SOCTIIP build alternatives. They are segregated by land use jurisdiction and then by existing and planned land uses.

3.3 COUNTY OF ORANGE LAND USES IN THE SOCTIIP STUDY AREA

3.3.1 COMMUNITY CHARACTER AND FACILITIES IN UNINCORPORATED ORANGE COUNTY

As discussed in detail below, the general character of the unincorporated area in the SOCTIIP study area is varied, consisting of the recently developed communities of Coto de Caza, Las Flores and Talega. Figure 3.3-1 depicts the location of land uses in the SOCTIIP study area and Figure 3.3-2 shows the County of Orange General Plan land use designations in the County of Orange jurisdiction. The SOCTIIP study area also contains developing communities including the Ladera Ranch PC and rural agricultural uses consisting of the RMV property. The housing characteristics are typical of that of other suburban development in south Orange County and are principally single family residences supported by commercial uses. An exception to this is the former MCAS El Toro. At present, planned land uses for that site include a large regional park with tourist-oriented and institutional uses. However, the existing character of the MCAS El Toro is low intensity uses associated with an interim leasing program for the Base using the existing facilities.

The part of the SOCTIIP study area under the jurisdiction of the County of Orange is unincorporated land which extends from the northern limits of the study area (Oso Parkway) to the Orange/San Diego County line at the northern boundary of San Onofre State Beach, to the northern boundary of the City of San Clemente, and to the eastern boundaries of the Cities of San Juan Capistrano and Mission Viejo. The part of the study area in unincorporated Orange County is generally undeveloped, consisting largely of the RMV property. This property is owned by various partnerships and is depicted on Figure 3.3-1. The City of San Juan Capistrano is considering plans to incorporate part of these lands near the City border, in part, to control growth and ridgeline development. This process would go through annexation procedures overseen by the LAFCO. There are also several small undeveloped areas in County jurisdiction along I-5.

3.3.2 EXISTING AND PLANNED LAND USES IN UNICORPORATED ORANGE COUNTY

Existing land uses in the SOCTIIP study area in unincorporated Orange County include facilities for companies with leaseholds on RMV, ranch facilities, utilities, sand and gravel mining, the RMV Land Conservancy; Ronald W. Caspers Regional Park; Chiquita Water Reclamation Plant (CWRP); Prima Deshecha Sanitary Landfill, General Thomas F. Riley Wilderness Park and the Coto de Caza Specific Plan area, Ladera Ranch PC and Las Flores PC as shown in Figure 3.3-1.

3.3.2.1 Existing Land Uses and Leases on Rancho Mission Viejo

The majority of the 10,125-ha (25,000-ac) RMV property is currently used for ranch operations including cattle grazing, barley farming and citrus orchards. There are a number of ranch access roads in the SOCTIIP study area which are used for daily operations. Two cattle corrals on the ranch, the Cristianitos Corrals and Cow Camp, are used year-round. Additional uses on RMV include the Last Round-Up (the O'Neill family cemetery) and Amantes Camp. The Last Round-Up is in an area south of Ortega Highway. Amantes Camp is in the same general location as the cemetery.

By 1995, the RMV property owners had entered into numerous lease agreements. Many of the lease areas are operated under permits issued by the County of Orange. The approximate locations of these lease areas as well as historical lease areas are shown on Figure 3.3-3. Figure 3.3.4 shows the boundary and location of active leases on the RMV property. Table 3.3-1 shows the status and a general description of each active leasehold. The acreage of the lease area is indicated on the table and the approximate boundary of lease areas are shown on the figure.

3.3.2.2 Proposed Land Uses on Rancho Mission Viejo

In 2001, conceptual land use plans for RMV were submitted to the County by RMV proposing 14,000 dus in a community of mixed use villages. The village concept combines high density residential, low density residential, commercial and office uses into integrated areas instead of the traditional exclusive zones. The proposed Land Use Map is shown on Figure 3.3-5 and the proposed land use allocations are shown on Table 3.3-2. The plan proposes development on about half of the ranch with the remainder left in open space supporting the existing cattle ranching operations. The development plan is planned to be part of a concurrent process for state and federal Endangered Species Acts (ESAs) permits and watercourse alteration permits. These proposed conceptual plans are preliminary, have not received federal, state or county approvals, and are subject to future environmental review.

Although the plans and entitlement applications filed (e.g. General Plan Amendments, Zone Changes, maps, etc.) will be submitted to the County, the granting of any use intensification by the Orange County Board of Supervisors will not occur until after the development proposal for the RMV has complied with the California Environmental Quality Act (CEQA; Public Resources Code Section 21000 et seq.). The County Board of Supervisors may defer action on the development proposal until National Environmental Policy Act (NEPA; 40 C.F.R. Section 1500 et seq.) documentation has been prepared. Additionally, the County is the lead local agency for the Natural Community Conservation Plan (NCCP) for the South Subregion of which RMV is a major component.

TABLE 3.3-1
STATUS AND GENERAL DESCRIPTION OF EACH LEASEHOLD ON RMV

LESSEE	SIZE	DESCRIPTION	LEASE EXPIRATION
BellSouth Wireless - Use/Permit/License	Acres – Unknown Hectares – Unknown	A non-exclusive license for ingress and egress on the property to enable Licensee to install, maintain and operate a radio transmitter and antenna for data transmission. Cell Site. Various locations. General Plan/Zoning - Open Space/General Agriculture.	60 months (but with automatic renewal - 84 months - 2005)
Oglebay Norton - (California Silica)	Acres – 1,172 Hectares – 474.29	Exclusive right and license during term to explore for and to dig, min, store on designated area, process and remove sand, feldspar, clay and accessory minerals and substances. Located northeast of Prima Deshecha Sanitary Landfill and northwest of the RMV Land Conservancy. General Plan/Zoning - Open Space/General Agriculture.	1/31/2013
California Portland Cement (Catalina Pacific Concrete-North)	Acres – 16 Hectares – 6.47	Catalina Pacific operates a ready-mix concrete batch plant and clay removal operation on the north side of San Juan Creek and Ortega Highway. 6.48 (16 ac) General Plan/Zoning - Open Space/General Agriculture.	7/31/2001 Annual Renewal
California Portland Cement (Catalina Pacific Concrete-South) Inactive	Acres – 16 Hectares – 6.47	Catalina Pacific operates a ready-mix concrete batch plant and clay removal operation located east of the RMV Land Conservancy of the Rolling Hills/Talega Planned Community. A reservation for an alignment for a transportation corridor is included as part of the lease agreement. General Plan/Zoning - Open Space/General Agriculture.	2002 (4 years)
TruGreen - Miramar Nursery	Acres – 11 Hectares – 4.61	Wholesale nursery and related incidental uses located on the southeast corner of the intersection of Antonio Parkway and Ortega Highway. General Plan/Zoning - Open Space/General Agriculture.	4/1/2004
Saddleback College	Acres – Unknown Hectares – Unknown	For operating a radio transmitter and antenna for a 3,000 watt, frequency modulated noncommercial radio station with an F.C.C. assigned frequency of 88.55 MHz.	11/27/1997 Yearly Renewal
San Diego Gas & Electric	Acres – Unknown Hectares – Unknown	For constructing a building to contain a radio transmitter and antenna and emergency back-up facilities.	6/30/2003 Yearly Renewal
Southern California Edison	Acres – Unknown Hectares – Unknown	Temporary Communication Site.	5/31/03 Expired

TABLE 3.3-1
STATUS AND GENERAL DESCRIPTION OF EACH LEASEHOLD ON RMV

LESSEE	SIZE	DESCRIPTION	LEASE EXPIRATION
TRW	Acres – 2,694 Hectares – 1,090.22	Lease area is located at the east terminus of Avenida Pico, north of the Orange/San Diego County line and northeast of the MCB Camp Pendleton and San Onofre State Beach. For propulsion system testing, electronic device testing, satellite testing and related uses based on conditional use permit. . The majority of facilities and related activities are on a ridge approximately one to two km (0.6 to 1.2 miles) east of Avenida Pico. The lease includes a reservation for an alignment for a transportation corridor. Conditional Use Permit issued by County General Plan/Zoning - Open Space/General Agriculture	9/30/2018
Airtouch Cellular	Acres – Unknown Hectares – Unknown	Operating a communications facility located immediately southeast of the Prima Deshecha Sanitary Landfill. 8.91 ha (22 ac) General Plan/Zoning - Open Space/General Agriculture.	6/15/2005
Beekman Apiaries - North & South	Acres – .6 Hectares – .24	Maintenance and operation of Bee Apiaries. Located north of Ortega Highway, southeast of Colorspot Nursery. 0.24 ha (0.6 ac) General Plan/Zoning - Open Space/General Agriculture.	11/30/1989 Yearly Renewal
Southdown Concrete (Transit Mix/City Concrete)	Acres – Unknown Hectares – Unknown	Operation of a cement/concrete batch plant immediately west of the Solag Disposal lease area. A reservation for an alignment for a transportation corridor is included as part of the lease. 1.41 ha (3.5 ac) General Plan/Zoning - Open Space/General Agriculture	4/1/2013
Color Spot Nursery	Acres – 244 Hectares – 98.74	Commercial nursery north of Ortega Highway and east of Cañada Gobernadora. General Plan/Zoning - Open Space/General Agriculture	12/31/2006
DM Color Express (west)	Acres – 16.7 Hectares – 6.75	For wholesale nursery business, operation of a seed ranch and cultivation of crops located at the intersection of Antonio Parkway and Ortega Highway. The lease for this property expired in 1998. General Plan/Zoning - Open Space/General Agriculture, Flood Plain	7/31/2002 Expires 2004
DM Color Express (east)	Acres – 15.5 Hectares – 6.27	For wholesale nursery business, operation of a seed ranch and cultivation of crops located at the intersection of Antonio Parkway and Ortega Highway. General Plan/Zoning - Open Space/General Agriculture, Flood Plain	3/31/2000 Expires 2004
Ewles Aggregates	Acres – 2.5 Hectares – 1.01	Recycles asphalt and concrete into construction grade gravel for road construction and other uses. The operation is located along San Juan Creek adjacent to other lease areas north of Ortega Highway. A reservation for an alignment for a transportation corridor is included as part of the lease. General Plan/Zoning - Open Space/General Agriculture, Sand and Gravel	9/30/1990 Monthly Renewal

TABLE 3.3-1
STATUS AND GENERAL DESCRIPTION OF EACH LEASEHOLD ON RMV

LESSEE	SIZE	DESCRIPTION	LEASE EXPIRATION
The Oaks Polo Field, Corrals and Grazing Pasture	Acres – Unknown Hectares – Unknown	Equestrian Center located north and south of Ortega Highway, west of La Pata Avenue. This facility is a commercial stable and equestrian center. Uses include horse stalls, pasture, arenas, washrooms, tackroom, reviewing stands, caretaker residences and show facilities. 44.5 ha (110 ac, includes grazing pasture) General Plan/Zoning - Open Space/General Agriculture	12/31/2004 (Polo Field) 12/31/2000 (Corrals) Yearly Renewal 10/14/1999 (Pasture) Yearly Renewal
Tierra Verde - (BFI Greenwaste)	Acres – 7.5 Hectares – 3.03	A composting facility west of La Pata Avenue approximately 2.3 km (1.4 miles) south of Ortega Highway situated relatively close to the Prima Deshecha Sanitary Landfill. General Plan/Zoning - Open Space/General Agriculture	10 years after April 11, 1994 or April 10, 2004.
Olsen Paving Stone	Acres – 6 Hectares – 2.42	Manufactures various types of paving stones located southeast of the Catalina Pacific lease area and north of Ortega Highway. A reservation for an alignment for a transportation corridor is included as part of the lease. 2.41 ha (6 ac) General Plan/Zoning - Open Space/General Agriculture, Sand and Gravel	3/31/1991 Monthly Renewal
PacBell Wireless	Acres – 2.2 Hectares – .89	A non-exclusive license for ingress and egress on the property to enable Licensee to install, maintain and operate a radio transmitter and antenna for data transmission. Cell Site. Various locations. General Plan/Zoning - Open Space/General Agriculture.	12/31/2003 Yearly Renewal
Solag, Inc.	Acres – 6 Hectares – 2.42	A materials recovery facility (MRF) located immediately adjacent to and west of the Ewles Aggregates. Operations include a vehicle maintenance yard, a vehicle storage yard, trash bins, equipment associated trash removal and recyclable recovery services. A reservation for an alignment for a transportation corridor is included as part of the lease. General Plan/Zoning - Open Space/General Agriculture	9/19/2015
St. Augustine's Training Center	Acres – 2.7 Hectares – 1.09	For the operation of a stable and related commercial activities located north of Ortega Highway and south of Cañada Gobernadora adjacent to Colorspot Nursery. General Plan/Zoning - Open Space/General Agriculture.	Earlier of: August 31, 2008 or one year after written notice by landlord.
Tree of Life Nursery	Acres – 34 Hectares – 13.75	For conducting wholesale nursery business. Renewal Options: One option to extend term of lease for additional 5 years commencing of 4/1/2005. General Plan/Zoning - Open Space/General Agriculture.	7/31/2000 Yearly Renewal

TABLE 3.3-2
PROPOSED RANCHO MISSION VIEJO LAND USE STATISTICAL TABLE
(in acres)

PLANNING AREAS

Planning Area	Residential		Open Space		Totals
	Max dus	Gross Acres	Gross Acres	Reg Park Gross Acres	Gross Acres
1	1,020	540	148	122	810
2	1,180	,1631	49		1,680
3	6,000	2,193	115		2,308
4	150	216			216
5	2,440	1,191	159		1,350
6	110	275	33		308
7	1,480	1,350	132		1,482
8	1,400	1,214	50		1,264
9			9,218		9,218
10			778		778
11			1,050		1,050
12			1,429		1,429
13				957	957
Subtotal	13,780	8,610	13,161	1,079	22,850
O'Neill Overlay	220				
TOTALS	14,000	8,610	13,161	1,079	22,850

OVERLAY ZONES

O'Neill Ranch						Urban Activity		Neighborhood Center		Business Park		Golf Resort
Estate	Gross Acres	Golf Casitas	Gross Acres	Golf Course Gross Acres	Total Gross Acres	Gross Acres	Maximum Square Feet	Gross Acres	Maximum Square Feet	Gross Acres	Maximum Square Feet	Gross Acres
						108	630,000			38	575,000	
										40	610,000	
						22	140,000	22	220,000	100	1,525,000	
								5	50,000			
								5	50,000			
								2	20,000			
								5	50,000	80	1,220,000	20
100	200	120	20	200	420							
100	200	120	20	200	420	130	770,000	39	390,000	258	3,930,000	20

Source: Rancho Mission Viejo (2001).

3.3.2.3 South Subregion NCCP/Master Streambed Alteration Agreement

The NCCP South subregion boundary encompasses the area from the I-5 from the City of Lake Forest to Dana Point to the coast and the eastern boundary of the City of Lake Forest and extending to the county line through Cleveland National Forest, refer to Figure 3.3-6. Although the subregion encompasses a large area, much of it is already developed or already held within public lands such as Cleveland National Forest. The primary undeveloped area within the South NCCP subregion is RMV, which is why the NCCP development is being concurrently processed with the RMV development proposal. The County will act as the lead agency for the preparation of the South NCCP.

One state and at least two federal agencies are involved in the resource planning for the RMV site. The state agency is the California Department of Fish and Game (CDFG) which will oversee the compliance of the RMV development with the California Endangered Species Act through the NCCP and watercourse alteration through the Master Streambed Alteration Agreement (MSAA) pursuant to Section 1600 et seq. of the California Fish and Game Code. The two main federal agencies are the United States Fish and Wildlife Service (USFWS) and the United States Army Corps of Engineers (ACOE). These two agencies will, in a cooperative effort, oversee compliance with the Federal ESA through the preparation of the NCCP/Habitat Conservation Plan (50 C.F.R. Section 13.0) and the Clean Water Act through the Section 404 Permit Process (33 C.F.R. Section 230).

On October 30, 2002, the USFWS and ACOE held an informational meeting on the resource planning for the South Subregion NCCP and Special Area Management Plan (SAMP). Ten candidate plans were presented which ranged from development reflecting the RMV proposal to a very low density of development over a very limited development area. According to the County's website for the South Orange County Coordinating Planning Process, these alternatives will be evaluated in the South NCCP and SAMP environmental studies. Although a Notice of Intent to prepare an EIS for these efforts was published in August 2001, these studies are just underway notwithstanding that the South NCCP area that has been the subject of ongoing study for nearly a decade. These study efforts will influence and shape development on RMV as well as other land in the SOCTIIP study area.

3.3.2.4 Other Existing and Planned Land Uses in Unincorporated Orange County

The locations and layouts of the land uses in this Section are shown on Figure 3.3-1.

<u>Las Flores Planned Community</u>

The Las Flores PC is immediately northeast of the existing terminus of the Foothill Transportation Corridor (FTC)-North at Oso Parkway. Las Flores is a 407.3-ha (1,005-ac) primarily residential PC west of the existing City of Rancho Santa Margarita. A small allocation of residential neighborhood support uses has been included in the PC. 2.8 ha (7 ac) have been allocated as commercial development and 6.48 ha (16 ac) have been allocated as public facilities (excluding roads and a 8.1-ha (20-ac) school site), which represents all non-residential development in the PC. This PC was built out with 1,982 dwelling units completed in 2000.

The General Plan land use designation for the entire PC is Suburban Residential (1B, 0.5 to 18 du/ac). The non-residential uses are compatible with the Suburban Residential land use designation because of their relatively small scale and community support orientation.

Coto de Caza Specific Plan

The Coto de Caza Specific Plan area is a PC north of RMV, east of the existing FTC-North and northeast and south of General Thomas F. Riley Wilderness Park. Coto de Caza is an almost fully developed 1,996 ha (4,929 ac) PC of rural residential, commercial and open space uses. Based on information provided in the County's 1999 Annual Monitoring Report, Coto de Caza is estimated to have a total of 1,709 ha (4,220 ac) developed with 1,661 ha (4,102 ac) of residential uses, 47 ha (117 ac) of commercial uses and 0.4 ha (one ac) of other development. According to personal communication with the developer (Holly Mckee of Lennar Homes 4/16/01), buildout is expected to occur by the end of 2003 with approximately 182 residential units remaining to be built. A total of 6,268 dus are approved for Coto de Caza.

Ladera Ranch Planned Community

The Ladera Ranch PC is immediately southeast of the intersection of Oso Parkway and Antonio Parkway. In 1995, the County approved a 968 ha (2,390 ac) PC concurrent with the approval of the construction of Antonio Parkway from Oso Parkway to Avenida Pico. The Ladera Ranch PC comprises 806 ha (1,989 ac) of residential uses (8,100 dus maximum), 44.9 ha (111 ac) of urban activity center uses and 117 ha (290 ac) of other uses. The estimated buildout year is 2007 with a projected resident population of 21,348 and an employee population of 3,483. As of December 31, 2000, 166 ha (410 ac) had been developed and the entire development footprint was graded. The General Plan designations for the Ladera Ranch PC are Suburban Residential (1b), Community Commercial (2b), Urban Activity Center (6) and Open Space (5).

Rolling Hills Planned Community (formerly Talega)

The Rolling Hills PC, the part of the Talega development in unincorporated Orange County, is northwest of San Onofre State Beach and MCB Camp Pendleton and encompasses approximately 772 ha (1,908 ac). This PC is in the sphere of influence (future annexation area) for the City of San Clemente.

Approved in May 1983, the south part of this PC is planned for residential, commercial and business park uses. There are over 22 vested tentative tract maps for the site. A Feature Plan for Rolling Hills was originally prepared in 1988 and four subsequent amendments have been processed. A Final Environmental Impact Report (EIR) was approved for the original plan in 1988 and the amendments to the Feature Plan have been addressed in Addenda to the EIR. The development plan calls for 2,700 dus on 128.1 ha (316.3 ac). The remainder of the land uses on the Rolling Hills PC site include business/commercial, public facilities and roads. Rolling Hills PC is currently in construction for this southeastern area and is approximately one-third built out, with an estimated 1,066 dus and a 20.2 ha (50 ac) golf course in various stages of completion. The buildout year is 2007. The northern part of the site is the RMV Land Conservancy, established as a condition of approval for the Rolling Hills PC.

Annexation of the County part of Talega to the City of San Clemente has been anticipated by the developer, the City of San Clemente and the County as part of the development agreement for this project. The Talega Joint Planning Authority (JPA), created on July 21, 1999, consisting of City and County staff and representatives, uses City codes and policies for development requirements and design standards for the Rolling Hills Planned Community project. The JPA will maintain land use authority over the unincorporated parts of the project until annexation to the City occurs. The City of San Clemente has a two-phase annexation alignment for the unincorporated part of Rolling Hills that is expected to be fully executed by early 2003.

Rancho Mission Viejo Land Conservancy

The RMV Land Conservancy (Conservancy) is a 486 ha (1,200 ac) open space reserve in the Rolling Hills PC Specific Plan area. It was originally the primary open space component of the Talega Specific Plan and is now a major open space component of both the Champion Hills/Talega PC and the Rolling Hills PC. The Conservancy was created in 1991 to complement Orange County's goal to preserve and enhance lands throughout the region for educational, ecological, scenic and open space uses. The Conservancy is governed by a nine-member board of directors representing the County of Orange, the City of San Clemente, the RMV Company and the general public through local conservation organizations. The Conservancy is owned by RMV.

3.3.2.5 Public Facilities in Unincorporated Orange County

Tesoro High School (formerly Chiquita High School)

Tesoro High School is immediately southwest of the existing terminus of the FTC-North at Oso Parkway in unincorporated Orange County as shown on Figure 3.3-1. It received approvals from Capistrano Unified School District in March 1996. The site is 16.2 ha (40 ac) and is composed of 18,600 square meters (200,000 sq. ft.) of buildings supporting 85 classrooms. The design capacity, including portable classrooms is 3,100 students. This school opened in fall 2001.

Chiquita Water Reclamation Plant

The Santa Margarita Water District (SMWD) Chiquita Wastewater Reclamation Plant (CWRP) is in Chiquita Canyon north of Ortega Highway as shown of Figure 3.3-1. The CWRP has an existing capacity of 22.5 million liters per day (mld) (6 million gallons per day (mgd)) with a planned ultimate capacity of 79 mld (21 mgd). Access to the CWRP is from the Chiquita Access Road on 24 hours per day basis. As water demand changes in south Orange County, the facility may be expanded.

Prima Deshecha Sanitary Landfill

The Prima Deshecha Sanitary Landfill is on La Pata Avenue in the City of San Juan Capistrano, at its border with the City of San Clemente as shown on Figure 3.3-1. The currently active part of the Landfill is west of the proposed La Pata Avenue extension. As currently configured, the

extension of La Pata Avenue as shown on the Master Plan of Arterial Highways (MPAH) would cross areas of the Landfill proposed for future disposal activities. The General Plan land use designation for the Landfill is (4) Public Facilities.

As described in the Draft EIR for the General Development Plan (County of Orange, 2001), there are two future land uses planned for Prima Deshecha Sanitary Landfill:

1) The future extension of La Pata Avenue to its full MPAH designation.

2) Recreational uses including a park, golf course and riding and hiking trails after landfilling is terminated in 2067.

MPAH: Antonio Parkway/La Pata Avenue from Oso Parkway to Avenida Pico

The County, in conjunction with the City of San Clemente, is in the process of planning the alignment for the extension of this MPAH arterial. This arterial is called Antonio Parkway north of Ortega Highway, La Pata Avenue south of Ortega Highway to the San Clemente City limits and Avenida La Pata in the City of San Clemente. Currently, only the segment north of Prima Deshecha Sanitary Landfill to Oso Parkway is built. The four lane segment from Oso Parkway to Ortega Highway provides access to the east side of the Ladera Ranch PC. South of Ortega Highway, this road narrows to a three lane road leading into the Prima Deshecha Sanitary Landfill. The segment from south of the Landfill to just north of Avenida Pico is not currently constructed, but is in the planning process. The MPAH shows this arterial as a six lane facility (Major) from Oso Parkway to Prima Deshecha Sanitary Landfill, a four lane divided facility (Primary) to just past the intersection with Camino Las Ramblas and a six lane facility (Major) to Avenida Pico.

MPAH: Crown Valley Parkway

Crown Valley Parkway is shown on the MPAH as a Principal (eight lane) facility from I-5 east to Marguerite Parkway, a Major arterial (six lanes) after its intersection with Antonio Parkway and narrowing to a Primary arterial (four lanes) until its terminus at Oso Parkway. Crown Valley Parkway is currently built as a six lane facility from I-5 to Marguerite Parkway, narrows to a four lane facility and then widens to a six lane facility as it intersects with Antonio Parkway. The Crown Valley Parkway bridge connecting Crown Valley Parkway with Antonio Parkway opened in April 2001. Crown Valley Parkway is not built east of Antonio Parkway. Plans for the segment from Antonio Parkway to Oso Parkway have not been initiated.

MPAH: Ortega Highway

Ortega Highway is a two lane facility from just east of the I-5 through Cleveland National Forest. It is shown on the MPAH as a Primary Arterial (four lanes). Ortega Highway is also State Route 74 (SR 74). Plans for its improvement to a four-lane facility have not been initiated.

Reuse of the Marine Corps Air Station (MCAS) El Toro

A civilian international airport and other uses such as park/open space, residential, commercial, industrial and public uses on approximately 1,903.5 ha (4,700 ac) have been proposed for the former MCAS El Toro by the designated Local Reuse Authority which is the Orange County Board of Supervisors. The County of Orange General Plan Land Use Element shows the area as Public Facilities (4), Open Space (5), Suburban Residential (1B) and Employment (3). In November 2001, the voters of Orange County voted for the Great Park Plan (Initiative Measure W) which proposed replacing the originally proposed airport and ancillary uses with a comprehensive plan including open space/recreation uses, entertainment uses, commercial uses and institutional uses with an overall tourist/visitor orientation. Plans for these uses are in the initial stages of the design process.

3.4 CITY OF SAN CLEMENTE

3.4.1 COMMUNITY CHARACTER AND FACILITIES IN THE CITY OF SAN CLEMENTE

The City of San Clemente in its General Plan (1993) established a number of goals and objectives to ensure a balanced community committed to protecting what is valued today while meeting tomorrow's needs. These goals and objectives include:

- Maintaining a safe, healthy atmosphere in which to live, work and play.
- Guiding development to ensure responsible growth while preserving and enhancing our village character, unique environment and natural amenities.
- Providing for the City's long term stability through promotion of economic vitality and diversity.

Existing land uses and facilities which serve the City of San Clemente include schools, parks, recreation areas, day care centers and religious institutions. Access to these uses is provided by the local circulation network, bikeways or sidewalks. Pedestrian access in the study area is provided on local streets. Currently, residents can pass from one side of the I-5 to the other via local roads or sidewalks along the road. Across I-5, pedestrian and automobile travel is provided on Avenida Mendocino (crosses over I-5 with sidewalks on both sides of the road); Avenida Pico (undercrossing with one sidewalk on the east side); Avenida Palizada (undercrossing with one sidewalk on the east side); Avenida Presidio (undercrossing with sidewalks on both sides of the road); and El Camino Real (undercrossing with sidewalks on both sides of the road). The downtown area is the symbolic core of the City and has a pedestrian oriented village character. Access to the downtown area from I-5 is primarily provided from the Avenida Pico, Avenida Palizada and Avenida Presidio interchanges.

The San Clemente City limits encompass a triangular shape with a base that extends along the coast for approximately 11.3 km (seven miles) and extends inland approximately eight km (five miles). The City's corporate limits contain an area of 44.2 square km (17.1 square miles). The

sphere of influence (SOI) for the City is defined as that land outside of the City's boundary that has been approved by the LAFCO to be included in the City's planning efforts for possible future annexation. The City's corporate boundary and existing SOI are shown on Figure 3.4-1. By early 2003, the City is planning to annex the rest of the area within their Sphere of Influence except for the RMV conservancy.

The City is accessible to surrounding communities and beyond through a limited network of major and secondary arterials. I-5 is the primary north-south route through the City at a distance ranging from approximately 0.8 km (0.5 mile) to 1.6 km (1.0 mile) inland. The primary east-west circulation routes are Avenida Pico and Camino de Los Mares.

3.4.2 EXISTING LAND USES IN THE CITY OF SAN CLEMENTE

There are five large tracts of land whose permitted uses and densities are subject to provisions of Specific Plans which have been adopted by the City. The four approved Specific Plan areas are Rancho San Clemente (including Plaza Pacifica), Marblehead Inland, Marblehead Coastal, Champion Hills (Talega) and Forster Ranch. These PCs are shown on Figure 3.4-2. The communities of Marblehead Inland, Rancho San Clemente and Forster Ranch PCs are almost completely built out with only small parcels remaining to be developed. The Champion Hills PC has not been completed and the Marblehead Coastal Specific Plan and Local Coastal Program was only recently approved by the City and has not received California Coastal Commission (CCC) approvals. Consistent with the City's General Plan, the four inland Specific Plans assumed implementation of the FTC-S on an alignment east of the City.

The City's General Plan indicates that the 4.6 km (15,200 feet) stretch of the City that abuts I-5 includes Community Commercial, Regional Commercial, Low Density Residential, Low Medium Density Residential, Medium Density Residential, Neighborhood Commercial, Commercial Recreation, Private and Public Open Space, Mixed Use and Industrial uses.

Other City of San Clemente General Plan land use designations in the SOCTIIP study area are shown on Figure 3.4-3 and include the following: Public Parking, Community Commercial, Residential low density, (4.5 units/gross ac), Residential medium density, (15 units/gross ac), Open space commercial - golf courses and commercial recreation, Open space - public parks and public open space, and Mixed Use.

In the SOCTIIP study area, various land uses identified in the City of San Clemente Precise Zoning Plan include open space (O-S), planned residential development (PRD), development district (D-D), central commercial (C-1), mixed use (MU), general commercial (C-2), business park (BP), and low density residential (L).

From the southern boundary of Prima Deshecha Sanitary Landfill to the northern boundary of Plaza Pacifica, the SOCTIIP study area in the City of San Clemente is currently undeveloped. However, as discussed below, the majority of the area is planned for development as part of the City's inland PCs.

The north and northeast parts of the City comprise the Champion Hills/Talega PC. This area is partially developed with a golf course, residential uses and a business park.

Immediately south of Avenida La Pata and west of Avenida Pico, there is the approximately 24 ha (60 ac) retail commercial component of Plaza Pacifica (Planning Area 1 of Rancho San Clemente PC). The residential components of Plaza Pacifica were completed by mid-1998. General Plan designations for the Rancho San Clemente PC in the SOCTIIP study area include OS2 (Open space, privately owned open space), MU (Mixed Use), I2 (Light industrial, floor area ratio 0.5), OSC (Open space commercial, golf courses and commercial recreation) and I3 (Heavy industrial, floor area ratio 0.75).

South and southeast of Plaza Pacifica are private open space and other uses in the Marblehead Inland PC which is generally bound by I-5 to the south and Avenida Pico to the east. St. Andrews by the Sea Methodist church is in the northeast quadrant of the I-5/Avenida Pico interchange. East of Avenida Pico are existing uses in the Rancho San Clemente PC including a business park, private open space and residential uses. A neighborhood commercial center and San Clemente High School are south of Rancho San Clemente PC and east of Avenida Pico. Along both sides of I-5, the City of San Clemente is developed primarily with commercial and residential uses from Avenida Pico to the Orange/San Diego County line. Immediately adjacent to I-5, land uses include San Clemente High School, Ole Hanson Elementary School, and residential and commercial uses. On the coastal side of I-5, land uses in the SOCTIIP study area include single and multi-family residential uses, hotels, office uses, industrial and commercial uses and San Clemente Presbyterian Church.

Existing land uses in the southeast part of the SOCTIIP study area consist primarily of single family residential, recreational and open space uses. Recreation areas include the privately owned Pacific Golf Course, and publicly owned Richard T. Steed Park, Vista Bahia Park and San Clemente Municipal Golf Course.

3.4.2.1 Forster Ranch Specific Plan

The original Specific Plan for Forster Ranch was approved in the early 1980s. The current Forster Ranch Specific Plan was adopted by the City Council in February 1992 and subsequently amended in February 1998 when the ownership changed. The Specific Plan has been divided into three sectors: D, G and P. Sector D consists of 300 ha (741 ac) east of Camino de Los Mares. The residential component is almost completely built out. Sector G is the only coastal component and includes the existing Shorecliffs Golf Course and hotel site on the coastal side of the I-5. Sector P contains 443 ha (1,096 ac) east of Camino de Los Mares, west of the proposed Avenida La Pata and north of the Plaza Pacifica development in Rancho San Clemente PC. The residential component of this PC has varying densities supporting single and multiple family housing. The last residential planning area (Planning Area 4) is in its final phases of development, is currently being graded and construction has begun.

General Plan designations in the Forster Ranch Specific Plan include OS (open space), L (low density residential, 4.5 dus/ac), MH (medium high density residential, 24 dus/ac), CC (central commercial), PU (utility buildings and facilities) and BP (business park). The Specific Plan for

Forster Ranch consolidates all zoning into one category, Development District (D-D). However, separate sets of permitted land uses and development standards have been drafted for each sector. The D-D zoning is consistent with the General Plan designations.

3.4.2.2 Marblehead Coastal Specific Plan

The proposed 101-hectare (250-acre) Marblehead Coastal development received preliminary approval from the California Coastal Commission in April 2003.The proposed development is described in the next Section.

3.4.3 PLANNED LAND USES IN THE CITY OF SAN CLEMENTE

The planned land uses in the City of San Clemente are primarily associated with the Champion Hills PC and Marblehead development. An important part of the City's future land use planning efforts is the development of an Integrated Development Planning Area (IDPA) generally between Avenida Vista Hermosa and Avenida Pico, at Avenida La Pata. This area includes lands in Forster Ranch, Talega and Rancho San Clemente PCs which are designated for a mix of retail and office commercial, business park, residential and open space uses as shown in Figure 3.4-4. The future development of the Avenida La Pata extension is a critical component of the IDPA. The IDPA is intended to serve as principal activity centers and contain the highest intensity of development permitted in each Specific Plan area. The integrated concept provides for:

1) A reconfiguration of the pattern of uses to clearly define the appropriate mix and balance of uses necessary to serve these communities (e.g. preventing an oversupply of community shopping centers).

2) Integration of the uses in a comprehensive manner.

3) A physical link between future uses and the existing Plaza Pacifica.

3.4.3.1 Talega Specific Plan Area

The Talega Specific Plan includes the Champion Hills (Talega) PC in the City of San Clemente and the Rolling Hills PC in unincorporated County of Orange and the City's SOI, as discussed earlier. The original Specific Plan for this development was approved in 1987 and the current Specific Plan for development in the City was adopted in July 1992. The Feature Plan for Rolling Hills was adopted by the County in 1989. The Talega Specific Plan area is east of Forster Ranch and west of Cristianitos Road and is currently partially developed. Preliminary grading has occurred to construct several regional water supply lines, to improve certain arterial highway segments, to stabilize geologic hazards and to create drainage facilities. Development of a golf course, residential uses and business park uses have occurred in both the Champion Hills and Rolling Hills areas.

The Champion Hills Specific Plan (Talega) area encompasses approximately 649 ha (1,604 ac) and is planned for residential (approximately 4,965 dus), business park, commercial, sports

complex, hotel, school, golf course and open space uses. The General Plan designation for the Champion Hills Specific Plan is D-D (Designated Development). Subcategories of the D-D designation which apply to Talega are referred to as "preferred land use area" and include R-M/H (residential medium/high density), TC (tourist commercial), CC (community commercial), NC (neighborhood commercial), BP (business park) and E (elementary school). Champion Hills is entirely in the D-D zoning designation. Development in Champion Hills will conform to the provisions outlined in the Specific Plan, as well as the D-D designation in the San Clemente Zoning Code. Currently only about 35 percent of this PC is built out.

3.4.3.2 Marblehead Coastal Specific Plan

The planned Marblehead Coastal Development is west of Avenida Pico on the coastal side of I-5. This project is proposed to include 313 residential units and an approximately 62,775 square meter (675,00 square foot) regional shopping center north of Avenida Vista Hermosa The California Coastal Commission approved the development on April 19, 2003 and the project is now pending approval by the San Clemente City Council in late 2003. General Plan designations for Marblehead Coastal development in the SOCTIIP study area are OS1 (Open space, public parks and public open space), OS2 (Open space, privately owned open space), RC-1 (Regional Commercial), RL (Residential low density, 4.5 unit/gross acre), RML (Residential medium to low density), RM (Residential medium density, 15 units/gross acre), I (Institutional) and P (Public Parking).

3.4.3.3 Other

Immediately north of I-5 and east of St. Andrews by the Sea Church is the Pacific Coast Church in the Marblehead Inland community, there is a planned daycare center. No schedule for the development of this use has been identified.

3.4.3.4 Public Facilities

There are no public facilities in the City of San Clemente PC in the SOCTIIP study area.

3.4.4 CITY OF SAN CLEMENTE GROWTH CONTROL INITIATIVE

The citizens of the City of San Clemente voted to implement a growth control initiative which limits the number of building permits for dus that can be issued on an annual basis to 500 units. This currently affects the buildout of Forster Ranch and Champion Hills PC, and will affect the Marblehead Coastal development that is pending CCC approval.

3.5 CITY OF SAN JUAN CAPISTRANO

3.5.1 COMMUNITY CHARACTER AND FACILITIES IN THE CITY OF SAN JUAN CAPISTRANO

The City of San Juan Capistrano has a rich history, as noted by the historic Mission San Juan Capistrano in the center of the City. The older parts of the City are characterized by low density

housing that typifies the early California ranch houses. The newer development is more typical of the single family and multi family developments in southern Orange County, although the overall density is lower. The City is characterized by hilly terrain and does not have any coastline.

The City of San Juan Capistrano is between the Cities of Laguna Niguel, Dana Point and San Clemente as shown on Figure 3.1-1. It is bordered to the east by the RMV in unincorporated Orange County. I-5 traverses the center of the City and proceeds in a curvilinear fashion in a north/south direction across the City. The City of San Juan Capistrano is generally northwest of the Forster Ranch PC in San Clemente and the City boundary bisects the Prima Deshecha Sanitary Landfill which is partly in the City.

3.5.2 EXISTING LAND USES IN THE CITY OF SAN JUAN CAPISTRANO

With the exception of the proposed Whispering Hills PC development near the City's northeastern boundary, the eastern part of the City of San Juan Capistrano in the SOCTIIP study area is not planned for development as shown on Figure 3.5-1. Much of this area contains the Prima Deshecha Sanitary Landfill as shown on Figure 3.5-2. General Plan land use designations for the east part of the City include residential and public/institutional.

Existing La Pata Avenue runs parallel to the City's boundary for approximately 2.3 km (1.4 miles). Ortega Highway is a major component of the City's circulation network, providing the primary east/west access through the City.

3.5.3 PLANNED LAND USES IN THE CITY OF SAN JUAN CAPISTRANO

3.5.3.1 Whispering Hills Planned Community

The Whispering Hills PC proposes a residential planned community immediately north of Prima Deshecha Sanitary Landfill on the east side of the City. The location of Whispering Hills is shown on Figure 3.5-2A. The City approved an amendment to the previously approved 363 du project in spring 2002. The San Juan Capistrano General Plan LUE identifies this area as "Planned Community." It is identified as "Growth Management" in the City's Zoning Map. According to the LUE allowable uses guidelines, this development is planned for Very Low Density Residential. In the November 2002 election, the citizens of San Juan Capistrano voted against a proposal to allow 193 dus and a high school on the site. In early 2003, the Capistrano Unified School District proceeded with its plans to construct the high school on the north part of the site. As of August 2003, the potential for development on the south part of the site is unresolved.

3.5.3.2 Pacific Point and Mesa Planning Areas (Forster Canyon Planned Community)

The Forster Canyon PC was approved in February 1981 (163 ha, 404 ac). The location of the Forster Canyon PC is shown on Figure 3.5-2A. A 1991 amendment to the previously approved Forster Canyon PC and Comprehensive Development Plan (CDP 81-1) affected 103 ha (256 ac) of the Forster Canyon CDP currently known as the Pacific Point PC. Pacific Point PC is in the

south part of the City of San Juan Capistrano adjacent to the City of San Clemente. The CDP for this PC includes a maximum of 617 dus with varying densities (71 ha, 176 ac), Research and Development (10 ha, 25 ac), Public/Institutional (3 ha, 7.8 ac), General Open Space (66 ha, 162 ac) and Active Park (1.8 ha, 4.5 ac). All residential planning areas have been mass graded and 350 dus have been built or permitted. The central part of this PC served as a County of Orange landfill from 1958 to 1975. This area is currently zoned for Recreation/Open Space. To the north of Pacific Point PC is Mesa PC which consists of the remaining 60 ha (148 ac) of the former Forster Canyon PC. Development plans for this area include 275 dus and 11.5 ha 2 (8.5 ac) of recreation open space.

3.5.3.3 Pueblo Serra Planned Community

Development plans for Pueblo Serra PC were approved in the late 1980s. The location for the Pueblo Serra PC is shown on Figure 3.5-2A. However, since these plans were not consistent with the City's Zoning Code, no action by the City Council is proposed until a zone change is approved for the site. The area is designated PC in the City's General Plan. Mixed Use development guidelines for this PC include Office Research Park with support accessory uses such as hotel and food services.

3.5.3.4 Oso Ranch Planned Community

Oso Ranch PC is undeveloped with no access or approved development plans as of November 2002. The location of the Oso Ranch PC is shown on Figure 3.5-2A. The area is designated PC in the City's General Plan. Mixed Use development guidelines for this PC include 40 percent Public Institutional, 30 percent Affordable/Senior Housing and 30 percent Medium Density Residential.

3.5.3.5 Crystal Cathedral Ministries Planned Community

The Rancho San Juan Capistrano PC (referred to as Crystal Cathedral Ministries in the General Plan) is pending approval. The location of the Crystal Cathedral Ministries PC is shown on Figure 3.5-2A. The area is designated PC in the City's General Plan. Mixed Use development guidelines for this PC include 80 percent Public Institutional (includes retreat center) and 20 percent Assisted Care Facility (which may include a wellness center).

3.5.3.6 Central Redevelopment Project

The Central Redevelopment Project is overseen by the City's Community Redevelopment Agency (CRA) and encompasses a 436 ha (1,086 ac) area that straddles I-5 as shown on Figure 3.5-3. Goals identified for projects in this area include (pp. 38 of San Juan Capistrano LUE):

> "…the elimination of blight conditions in the Redevelopment Project Area; the prevention of recurrence of these blight conditions; the improvement or construction of public services and infrastructure and the improvement of the Project Area's environment; the implementation of the Redevelopment Plan; and the encouragement and fostering of economic development within the Project Area."

The CRA has not initiated any projects in recent years. However, there has been private development in the redevelopment area, some of which the CRA has participated in, including expansion of Capistrano Volkswagen on Valle Road.

3.5.3.7 Home Depot Development and City Land Sale

The proposed project involves four parcels, a two-parcel, 5.3 ha (13.2 ac) site owned by the San Juan Capistrano CRA, and a two-parcel 2.04-ac site owned by Home Depot, U.S.A. The parcels owned by the CRA would be sold to Home Depot, USA for development. The proposed project would develop a total of 14,632 square meters (157,331 gross square feet) of retail space, including 9,958 square meters (107,080 gross square feet) for a home improvement center, 2,198 square meters (23,638 gross square feet) for a garden center, and 2,475 square meters (26,613 gross square feet) for an accessory retail facility (Retail A) on the 6.2 ha (15.3 ac) site. The project would also provide access under the Stonehill Drive overpass to several existing parcels within the City limits located south of Stonehill Drive. This proposal was voted down on the November 2002 ballot by the citizens of San Juan Capistrano. The vote is as an advisory position of the citizens, but does not function as either veto or ratification without subsequent action by the City Council. However, the City Council has stated that they would support the voters' decision. The City Council has not taken any action on this project as of December 2002.

3.5.4 PUBLIC FACILITIES

3.5.4.1 Prima Deshecha Sanitary Landfill

The Prima Deshecha Sanitary Landfill is on La Pata Avenue in the City of San Juan Capistrano at its border with the City of San Clemente. The currently active part of the Landfill is west of the proposed La Pata Avenue in the City. However, the General Development Plan for the Landfill shows the expansion of the Landfill in the area outside of the City boundary (Prima Deshecha Draft Program EIR for 2001 General Development Plan). The City's General Plan land use designation for the Landfill is (4) Public Facilities. The Landfill is proposed as a regional park after the termination of landfilling in 2067.

3.5.4.2 MPAH: Ortega Highway

Ortega Highway is a two-lane facility from just east of the I-5 through the Cleveland National Forest. It is shown on the MPAH as a Primary arterial (four lanes). Plans for its improvement to a four-lane facility have not been initiated.

3.5.4.3 MPAH: Camino Las Ramblas

The MPAH indicates that Camino Las Ramblas will continue northeast from its intersection with the proposed Camino de Los Mares extension and proceed adjacent to the western and northern Prima Deshecha Sanitary Landfill boundaries, eventually joining La Pata Avenue. Camino Las Ramblas currently exists from I-5 extending approximately 2.8 km (1.8 miles) northeast to its terminus near the City of San Clemente boundary. The City of San Juan Capistrano passed a

resolution on December 14, 1999 that stipulates the City's intention to pursue deletion of the Camino Las Ramblas extension to La Pata Avenue from the MPAH. To pursue this action, the City submitted a request in 2000 to the Orange County Transportation Authority (OCTA) to amend the MPAH. Prior to any action taken by OCTA, the City would be required to prepare and process a General Plan Amendment (GPA) of the Circulation Element and appropriate CEQA documentation. If the GPA is approved by the City of San Juan Capistrano, the GPA would then be forwarded to the OCTA Board of Directors for action. The MPAH amendment process is on hold at the OCTA, pending additional alignment and transportation studies by the County of Orange and the City of San Juan Capistrano.

3.6 MARINE CORPS BASE CAMP PENDLETON

MCB Camp Pendleton is the Marine Corps' only amphibious (land and water) training center on the west coast of the United States, with over 50,586 ha (125,000 ac) of land, 29 km (18 miles) of coastline, training areas, ranges and Special Use Airspace as depicted in Figures 3.6-1 and 6.3-2. MCB Camp Pendleton is a prime military training facility. The southeast portion of the SOCTIIP study area within Camp Pendleton boundaries includes land uses associated with six heavily used training areas, four artillery firing areas, one aviation drop zone, one helicopter heavy lift pad, numerous live-fire ranges, Green Beach (a beach used to support amphibious landing exercises), and the northwesternmost maneuver corridor which supports battalion-sized training exercises. This area also underlies one of MCB Camp Pendleton's most vital assets, its restricted airspace-specifically designated as Restricted Areas R-2503A and R-2503B. The type of training conducted by military personnel at MCB Camp Pendleton is critical to the development of individual and unit combat skills, and the essential teamwork abilities that are required for a Marine Air/Ground Task Force to be successful on the battlefield. Impacts to the Military Mission of the Base are addressed in detail in the Military Impacts Technical Report because MCB Camp Pendleton is a unique facility with highly specialized uses, public safety issues and national security issues attendant with a military installation.

Alternatives that encroach on active areas of the Base have implications on the four existing land use and management plans for MCB Camp Pendleton:

- Camp Pendleton Master Plan.
- Strategic Plan.
- Integrated Natural Resources Management Plan (INRMP).
- P-2020 Plan

These four plans are discussed in the Military Impacts Technical Report.

Two existing lease areas on Camp Pendleton in the SOCTIIP study are San Onofre State Beach and the agricultural lease area. These leases and their land uses are discussed in Sections 3.7 and 3.17.3.2, respectively.

3.7 SAN ONOFRE STATE BEACH

3.7.1 COMMUNITY CHARACTER AND FACILITIES AT SAN ONOFRE STATE BEACH

The community character of San Onofre State Beach (SOSB) is public outdoor recreation. The outdoor recreation opportunities available at SOSB include camping, hiking and surfing. SOSB is a state park in the northern part of San Diego County, as shown in Figure 3.7-1. The land is leased from MCB Camp Pendleton. The lower part of the Park comprises beach lands and bluffs extending inland on the San Diego/Orange County border. SOSB is operated and managed by the California Department of Parks and Recreation.

The SOSB was established as a state recreational area in 1971 by a 50 year lease between the State and the United States of America. The lease acknowledges that the federal government reserves the right to grant easements and right-of-way across the leased area, for facilities determined to be in the public interest.

As cited from the 1984 SOSB General Plan Resources Policy formation (page 19), the Declaration of Purpose for San Onofre State Beach is as follows, although acreages have been amended since 1984:

> "San Onofre State Beach was established to make available to the people the outstanding natural beach, bluffs, and related geological, ecological, and cultural features along the northern coast of San Diego County, including important uplands east of the Interstate 5 Freeway in the Valley of San Mateo Creek; and to provide for the enjoyment and use of these areas in ways that take full advantage of the recreational opportunities thus afforded, while protecting the natural and cultural values of the region.
>
> Located amidst dense urban development along the coast, the unit's relatively large size (more than 6.4 km (4 miles)) of ocean beach and 1,266 ha (3,127) ac has regional and statewide significance. Archaeological sites and threatened plant communities such as purple needlegrass tall prairie, red willow short woodland, arroyo willow tall closed scrub, and laurel sumac-sugar bush medium closed scrub are also prime resources of statewide significance."

SOSB features 5.6 km (3.5 mi) of sandy beaches with six access trails into the bluff above. The campgrounds are along Old Highway 101 adjacent to the sandstone bluffs and inland north of I-5. The park includes a marshy area where San Mateo Creek meets the shoreline and Trestles Beach, a well known California surfing site.

3.7.2 EXISTING LAND USES AT SAN ONOFRE STATE BEACH

As shown in Figure 3.7-1, SOSB is composed of four geographical subunits:

- Cristianitos subunit (Subunit 1).
- Trestles subunit (Subunit 2).

- Surf Beach subunit (Subunit 3).
- San Onofre Bluffs subunit (Subunit 4).

Cristianitos and Trestles subunits are the most northern subunits. They follow Cristianitos and San Mateo Creeks. Trestles subunit lies west of I-5, and includes the mouth of San Mateo Creek and the adjoining wetlands. Cristianitos subunit lies east of I-5 and includes parts of San Mateo and Cristianitos Creeks. The most prominent uses in this subunit are trails and the San Mateo Camp Ground which is about 2.8 km (1.5 miles) inland. This campground is open year round and has 157 camp sites.

The Surf Beach subunit, beginning just below the site of the former community of San Onofre, extends downcoast for a distance of about two km (1.2 miles). The San Onofre Nuclear Generating Station (SONGS) and other related facilities are further downcoast extending 1.4 km (0.9 mile). The Bluffs subunit begins at the south end of SONGS, and extends about 5.5 km (3.4 miles) downcoast. Partly because of the uniformity of the marine terrace in this area, and partly because of the routes selected for the transportation facilities (I-5 and railroad line), the width of the Surf Beach and Bluffs subunits is uniformly 183 to 244 meters (600 to 800 feet) throughout the entire length. This subunit has the San Onofre Bluffs Campgrounds which is open seasonally (spring, summer and fall).

There is an active Burlington Northern Santa Fe (BNSF) railroad right-of-way running more or less parallel to the I-5 and the beaches in San Onofre State Beach on the coastal side of I-5. The railroad right-of-way runs through the Cristianitos and Surf Beach subunits.

Existing land uses at SOSB, as described in the SOSB General Plan (1984 Revised), are:

<u>Subunit 1: Cristianitos</u>. Most of this 535 ha (1,321 ac) subunit is open space. At one time, a golf course was planned for this area, but does not appear to be actively planned at this time. The most prominent uses in the inland area are the San Mateo Campgrounds and the hiking trails extending inland and beachward from the campgrounds.

<u>Subunit 2: Trestles</u>. This 85 ha (209 ac) subunit has 1.82 km (6,000 feet) of shoreline used for surfing. This area also has wetland preserves and trails facilitating beach access.

<u>Subunit 3: Surf Beach</u>. This subunit is 34 ha (84 ac) with a 1.3 km (3,400 foot) long beach zoned for surfing use. The bluff top is used for parking for the SONGS.

<u>Subunit 4: Bluffs</u>. This 164 ha (405 ac) subunit has 5.6 km (3.5 miles) of beach used for swimming, sunbathing and other beach recreation uses. There are also day-use parking areas and overnight camping areas. The bluff tops and canyons between I-5 and the beach are open space.

Because the SOSB is leased through 2021 from the United States of America, it is not subject to land use regulation by the County or the state. However, the CCC reviews any development plans for consistency with the California Coastal Act and its reciprocal process under the Federal Coast Zone Management Act.

3.7.3 PLANNED LAND USES AT SAN ONOFRE STATE BEACH

According to the SOSB General Plan (1984), Subunit 1: Cristianitos is proposed to have an 18-hole golf course for the area directly east of the existing San Mateo Campground. Primitive camps along hiking trails utilizing the north part of this Subunit extending inland are also proposed with a possible secondary access from the Avenida Pico extension. No implementation plans for these proposed facilities are being pursued at this time.

3.8 CITY OF DANA POINT

3.8.1 COMMUNITY CHARACTER AND FACILITIES IN THE CITY OF DANA POINT

Dana Point is bordered by the Cities of Laguna Niguel and Laguna Beach to the north, San Juan Capistrano to the east, and San Clemente to the south. Incorporated in 1989, the City of Dana Point is named after Richard Henry Dana Jr. (1815-1882), a Harvard trained lawyer, seaman and author of the classic sea journal, *Two Years Before the Mast* (1840). The City of Dana Point is home to 35,110 residents and is characterized by nearly 11.3 km (seven mi) of prominent coastal bluffs and rolling hills along the Pacific Ocean. Most noteworthy of these bluffs is a unique promontory known as the Headlands which overlooks Dana Point Harbor, one of the most significant man-made alterations of the Orange County coastline.

Dana Point Harbor provides slips and mooring for over 2,500 boats along with over 50 specialty shops and restaurants. The Harbor attracts thousands of visitors annually for shopping, sportfishing, walking, bicycling, parasailing and a host of recreational activities. Dana Point Harbor is also considered the gateway to Doheny State Park, one of California's most popular beach facilities. The 25-ac (62-ac) State Park offers camping, picnicking, swimming, surfing, bicycling, tide pool exploration and more.

Dana Point provides over 1,400 hotel rooms ranging in accommodations and services from economy to five star hotels. Convention and meeting facilities are available at the larger resort facilities, and all provide access to Dana Point's unique coastal amenities.

3.8.2 EXISTING LAND USES IN THE CITY OF DANA POINT

The City of Dana Point has 1.5 km (5,000 ft) bordering I-5, as shown in Figure 3.8-1. Land uses in this part of the City include Low Medium Residential, Medium Residential and Community Residential.

3.8.3 PLANNED LAND USES IN THE CITY OF DANA POINT

There are currently no planned land uses in the City of Dana Point in the SOCTIIP study area. However, the Dana Point Harbor Master Development Plan is in the process of being updated. No plans were published that could provide detail on the nature of the update at the time of preparation of this technical report.

3.9 CITY OF RANCHO SANTA MARGARITA

3.9.1 COMMUNITY CHARACTER AND FACILITIES IN THE CITY OF RANCHO SANTA MARGARITA

Rancho Santa Margarita was planned to be an Urban Village, offering the best of two worlds: all the elements and advantages of a small city plus the quality of life of a small village. In 1996, the "Celebrating the Vision" Committee developed Rancho Santa Margarita's Vision Statement: "A Small City with the Soul of a Small Village." The City of Rancho Santa Margarita is located along the foothills of the Santa Ana Mountains. The City incorporated on January 1, 2000, and became the 33rd city in the County of Orange. The City has a population of 47,214.

The City of Rancho Santa Margarita includes the PCs of Rancho Santa Margarita, Rancho Santa Margarita Business Park, Rancho Santa Margarita Town Center, Rancho Trabuco Planned Community, Robinson Ranch, Trabuco Highlands and Dove Canyon PCs. Although the majority of the City is built out, it is in the process of refining and updating its General Plan. Existing and planned land uses in the City of Rancho Santa Margarita are shown on Figure 3.9-1 and discussed below. These discussions are based on the proposed revisions to the City's General Plan which is the most current data available for this City.

3.9.2 EXISTING LAND USES IN THE CITY OF RANCHO SANTA MARGARITA

The City of Rancho Santa Margarita is primarily built out. The City has 1916.5 ha (4,732 ac) of open space including the Chiquita Canyon Conservation area and O'Neill Regional Park which comprise a large part of the City. The City also has SR 241 running through it and terminating on the south end at Oso Parkway.

3.9.3 PLANNED LAND USES IN THE CITY OF RANCHO SANTA MARGARITA

The City of Rancho Santa Margarita does not have any unbuilt planned land uses in the study area. The City's planned uses occur in the northern and northeast parts of the City in the Foothill/Trabuco area of Orange County.

3.10 CITY OF MISSION VIEJO

3.10.1 COMMUNITY CHARACTER AND FACILITIES IN THE CITY OF MISSION VIEJO

The land on which Mission Viejo is developed was part of the original 21, 060-ha (52,000-ac) Rancho Mission Viejo. The chain of title to the land dates back to July 27, 1769, when a Spaniard named Gaspar de Portola led an expeditionary force from Mexico across the southern border of the ranch and claimed the land for Spain. In 1907, an Irish cattleman named Richard O'Neill acquired an undivided interest in Rancho El Trabuco and Rancho Mission Viejo. When a 1963 study indicated that urbanization was spreading south from the Los Angeles area, his grandchildren, Richard O'Neill and Alice O'Neill Avery, decided to sell 4,050-ha (10,000-ac).

Donald Bren, Philip J. Reilly and James Toepfer purchased the property and organized the Mission Viejo Company.

In 1965, a master plan for Mission Viejo was approved by the Orange County Board of Supervisors. One year later, families stood in line to pay $21,000 for homes on this former cattle range. In April 1966, these pioneering residents moved into the new neighborhoods near the intersection of La Paz Road and Chrisanta Drive.

The City of Mission Viejo has approximately 7.2 linear km (4.5 mi) encompassing I-5, as shown in Figure 3.10-1. I-5 borders the City on the west side along with the boundaries of the Cities of Laguna Hills and Laguna Niguel which fall on the west side of I-5. The City of Mission Viejo is one of the larger cities in south Orange County. Unincorporated Orange County and the City of Rancho Santa Margarita form its eastern border and the City of Lake Forest forms its northwestern border.

3.10.2 EXISTING LAND USES IN THE CITY OF MISSION VIEJO

Commercial, industrial, office and open space uses are adjacent to I-5 in the City of Mission Viejo. Residential uses also exist along I-5, north of Crown Valley Parkway. Other noted land uses along I-5 include Mission Viejo High School and Mission Viejo Country Club.

The southern part of the City includes major commercial and employment generating uses. These include Mission Viejo Mall, auto dealerships on I-5 and office developments along Crown Valley Parkway; substantial community facilities such as the Saddleback Community College and Mission Hospital Regional Medical Center; and a range of housing types and densities. This area represents the major urban activity center of the City and is designated as a Specific Plan Study Area. Figure 3.10-2 and the Land Use Policy Map of the General Plan illustrate the extent of the Specific Plan Study Area.

3.10.3 PLANNED LAND USES IN THE CITY OF MISSION VIEJO

There are no planned land uses in the City of Mission Viejo in the SOCTIIP study area.

3.11 CITY OF LAGUNA NIGUEL

3.11.1 COMMUNITY CHARACTER AND FACILITIES IN THE CITY OF LAGUNA NIGUEL

The name "Laguna Niguel" is derived from the Spanish word "Laguna" which means lagoon and the word "Nigueli" which was the name of a Juaneno Indian village once located on Aliso Creek. In 1782, California became Mexican territory and many rancheros were formed in southern California, including Rancho Niguel. During this period, Rancho Niguel was primarily used as a sheep ranch. In 1848, the Guadalupe Hidalgo treaty was signed, making California a territory of the United States. Rancho Niguel changed hands several times after the signing of this treaty, with the most recognized owners being the Moulton family. The Moultons named their land the Moulton Niguel Ranch.

The genesis of Laguna Niguel was the establishment of the Laguna Niguel Corporation in 1959 by Cabot, Cabot and Forbes, making it one of the first master planned communities in California. The firm of Victor Gruen and Associates was retained to develop a detailed community plan for the approximately 7,100 ac site. Land sales started in 1961 in Monarch Bay and the Laguna Terrace subdivisions. Avco Community Developer acquired the Laguna Niguel Plan in 1971 and initiated development as set forth in the original master plan.

On November 7, 1989, 89 percent of the voters in Laguna Niguel voted in favor of incorporation and on December 1, 1989, Laguna Niguel became the 29th city in the County of Orange. Laguna Niguel is a 357,412 square km (13.8 square mi) PC in South Orange County and is surrounded by the Cities of Mission Viejo, San Juan Capistrano, Dana Point, Laguna Beach and Laguna Hills, as shown on Figure 3.11-1.

Laguna Niguel's proximity to the coast provides an ideal climate which allows for year round enjoyment of its beautiful parks and nearby attractions. Over one-third of Laguna Niguel is designated open space and this is one of the key features that defines the character and urban form of the City. Commercial, business and industrial land uses comprise eight percent of the total land area of the City. Neighborhood professional and retail centers provide a wide variety of goods and services.

3.11.2 EXISTING LAND USES IN THE CITY OF LAGUNA NIGUEL

Approximately 3,124 meters (10,250 feet) of the City border lie immediately west of I-5 from approximately 0.8 km (0.5 mile) north of Crown Valley Parkway to approximately about 0.8 km (0.5 mile) south of Paseo de Colinas. Land uses in the part of the City bordering I-5 include Automotive Commercial (CA), Hospitality Commercial (CH), General Commercial/Light Industrial (C/LI) and Public Institutional (P/I for the SDG&E substation). Camino Capistrano, the BNSF railroad line and Oso Creek parallel I-5. The southernmost section of the City bordering I-5 is at the confluence of the San Joaquin Hills Transportation Corridor (SJHTC) and I-5.

The City has identified the triangular area generally defined by the I-5 frontage, the area surrounding SJHTC and the southern Laguna Hills boundary as the Gateway Specific Plan area. The strip along I-5 extending west is defined as Community Profile Area 4 as well as Opportunity Area 4, the Camino Capistrano/Cabot Road Business Area. According to the General Plan, this area is projected to contain 108,765 square meters (3,323,631 square feet) of commercial uses and an employment projection of 4,028 persons. Finally, part of the Oso Creek Trail shown on the City's Trails Map runs along I-5 along Oso Creek.

3.11.3 PLANNED LAND USES IN THE CITY OF LAGUNA NIGUEL

There are no planned land uses in the City of Laguna Niguel in the SOCTIIP study area.

3.12 CITY OF LAGUNA WOODS

3.12.1 COMMUNITY CHARACTER AND FACILITIES IN THE CITY OF LAGUNA WOODS

The City of Laguna Woods is in the Saddleback Valley area of south Orange County, ten miles from the Pacific Ocean. It is home to the senior citizen gated community of Leisure World. Laguna Woods was incorporated as Orange County's 32nd city in 1999. The City of Laguna Woods is the first city in California consisting primarily of communities for senior citizens. Laguna Woods has more than 18,000 senior citizens.

3.12.2 EXISTING LAND USES IN THE CITY OF LAGUNA WOODS

The City of Laguna Woods has a 1.6 km (1 mile) section on its northeast side in the SOCTIIP study area that is adjacent to a very narrow undevelopable strip of the City of Laguna Hills which borders I-5 consisting of freeway slopes and Avenida de la Carlota, as shown in Figures 3.12-1 and 3.13-1. The area is designated Suburban Residential and is part of the Leisure World Community.

3.12.3 PLANNED LAND USES IN THE CITY OF LAGUNA WOODS

There are no planned land uses in the City of Laguna Woods in the SOCTIIP study area.

3.13 CITY OF LAGUNA HILLS

3.13.1 COMMUNITY CHARACTER AND FACILITIES IN THE CITY OF LAGUNA HILLS

Laguna Hills is built on one of the major land grants developed during the Rancho Era. Following Mexico's independence from Spain in 1821, those who had served in the government or who had friends in authority were given vast lands for cattle grazing. Rancho Lomas de Santiago, Rancho San Joaquin and Rancho Niguel covered much of the west part of the Saddleback Valley. Don Juan Avila was granted the 5,265 ha (13,000 ac) Rancho Niguel on which Laguna Hills is located.

In 1874, Lewis Moulton purchased Rancho Niguel from Don Juan Avila and increased the original grant to 8,910 ha (22,000 ac). Moulton and his partner, Jean Piedra Daguerre, used the ranch to raise sheep and cattle. The Moulton Ranch was eventually subdivided in the early 1960s, part of which is now Laguna Hills.

Incorporation efforts began in 1987 and on March 5, 1991, the goal of incorporation was finally achieved with 86 percent of the residents voting in favor of forming the City of Laguna Hills. On December 20, 1991, Laguna Hills officially became a City. On November 14, 1995, the City Council approved annexation of the North Laguna Hills area, which became part of the incorporated City on July 1, 1996. On September 18, 2000, with the overwhelming support from the 1,800 residents, the Westside Annexation Area officially became part of the incorporated

City. The annexation added 60.3 ha (149 ac) of residential use, which includes the Aliso Viejo Community Association's Sheep Hills Park.

The City of Laguna Hills is west of I-5 from Lake Forest Drive to about 293 m (960 ft) past La Paz Road. The City boundary then jogs west and extends down to the SJHTC. The City of Mission Viejo boundary extends across I-5 forming the eastern boundary and the City of Laguna Niguel forms the remainder of the eastern boundary on I-5. The Cities of Aliso Viejo and Laguna Woods form the western boundary of Laguna Hills in the northern section, while the western boundary in the southern part of the City of Laguna Hills is formed by the City of Laguna Niguel.

3.13.2 EXISTING LAND USES IN THE CITY OF LAGUNA HILLS

As shown in Figure 3.13-1, on the 5,779 m (18,960 ft) long section bordering I-5 a variety of existing land uses occur including Freeway Commercial (FC), Low-Density Residential (LDR), Open Space Drainage Facilities (OS-2), Village Commercial (VC), Community Commercial (CC) and Mixed Use (MU).

3.13.3 PLANNED LAND USES IN THE CITY OF LAGUNA HILLS

There are no planned land uses in the City of Laguna Hills in the SOCTIIP study area.

3.14 CITY OF LAKE FOREST

3.14.1 COMMUNITY CHARACTER AND FACILITIES IN THE CITY OF LAKE FOREST

Although Lake Forest is a new City, having incorporated on December 20, 1991, the Lake Forest area has a long history. Starting out as an agricultural area like most of Orange County region, Lake Forest (at the time called "El Toro") began to grow rapidly following World War II. Residential, commercial and industrial development began to replace the ac of citrus and other agricultural products. A major reason for the change was the growing importance of MCAS El Toro. The growth of this Base increased the need for new homes and support services. Steadily, the Lake Forest area was built into today's City. The City of Lake Forest is immediately south of the City of Irvine and has 4.4 km (2.7 miles) of its border along the east side of I-5. Figure 3.14-1 shows the location of land uses in the City of Lake Forest in the SOCTIIP study area.

Lake Forest has been master planned to help ensure that it will be an ideal place to live and conducive to business growth. Consequently, the amenities for encouraging residential and business growth are highly valued and carefully nurtured by those groups and individuals whose role is to help the City grow. Seeded in history, nestled within rolling hills, lakes and stands of eucalyptus, and freeway close, Lake Forest is a community that is responsive to business and aggressive in its desire for attracting and retaining an excellent business community.

3.14.2 EXISTING LAND USES IN THE CITY OF LAKE FOREST

The City of Lake Forest LUE designates the area along I-5 as recreation/open space, residential and community facility uses.

3.14.3 PLANNED LAND USES IN THE CITY OF LAKE FOREST

There are no planned land uses in the City of Lake Forest in the SOCTIIP study area.

3.15 CITY OF IRVINE

3.15.1 COMMUNITY CHARACTER AND FACILITIES IN THE CITY OF IRVINE

The City of Irvine was incorporated on December 28, 1971 and is one of the nation's largest planned urban communities, encompassing over 12,182 ha (47 square miles). The City's current population is over 143,000. The Mission Statement for the City of Irvine is:

> "Our goal is to create and maintain a community where people can live, work and play in an environment that is safe, vibrant and aesthetically pleasing. This community promotes the well-being of all people." (http://www.cityofirvine.org/about/mission_statement.asp (July 2001).

The City of Irvine has 2.2 km (1.4 miles) of its city bordering I-5 on both sides of the freeway. The confluence of I-5 and I-405 occurs within the borders of Irvine and forms the northern boundary of the SOCTIIP study area.

3.15.2 EXISTING LAND USES IN THE CITY OF IRVINE

As shown in Figure 3.15-1, this area in the City of Irvine includes retail, open space, agricultural and highway commercial uses.

3.15.3 PLANNED LAND USES IN THE CITY OF IRVINE

With the passage of Measure W in March 2002, the Orange County "Great Park" in the City of Irvine was established along with a variety of land uses which include parks, museums, open space and tourist uses. When the Department of the Navy sells the land, the subsequent owner may change use. The proposed project includes annexation, General Plan and Zoning Amendments to accommodate a comprehensive land use plan occupying 35.9 ha (3,856,500 sf) including residential (225 dus), educational, cultural and institutional, transportation facilities, research and development, retail, office, auto center, agricultural, a variety of open space and road uses.

3.16 ORANGE COUNTY TRANSPORTATION AUTHORITY MASTER PLAN OF ARTERIAL HIGHWAYS

The OCTA oversees the County's circulation plan, known as the MPAH. The MPAH is reflected in the local General Plans of the individual cities and the County of Orange. Each jurisdiction is responsible for implementing the MPAH part of its General Plan Circulation Element within it's jurisdictional boundary. There are major MPAH improvements in the SOCTIIP study area scheduled for implementation. These improvements are described in detail in Section 10.0 (Cumulative Impacts).

3.17 AGRICULTURAL RESOURCES AND PRESERVES

3.17.1 OVERVIEW OF AGRICULTURAL RESOURCES AND PRESERVES

For ease of discussion, the term "agricultural resources" refers to Natural Resources Conservation Service rated agricultural lands (prime, unique or statewide importance). Agricultural resources and activities are located in two main areas in the SOCTIIP study area: RMV and MCB Camp Pendleton adjacent to SOSB. San Juan Capistrano was historically an agricultural community. Although much of the land used for agriculture in the City has been developed in urban uses, there are a few remaining private parcels which continue in agricultural production. Agricultural areas in the SOCTIIP study area are shown on Figures 3.17-1 and 3.17-2.

Approximately 29 ha (70 ac) of land in San Juan Capistrano are designated in the General Plan for Agri-Business. This land use designation provides for the production and sale of agricultural crops, including but not limited to row crops, orchards, vineyards, nurseries, feed and livestock production, and rangeland. Agricultural operations in the City occur on parcels as small as 0.4 ha (one ac), to parcels over 61 ha (150 ac) in size. The City currently owns, and through contracts with the private sector, farms 11.3 ha (28 ac) of land designated as Agri-Business. However, almost all the areas in the City in the SOCTIIP study area have been planned for development or requests for changes in land use and zoning designations have been submitted.

The following discussion details the various organizations and policies involved with agricultural conservation efforts and how they would affect these resources in the SOCTIIP study area.

The preservation of agricultural resources and activities has been an explicit goal of the California Department of Conservation (CDC) and the United States Department of Agriculture (USDA). As growth and urbanization continue, agricultural areas are converted, resulting in an overall loss in arable land to support agricultural activities, as well as valuable topsoil. There are two separate, but related, issues concerning agricultural resources: agricultural activities and soil resources that support those activities. Agricultural activities have a broad definition and include activities such as ranching with space being the primary issue. Agricultural soils are a limited non-renewable resource that are usually confined to a particular location. However, not all agricultural activities occur on soils classified as appropriate for agriculture and not all soils rated as excellent farming soils are used for crop production. Generally, policies implemented to preserve agriculture are aimed at either protection of the space or protection of the soil.

3.17.2 FARMLAND AND AGRICULTURAL RESOURCES PROTECTION

Farmland and agricultural resources require specific environmental factors for valuable production, the most important of which is soil. Soil capabilities are assessed using criteria established by various agencies for the interest of soil protection and reducing loss of agricultural resources. The state and federal governments have roles in agricultural resources protection. The USDA Natural Resources Conservation Service (NRCS) has jurisdiction over federal agencies sponsoring a project that could contribute to the conversion of agricultural land to nonagricultural uses. The CDC has jurisdiction over farmlands with specific designations under their Farmland Mapping and Monitoring Program as well as those connected with agricultural preserve agreements (Williamson Act Contracts). Other concerned agencies support these programs and policies, and some local jurisdictions in the SOCTIIP study area have created their own policies and programs to implement in addition to those issued by the state and federal government. The policies and agencies that govern the management and conversion of agricultural land in the SOCTIIP study area are discussed in detail in the following Sections.

3.17.2.1 Farmland Protection Policy Act

Congress enacted the Farmland Protection Policy Act (FPPA) to "…minimize the extent to which Federal programs contribute to the unnecessary and irreversible conversion of farmland to nonagricultural uses…" (7 U.S.C. 4201(b), et seq.).

The NRCS rates the agricultural suitability of soils in terms of both the Land Use Compatibility Classification System and the Storie Index. The Classification System shows the suitability of soils for most types of field crops according to their limitations, risk of damage when used and the way they respond to treatment. The Storie Index expresses the suitability of soils for general intensive farming, based on characteristics of the soil including depth, texture of the surface soil, slope, drainage, salinity, alkalinity, general nutrient level of the soil and erosion. Based on the Storie Index, soils can be classified from Grade 1, considered excellent and very well suited to general intensive farming, to Grade 6, soils and miscellaneous areas not suited to farming. Based on the Storie Index, the NRCS has determined that the soils in the SOCTIIP study area are Grade 4 with an index rating of 20 to 39. Grade 4 soils are poorly suited for general intensive farming (Farmland Information Library: http://www.farmlandinfo.org).

The NRCS initiated a policy urging agencies to look at alternatives to activities that lead to the conversion of prime farmland and advocating consideration of farmland conversion in Environmental Impact Statements. The NRCS further directed each agency in the USDA to review and revise policies and rules that cause or encourage farmland conversion.

The FPPA is intended to minimize the extent to which federal activities contribute to the conversion of agricultural land to nonagricultural uses. It also seeks to ensure that federal policies are administered in a manner that will be compatible with state, local and private policies that protect farmland.

The FPPA requires federal agencies to examine the impacts of their programs before they approve any activity that would convert farmland. Agencies have the option of determining whether a site contains farmland, and, therefore, falls under the act, without input from NRCS. To rate the relative impact of projects on sites subject to the FPPA, federal agencies prepare a Farmland Conversion Impact Rating Form (AD 1006) or CPA 106 form for corridor projects. The rating form is based on a Land Evaluation and Site Assessment (LESA) System. The LESA is a numerical system that measures the quality of farmland. LESA systems have two components. The Land Evaluation element rates soil quality. The Site Assessment component measures other factors that affect a farm's viability including, but not limited to, proximity to water and sewer lines and the size of the parcel. In general, the higher the LESA score, the more appropriate the site is for protection.

Under the FPPA, federal agencies sponsoring a project subject to the law complete a Site Assessment. The NRCS is responsible for the Land Evaluation component. Sites receiving a combined rating of less than 160 do not require further evaluation. Alternatives should be proposed for sites with a rating of greater than 160 points. However, the FPPA has no requirement for federal agencies to alter projects to avoid or minimize farmland conversion.

3.17.2.2 California Department of Conservation

Farmland Mapping and Monitoring Program

The CDC initiated a Farmland Mapping and Monitoring Program in 1980 to supplement the efforts of the NRCS. For the purpose of inventorying land, categorical definitions of important farmlands were developed by the NRCS. These definitions gave recognition to the land's suitability for agricultural production. Seven categories of land use are identified in the Farmland Mapping and Monitoring Program. These categories, in order of agricultural importance, are Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance, Grazing Land, Urban and Built-Up Land, and Other Land. Figure 3.17.1 provides the Farmland Mapping for the SOCTIIP study area.

Williamson Act

The California Land Conservation Act of 1965, also known as the Williamson Act (Government Code Section 51200 et seq.), defines prime agricultural soils as any one of the following soils which have capability groupings of Class I or II: soils which have Storie Index ratings of 80 to 100; land supporting livestock equivalent to a minimum of one animal unit per 0.405 ha (one ac); or land planted with fruit or nut bearing vegetation producing not less than $81 per ha ($200 per ac) annually. The Williamson Act was adopted as an incentives program, encouraging the preservation of the state's agricultural lands. As a means to implement the Act, a land contract is established, whereby a county Board of Supervisors or city council stabilizes the taxes on qualifying lands in return for an owner's guarantee to keep the land in agricultural preserve status for a 10-year period. Each year, on its anniversary date, the contract is automatically renewed unless a notice of non-renewal is filed.

Timberland Productivity Act

The California Timberland Productivity Act of 1982 (Government Code Section 51100 et seq.) established "Timber Protection Zones" (TPZs) for the purpose of discouraging premature conversion of timberland to other uses. TPZs are rolling ten-year contracts providing preferential tax assessments to qualified timberland. There are no established TPZs in the SOCTIIP study area.

3.17.2.3 Federal Highway Administration

The Federal Highway Administration (FHWA) will only approve a federally funded highway project that demonstrates evidence that the FPPA has been followed in the NEPA document or in the project file where no NEPA document is required.

3.17.2.4 California Department of Transportation

The California Department of Transportation (Caltrans) provides guidelines for assessing a project's influence on agricultural resources including requiring that any impact analysis include a discussion of agricultural resources and the character of the agriculture in the study area. The analysis should also include the amount of land under cultivation, the number of ha (ac) under Williamson Act Contracts, important crops, value of agriculture production and a description of trends in farmland conversion as prescribed in the Caltrans Community Impact Assessment Guidelines.

Caltrans also acts for FHWA with NRCS to complete the CPA 106 process.

3.17.2.5 California Coastal Act Agricultural Policies

Pursuant to Article 5 of the California Coastal Act of 1976 (Public Resources Code Section 30000 et seq.) (CCA), prime agricultural land is to be maintained in agricultural production. Conflicts between urban land uses and agricultural lands, as stated in Section 30241 ((a) – (f)) of the CCA (Public Resource Code), are to be minimized as follows:

(a) By establishing stable boundaries separating urban and rural areas, including, where necessary, clearly defined buffer areas to minimize conflicts between agricultural and urban land uses.

(b) By limiting conversions of agricultural lands around the periphery of urban areas to the lands where the viability of existing agricultural use is already severely limited by conflicts with urban uses or where the conversion of the lands would complete a logical and viable neighborhood and contribute to the establishment of a stable limit to urban development.

(c) By permitting the conversion of agricultural land surrounded by urban uses where the conversion of the land would be consistent with Section 30250.

(d) By developing available lands not suited for agriculture prior to the conversion of agricultural lands.

(e) By assuring that public service and facility expansions and nonagricultural development do not impair agricultural viability, either through increased assessment costs or degraded air and water quality.

(f) By assuring that all divisions of prime agricultural lands, except those conversions approved pursuant to subdivision (b), and all development adjacent to prime agricultural lands shall not diminish the productivity of such prime agricultural lands.

The maximum amount of prime agricultural land is to be maintained to assure agricultural economy of the area. By minimizing the conflicts between agricultural land and urban uses this objective should be met.

3.17.2.6 Local Plans and Policies – General Plan and Zoning Issues

The two areas that have existing agricultural resources in the study area are RMV and MCB Camp Pendleton. RMV is in the County of Orange jurisdiction and the MCB Camp Pendleton is under its own jurisdiction as set forth by the Department of the Navy (DON) and its land use management policies and plans for MCB Camp Pendleton.

Rancho Mission Viejo

As discussed previously, RMV is designated Open Space (5) in the County of Orange General Plan LUE (2000, Map III-1) and zoned General Agriculture (A1) in the County zoning maps. The County's General Plan Resources Element (2000, pp. VI-12) states the following about agricultural preserves:

> "Two major landowners, the Irvine Company and Rancho Mission Viejo, have historically held the majority of property within agricultural preserves under the Williamson Act. In 1987, the Irvine Company filed notice of non-renewal on all of their remaining properties (approximately 19,000 ac) from their contract. Withdrawal of the Irvine Company properties from the agricultural preserve is a ten-year process which will be completed by 1999. Rancho Mission Viejo currently holds approximately 22,000 ac in agricultural preserves."

As of August 2001, none of the Irvine Company properties were in agricultural preserves. All indications are that RMV will not renew the existing Williamson Act agreements on the property in order to develop it in the future, given the economic and growth projections for south Orange County. The decision to develop agricultural land is driven by economic factors that must be weighed by the land owner and/or developer. Notwithstanding the financial incentives of Williamson Act agreements, there exists no policy in the County of Orange General Plan or zoning that would discourage the conversion of the land from agricultural uses to more intense urban uses. The existing LUE designations and zoning for the RMV are relatively permissive on allowable uses, but the general character of the uses allowed tend to be low intensity uses. The

Open Space designation and the A1 zoning do not contain specific policies for preserving agricultural uses. Additionally, the Resources Element relies heavily on voluntary participation in Agricultural Preserve agreements as they are called pursuant to the Williamson Act. Finally, the County of Orange General Plan Resources Element (pp. VI-12) states that growth projections indicate more urbanization resulting in more conversion of agricultural uses in the following statement:

> "Growth projections through 2020 indicate the continued urbanization of the County. This urban development will continue to convert agricultural acreage to more intensive land uses."

MCB Camp Pendleton

MCB Camp Pendleton is overseen by the DON which regulates and manages resources on the Base based on the Camp Pendleton Master Plan (1996) and the Final INRMP. The Master Plan is more of a long term planning document which inventories and generally describes existing uses and planned uses for the Base. The INRMP contains detailed accounts of natural resources on the Base and the Base's policies to use and preserve these natural resources. The INRMP was adopted in October 2001.

3.17.3 FARMLAND AND AGRICULTURAL RESOURCES IN THE SOCTIIP STUDY AREA

Agricultural resources in the SOCTIIP study area were determined to exist only in unincorporated County of Orange, RMV, City of San Juan Capistrano and MCB Camp Pendleton. The resources in these areas are described in detail below.

3.17.3.1 Rancho Mission Viejo

Rated Farmland

As shown on Figure 3.17-1, RMV has several areas that have agricultural resources that are rated on the NRCS maps. These areas consist of 133 ha (328 ac) of Prime Farmland, 355 ha (876 ac) of Unique Farmland, and 44 ha (110 ac) of Farmland of Statewide Importance. A large part of these areas are currently in agricultural production.

Agricultural Outleases

Although RMV is an active cattle ranch, there is also a diverse range of agricultural activities on the ranch, including barley farming, citrus orchards, row crops and commercial nurseries. The RMV landholdings, encompassing approximately 11,667 ha (28,830 ac), are a prominent agricultural resource in the SOCTIIP study area. The agricultural uses at this ranch include dry barley farming and citrus. There are approximately 104 ha (256 ac) of citrus orchards on the ranch, of which 66 ha (163 ac) are near Oda Nursery. RMV also leases land for various uses. In the SOCTIIP study area, there are three leaseholds which house nurseries. These are the DM Color Express (east and west), True Green (Miramar) and Colorspot Nursery. These lease areas

are nurseries for landscape plants or trees, not crops. These lease areas were shown earlier on Figures 3.3-3 and 3.3-4. There are also private orchards on RMV located east of Colorspot Nursery and adjacent to the CWRP in Chiquita Canyon.

Existing Agricultural Preserves (Williamson Act Preserves)

In 1969, an agricultural preserve boundary for RMV was established which encompassed 14,819 ha (36,619 ac). Approximately 3,038 ha (7,507 ac) were identified as exceptions to the land conservation agreement areas, leaving 11,781 ha (29,112 ac) under the original contract. Since that time 53 ha (131 ac) were added to O'Neill Regional Park and approximately 7,053 ha (17,428 ac) have been subject to notice of non-renewal and/or petition for partial cancellation. The SOCTIIP study area traverses property that is currently in preserve status including six parcels for which notices of non-renewal have been filed. These parcels are proposed to be withdrawn between December 1997 and 2005. The locations of agricultural lands with preserve status in the SOCTIIP study area are shown on Figure 3.17-2.

3.17.3.2 MCB Camp Pendleton

Rated Farmland

Prime farmland is protected by guidelines and standards described in the Environmental Protection Manual, MCO P11000.8B. The soil types on Base that qualify, as managed by the Environmental Security Department, comprise roughly 5,468 ha (13,500 ac) of the Base, of which approximately 607 ha (1,500 ac) are now being farmed. Of those, approximately 243 ha (600 ac) are shown on Figure 3.17-1 which are the agricultural uses on the Base in the SOCTIIP study area.

Agricultural Outleases

The Base leases approximately 972 ha (2,400 ac) for intermittent livestock grazing and 528 ha (1,300 ac) for row crop production. General oversight of MCB Camp Pendleton's agricultural leases and land use management associated with the agricultural lease areas is a function of the Environmental Security Department. San Clemente Farms (Deardorff-Jackson-lessee) is a 240 ha (592 ac) outleased area in the SOCTIIP study area on land administered by the DON and fully within the boundaries of MCB Camp Pendleton. The current lease is due to expire in December 2003. There is no indication from MCB Camp Pendleton that agricultural uses in this area will cease although the lessee could change. Approximately 220 ha (546 ac) of this area is used for farming activities with the remainder used for administrative or operational uses. The outleased area is shown on Figure 3.17-1. It is the only area in San Diego County in the SOCTIIP study area identified as Prime Farmland and Farmland of Statewide Importance on the State's map. The outlease area is primarily used for the production of truck crops (tomatoes, potatoes, cucumbers, etc.). The approximately 16 ha (40 acre) parcel of this agricultural operation is currently bisected by Cristianitos Road and is not in agricultural production.

Existing Agricultural Preserves (Williamson Act Preserves)

Lands on MCB Camp Pendleton are not subject to agricultural preserves under the Williamson Act because they are federally owned.

3.18 COASTAL ZONE

An area in the southern part of the SOCTIIP study area is in the Coastal Zone. Development in the Coastal Zone would require application for a Coastal Development Permit (CDP). CCC review would be pursuant to the CDP and the federal consistency processes described below.

3.18.1 CALIFORNIA COASTAL PROCESS

The CCA of 1976 (Public Resources Code Section 3000 et seq.) was enacted in 1976 to provide for the long term protection of California's coastline for the benefit of current and future generations. The Coastal Zone, as defined and depicted, is a 1,769 km (1,100 mile) long stretch from Oregon to the border of Mexico reaching 4.8 km (three miles) out to sea to a varying boundary of a few blocks to eight km (five miles) inland. The Coastal Zone establishes a jurisdictional boundary for the CCC. The Coastal Zone boundary for the SOCTIIP study area is shown on Figure 3.18-1.

The CCC is the agency responsible for planning and regulation of land and water uses in the Coastal Zone, consistent with CCA policies. These powers apply to private and public activities or development such as all division of land, change in intensity of use of state waters and transportation projects. Such activities are authorized through the issuance of a CDP. Either the CCC or a local government that has a commission-certified Local Coastal Program (LCP) can issue CDPs. The CCC also hears appeals from local government CDP decisions and reviews and approves any amendments to previously certified LCPs.

3.18.2 LOCAL COASTAL PROGRAMS

LCPs are submitted to the CCC for review and certification. An important aspect of LCP certification is the transfer of coastal permitting authority over most new development from the CCC to the local government. However, the CCC is required to review each certified LCP at least once every five years. LCPs implement the basic planning and management policies found in Chapter 3 of the CCA (Public Resources Code Section 30200 et seq.). These policies reflect the basic stated goals for the Coastal Zone, which are:

(a) Protect, maintain, and where feasible, enhance and restore the overall quality of the coastal zone environment and its natural and artificial resources.

(b) Assure orderly, balanced utilization and conservation of coastal zone resources taking into account the social and economic needs of the people of the state.

(c) Maximize public access to and along the coast and maximize public recreational opportunities in the coastal zone consistent with sound resources conservation principles and constitutionally protected rights of private property owners.

(d) Assure priority for coastal-dependent and coastal-related development over other development on the coast.

(e) Encourage state and local initiatives and cooperation in preparing procedures to implement coordinated planning and development for mutually beneficial uses, including educational uses, in the coastal zone. (Public Resources Code Section 30001.5 ((a) – (e)).

The CCC's concerns involve environmentally sensitive habitat areas, alterations of rivers or streams, fish and wildlife resources, wetland areas, archaeological or paleontological resources, and visual qualities. These concerns are discussed in detail in the Biological Resources, Cultural Resources, Paleontological Resources and Visual Impact Assessment Technical Reports. At present, no certified LCP is in place that would provide guidance for CCA compliance for the SOCTIIP alternatives that are in the Coastal Zone. However, should a CDP and Federal consistency finding be required, they would address this matter.

3.18.3 FEDERAL COASTAL PROCESS

The CCC, as designated by the federal government, is the only State agency which can conduct a consistency review of federal projects and activities within the Coastal Zone. Also, all new development proposed on tidal and submerged lands, and other public trust lands must receive a permit from the CCC.

Federal Coastal Zone management is implemented through the CCC's Federal Consistency Unit pursuant to Section 1456 (Section 307) of the Federal Coastal Zone Management Act (CZMA) of 1972 (16 U.S.C Section 1451 et seq.). The CZMA created a federal and state partnership for coastal resource management through the federal consistency procedures of the CZMA implemented through coastal management programs. In 1978, the federal government certified the California Coastal Management Program (CCMP), which was developed pursuant to the CZMA.

Federal development projects, permits, licenses and subsidies to states and local governments require consistency with the state-certified the CCMP. The process established for compliance with federal coastal law for federal activities and development projects is called a Consistency Determination and for federal permits, licenses and federal support to state and local agencies is called a Consistency Certification.

3.19 RECREATION

The SOCTIIP study area includes a number of public and private recreation resources. These are described in detail in the Recreation Resources Technical Report.

3.20 WILD AND SCENIC RIVERS

The Wild and Scenic Rivers Act (16 U.S.C. 1271 et seq.) requires that certain selected rivers of the Nation, with their immediate environments which possess remarkable scenic, recreational, geological, fish and wildlife, historic, cultural or other similar values, be preserved in free

flowing condition and that they and their immediate environments be protected. Once a river has met one or more of the above criteria, it is then classified as one of the following:

1) "*Wild river areas* – Those rivers or sections of rivers that are free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted. These represent vestiges of primitive America.
2) *Scenic river areas* – Those rivers or sections of rivers that are free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads.
3) *Recreational river areas* – Those rivers or sections of rivers that are readily accessible by road or railroad, that may have some development along their shorelines, and that may have undergone some impoundment or diversion in the past." (16 U.S.C. Section 1273 (b)).

Foreseeable adverse effects of a proposed project area on a wild, scenic or recreational river require that FHWA's guidelines be met. With this understanding, the Wild and Scenic Rivers Act and the National Inventory of Wild and Scenic Rivers (http://www.nps.gov/rivers/) were reviewed to determine effects on rivers in the SOCTIIP study area. Based on review of these documents, it was determined that the SOCTIIP study area does not contain wild, scenic, or recreational rivers as addressed in the Wild and Scenic Rivers Act or listed in the National Inventory of Wild and Scenic Rivers.

3.21 MITIGATION AREAS FOR PREVIOUS PROJECTS

Areas that are associated with mitigation for previous projects pursuant to 404 permits (ACOE) and upland habitat impacts pursuant to the federal ESA in the SOCTIIP study area were identified in consultation with USFWS and the ACOE. Table 3.21-1 lists the title of the project, the mitigation type and hectares/acres of mitigation for the project. Figure 3.21-1 shows the location of these mitigation sites.

3.22 OTHER LAND USE AND TRANSPORTATION PLANS

3.22.1 COUNTY OF ORANGE CONGESTION MANAGEMENT PROGRAM

The gas tax increase (Proposition 111 or Measure M) in June 1990 included a requirement that urbanized areas in the State adopt a Congestion Management Program (CMP). The goals of the CMP are to reduce traffic congestion and provide a mechanism for coordinating land use development and transportation improvement decisions. For a jurisdiction to be eligible for Proposition 111 funds, no intersection on an adopted CMP highway system may be allowed to deteriorate to a level of service (LOS) worse than E or the existing (1991) LOS if worse than LOS E without mitigation being prescribed in an adopted deficiency plan.

The Orange County CMP, adopted in 1991 and administered by Orange County Transportation Authority (OCTA), established the freeway system and major arterial highways as the Orange County CMP Highway System. The Orange County CMP established a process for use by each jurisdiction to analyze the impacts of proposed development on the CMP Highway System. Each jurisdiction is required to analyze development projects to determine whether project generated traffic will cause CMP intersections/links to exceed their LOS standards and to assess

TABLE 3.21-1
MITIGATION AREAS IN THE SOCTIIP STUDY AREA

	Name of Site or Project	Description of Location	Type	Area	Source
1	Tesoro High School (onsite)	Immediately east of Tesoro High School and south of Oso Parkway.	W	0.55 ha/1.35 ac	1, 2
2	Tesoro High School (offsite)	On RMV across from Santa Margarita Water District parcel.	W	3.09 ha/7.65 ac	1, 2, 3
3	Ladera/RMV	Northeast and adjacent to Tesoro High School mitigation site.	W	0.36 ha/.8 ac	1, 2, 3
4	Arroyo Trabuco Basin	Northwestern edge of Ladera Ranch.	W	2.43 ha/6.0 ac	1
			C	0	1
5	Cañada Gobernadora/RMV	North of Ortega Highway in Cañada Gobernadora.	C	9.13 ha/23 ac	1
6	TCA Chiquita Canyon Conservation Area	Chiquita Canyon north of Oso Parkway	W	0	2
			C	478.71 ha/1182 ac	2, 4
7	Santa Margarita Water District Ladera Water Tank	No location information available.	W	0	2

W Wetlands.
C Coastal sage scrub.

1. Tony Bomkamp, Glenn Lukos Associates (maps, diagrams, personal communications (2002 etc.).
2. List of mitigation sites provided by David Zoutendyk, United State Fish and Wildlife Service via email 5/15/01.
3. Map provided by Army Corps of Engineers entitled "San Juan and Portions of San Mateo Creek Watersheds, Regulated Aquatic Resources, Including Wetlands and Waters of the United States" (no date) received by P&D June 2001.
4. TCA Chiquita Canyon Conservation Bank Agreement (May 24, 1996).

Refer to Figure 3.21-1 for the locations of these mitigation areas.

feasible mitigation measures to maintain the adopted LOS standard. In addition, the Orange County CMP includes mechanisms for inter-jurisdictional coordination where a proposed development is determined to generate an increase in traffic on CMP links/intersections beyond an individual jurisdiction's boundaries.

3.22.2 SCAG REGIONAL COMPREHENSIVE PLAN AND GUIDE

The SCAG Regional Comprehensive Plan and Guide (RCPG, SCAG, March 1996), formerly referred to as the SCAG Growth Management Plan, is a summary of various plans for the southern California region, some of which are required by federal or state law. The RCPG was developed in cooperation with numerous agencies including subregions of southern California, transportation commissions, Caltrans, the Metropolitan Water District of Southern California, the California Energy Commission, the Bureau of Land Management of the United States Department of the Interior, the South Coast Air Quality Management District, Ventura Air Pollution Control District and other parties, both public and private.

The RCPG consists of three sections: Growth Management, Regional Mobility, and Air Quality, Water Quality and Hazardous Waste Management. These are the chapters which currently respond directly to federal and state requirements placed on SCAG. Local governments are required to use these as a basis of their plans for purposes of consistency under regional plans under CEQA. These chapters also serve as advisory materials and guidance. Those requirements based on state and federal statute found in these chapters also form the basis for certification of local plans described in the Implementation Chapter of the RCPG. (RCPG, SCAG, March 1996).

3.22.3 SANDAG REGIONAL TRANSPORTATION IMPROVEMENT PROGRAM

The San Diego Association of Governments (SANDAG) is the regional planning agency for San Diego County. It is governed by a Board of Directors composed of mayors, council members, and a county supervisor from each of the region's 19 local governments in the County of San Diego. Supplementing these voting members are advisory representatives from the United States Department of Defense, Caltrans, San Diego Unified Port District, Metropolitan Transit Development Board, North San Diego County Transit Development Board, San Diego County Water Authority and Tijuana/Baja California/Mexico. SANDAG addresses regional issues such as growth, transportation, environmental management, housing, open space, air quality, energy, fiscal management, economic development and criminal justice by establishing policies, adopting plans, allocating transportation funds and developing programs for regional issues which are used by local governments as well as other public and private organizations.

SANDAG adopted the San Diego Association of Governments Regional Transportation Improvement Program (RTIP) to facilitate accomplishing regional goals related to transportation. With the exception of the Interstate 5 corridor through the Base, the RTIP does not include the area on MCB Camp Pendleton, as SANDAG has no authority to enforce any policies on this military base. The Department of the Navy (DON) has jurisdiction over MCB Camp Pendleton in the part of San Diego County that is in the SOCTIIP study area.

3.22.4 COUNTY OF SAN DIEGO GENERAL PLAN

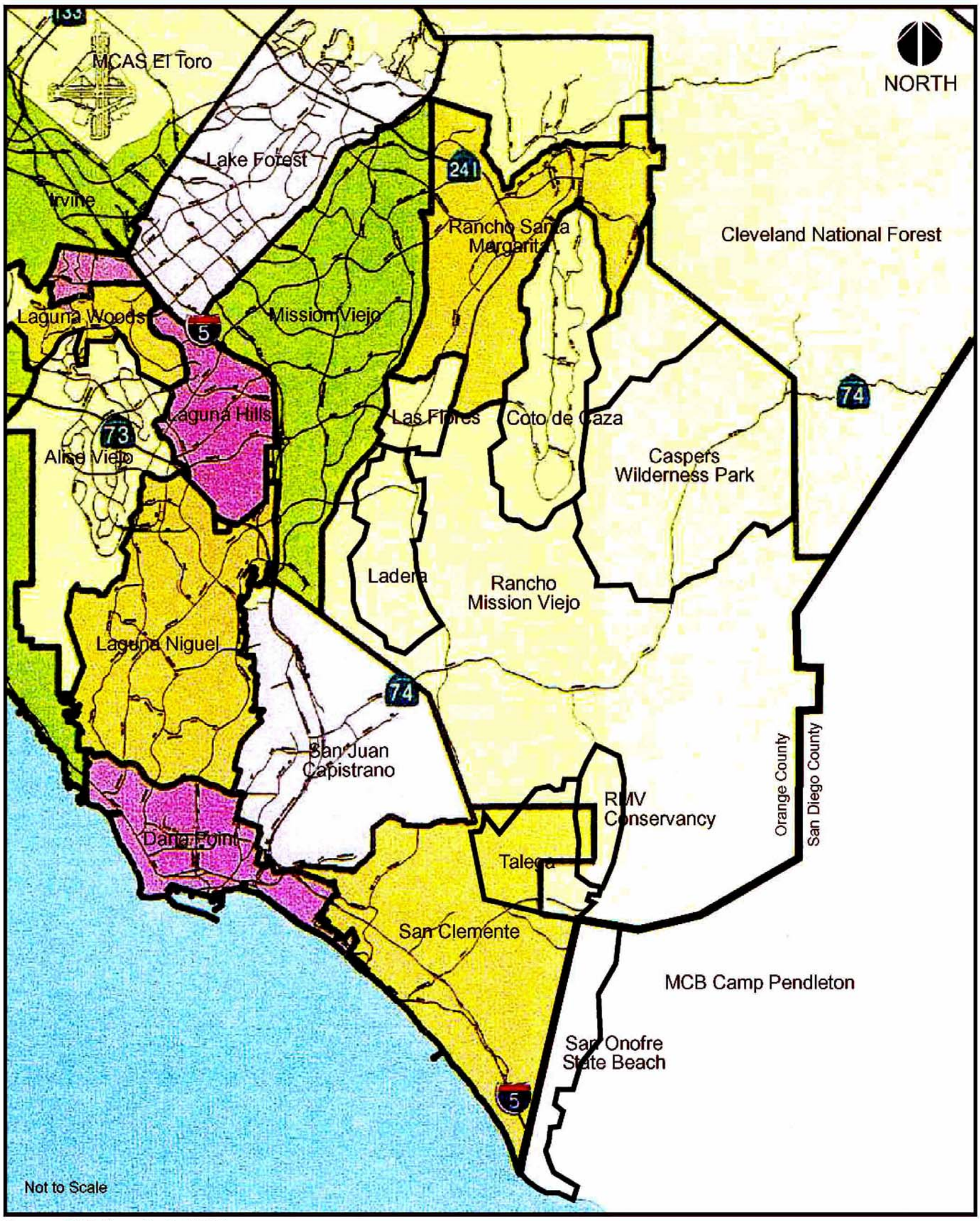
The County of San Diego General Plan serves as guidelines for coordinating land use considerations. However, this plan is not relevant to land use concerns in the SOCTIIP study area because the DON has jurisdiction over MCB Camp Pendleton, the part of San Diego County that is in the study area.

3.22.5 SAN DIEGO NORTH COUNTY TRANSIT DISTRICT (NCTD) FAST FORWARD

The NCTD Fast Forward Plan includes transit system strategies for northern San Diego County. There are no land use policies that affect any of the SOCTIIP alternatives in the NCTD Fast Forward Plan.

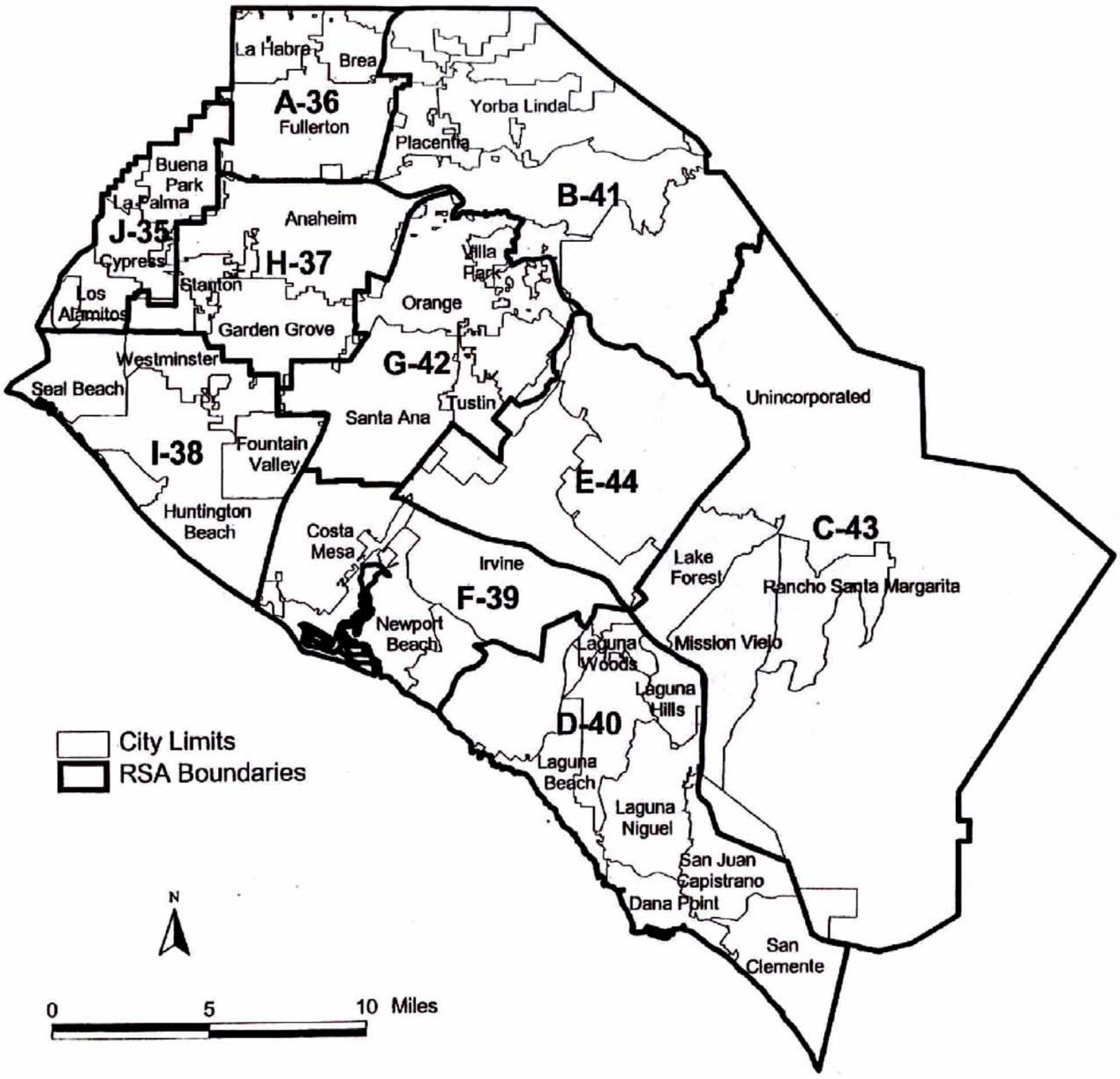
3.22.6 COUNTY OF SAN DIEGO CONGESTION MANAGEMENT PLAN

The CMP for San Diego County performs a similar function as the Orange County CMP, however its funding and implementation are quite different. The CMP does not include MCB Camp Pendleton and no CMP roads are within the SOCTIIP study area. Additionally, the land use monitoring component has no land use policies that could affect land use in the SOCTIIP study area.



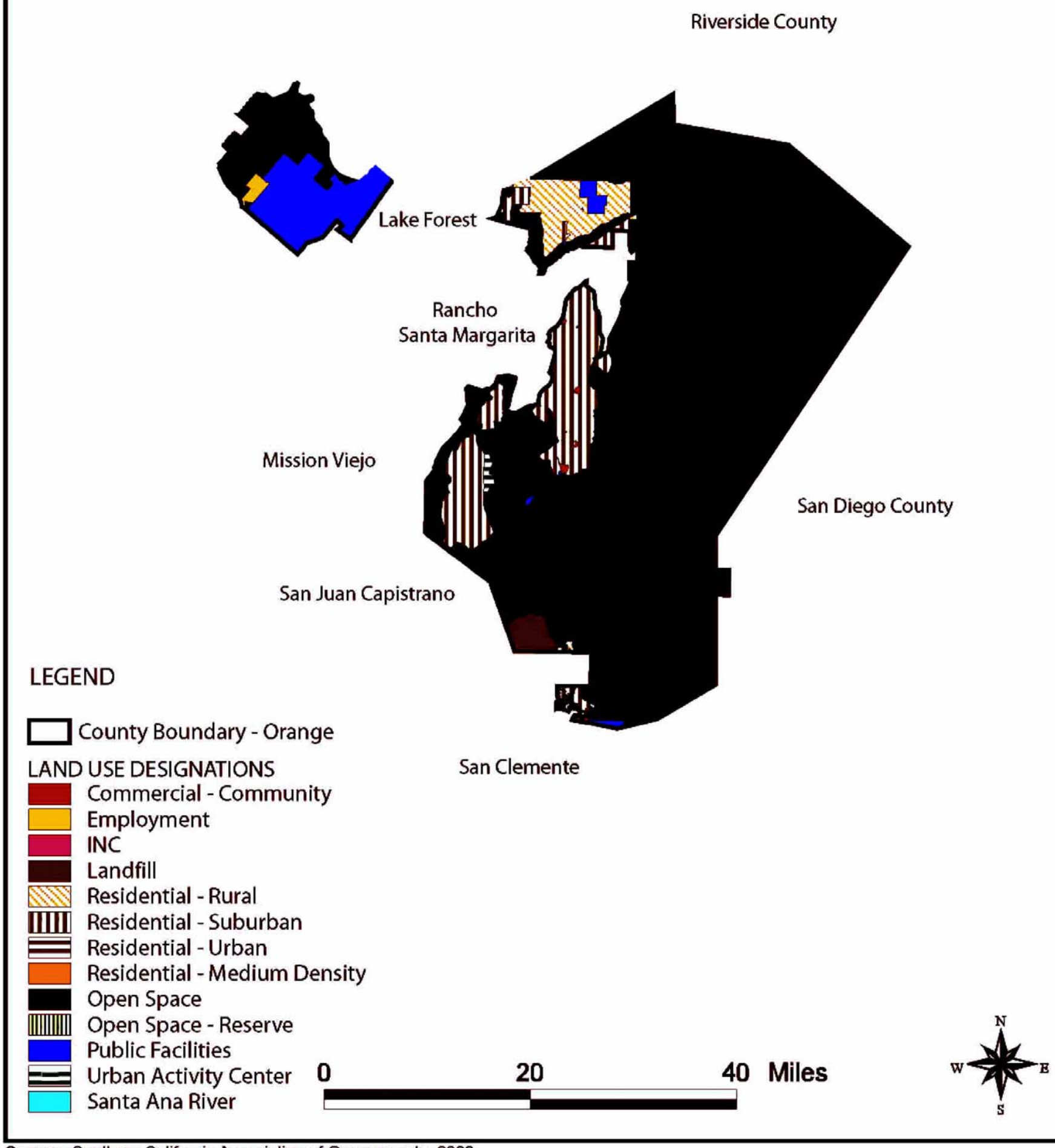
Source: P&D Consultants (2001).

SOCTIIP Study Area



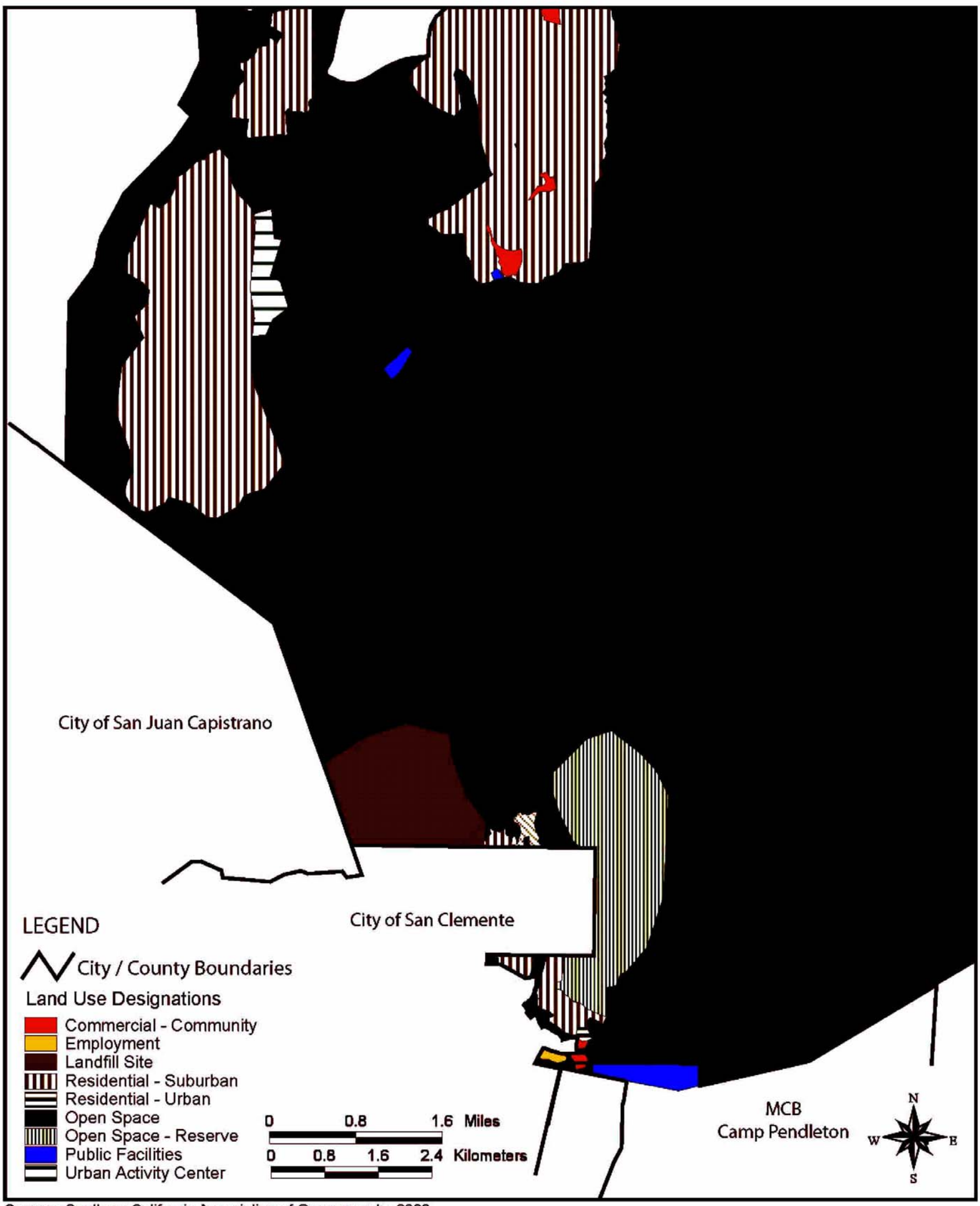
Source: Center for Demographic Research, (Sept 2001).

Regional Statistical Areas in the SOCTIIP Study Area



Source: Southern California Association of Governments, 2000.

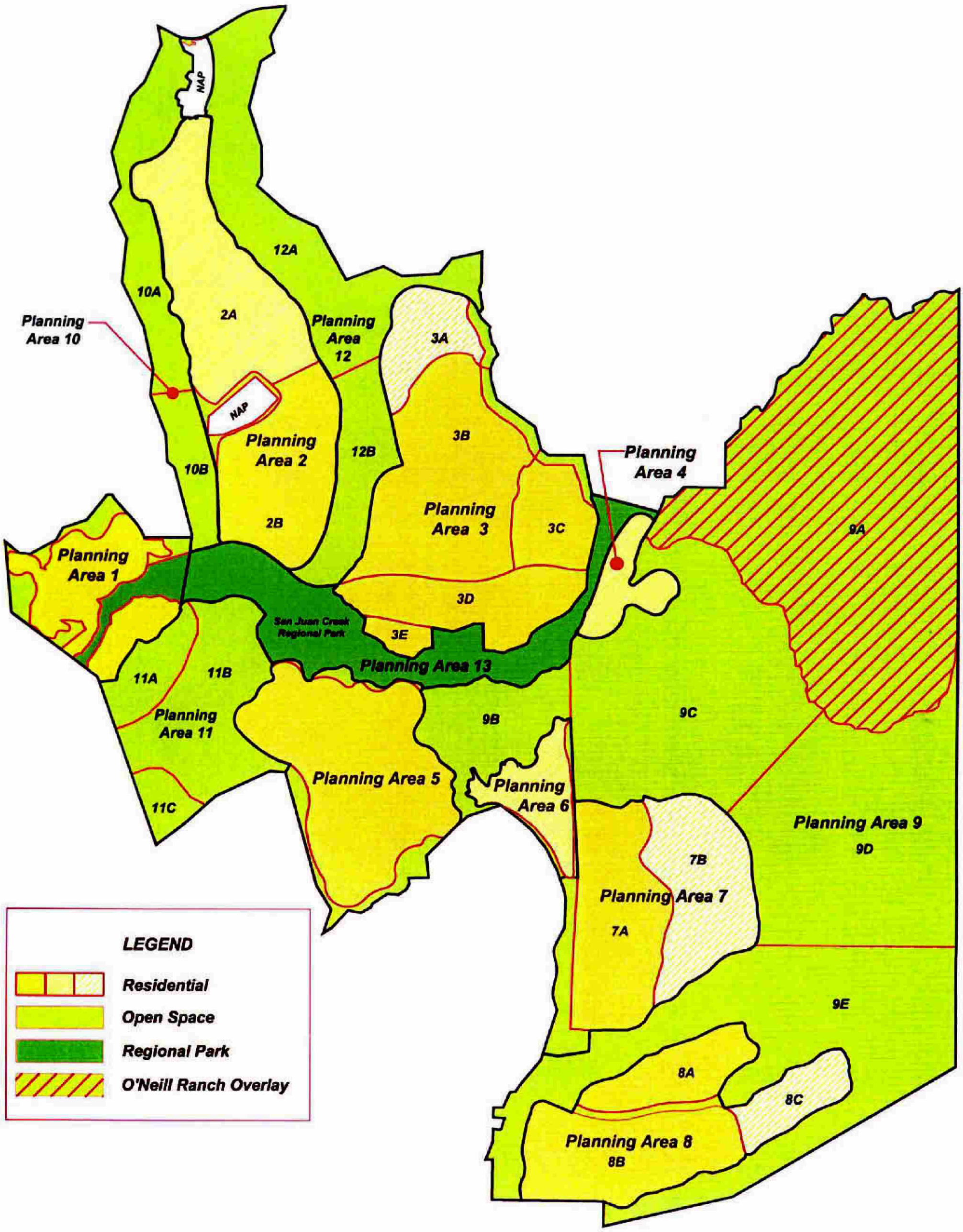
Land Uses in the County of Orange in the SOCTIIP Study Area

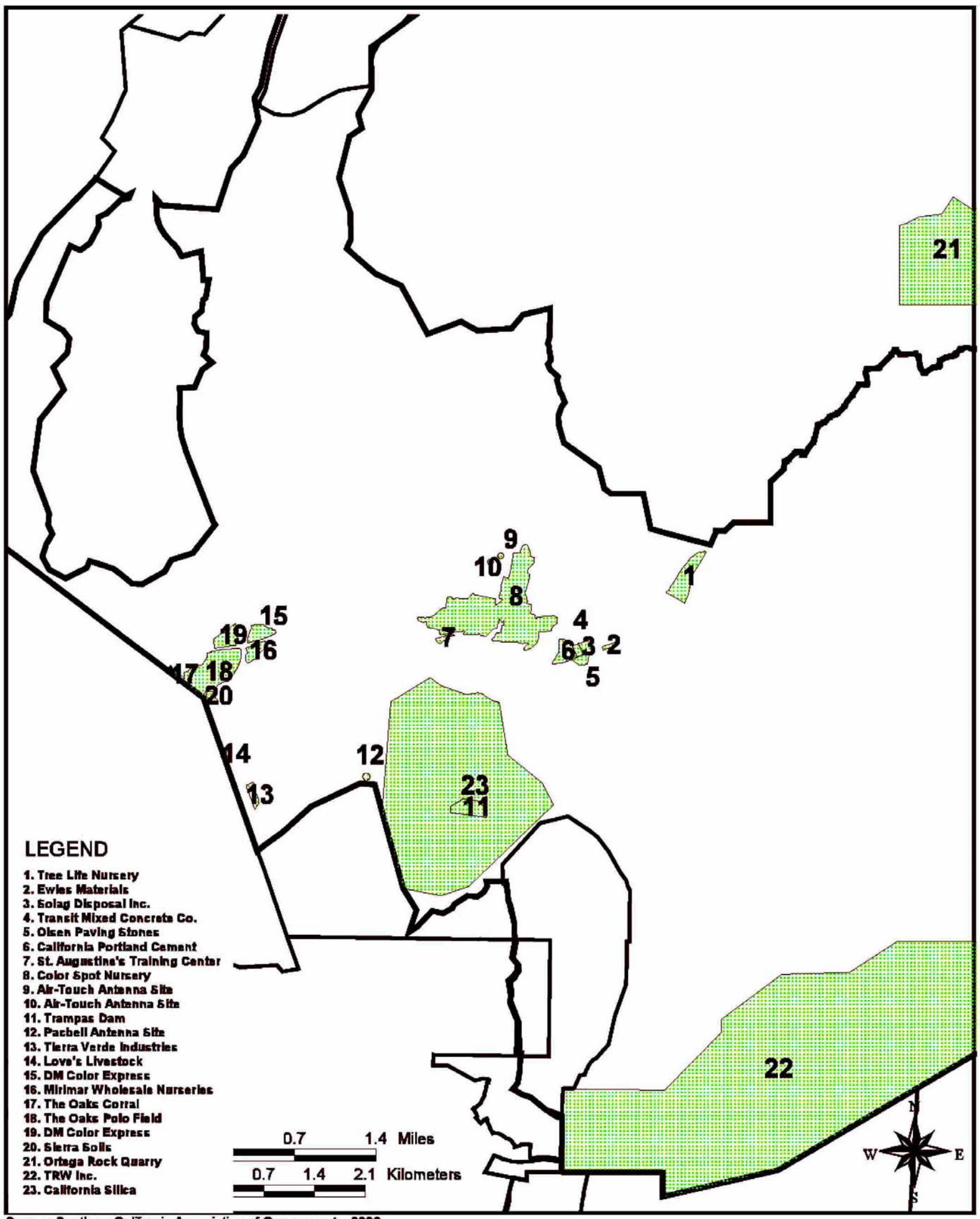


Source: Southern California Association of Governments, 2000.

Note: For the locations along the County of Orange and individual cities in the Study Area, refer to Figure 3.3-1

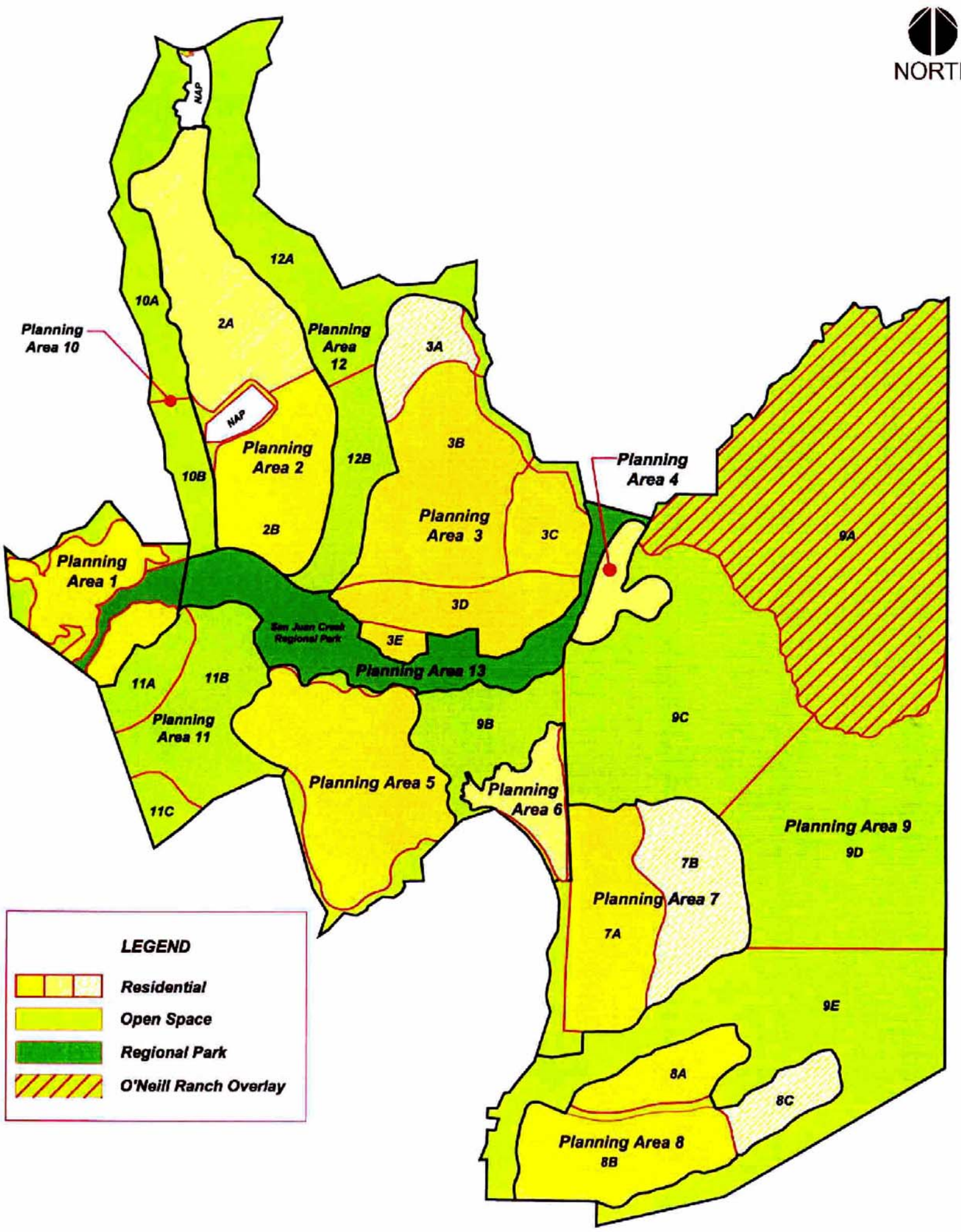
Land Uses in the County of Orange in the SOCTIIP Studay Area


NAP
12A
10A
2A
Planning Area 10
Planning Area 12
3A
NAP
Planning Area 2
12B
3B
10B
Planning Area 4
Planning Area 3
3C
2B
9A
Planning Area 1
3D
San Juan Creek Regional Park
3E
Planning Area 13
11A
11B
Planning Area 11
9B
9C
Planning Area 5
Planning Area 6
11C
Planning Area 9
9D
7B
Planning Area 7
7A
9E
8A
8C
Planning Area 8
8B
LEGEND
Residential
Open Space
Regional Park
O'Neill Ranch Overlay



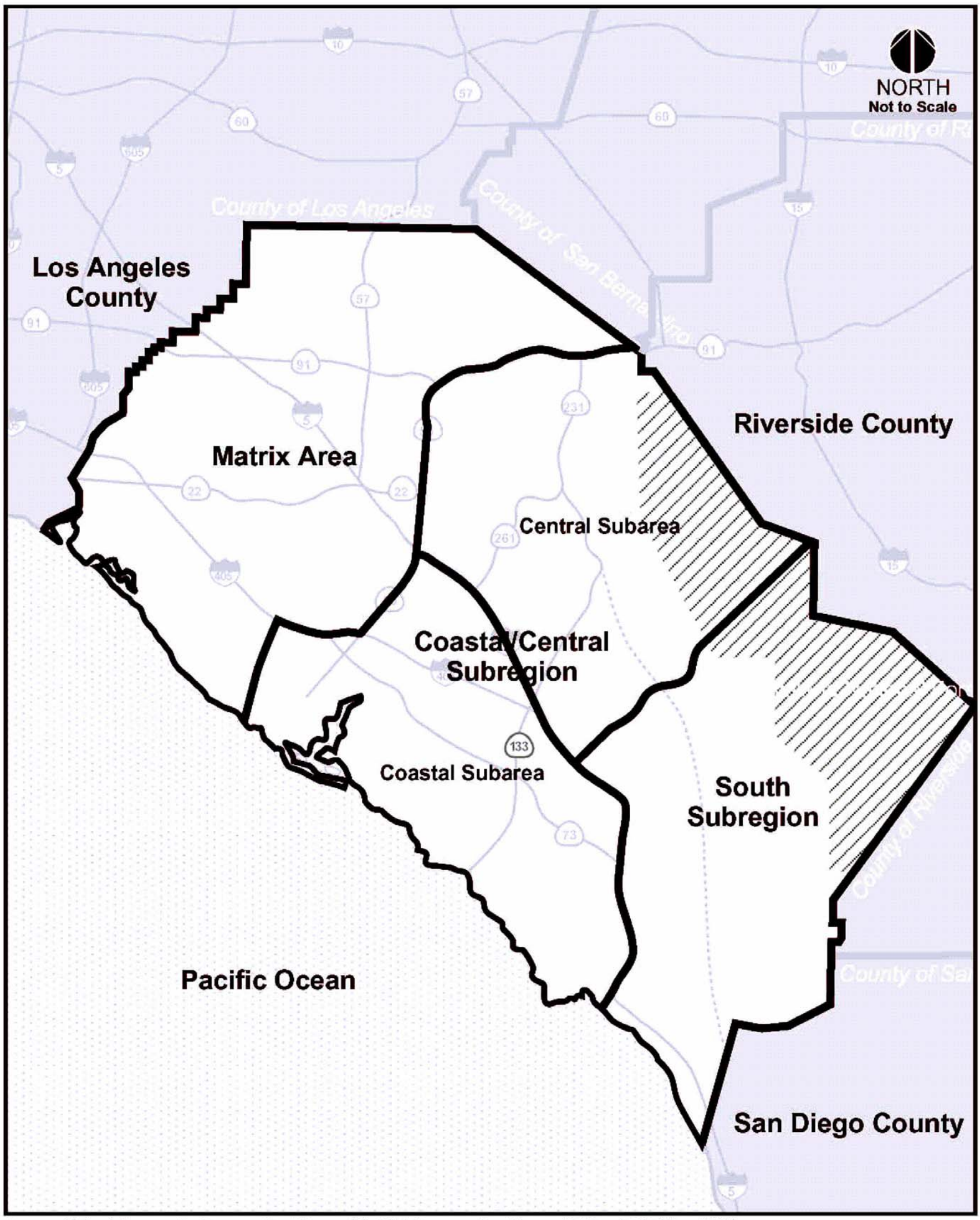
Source: Southern California Association of Governments, 2000.

Rancho Mission Viejo Active Property Leases



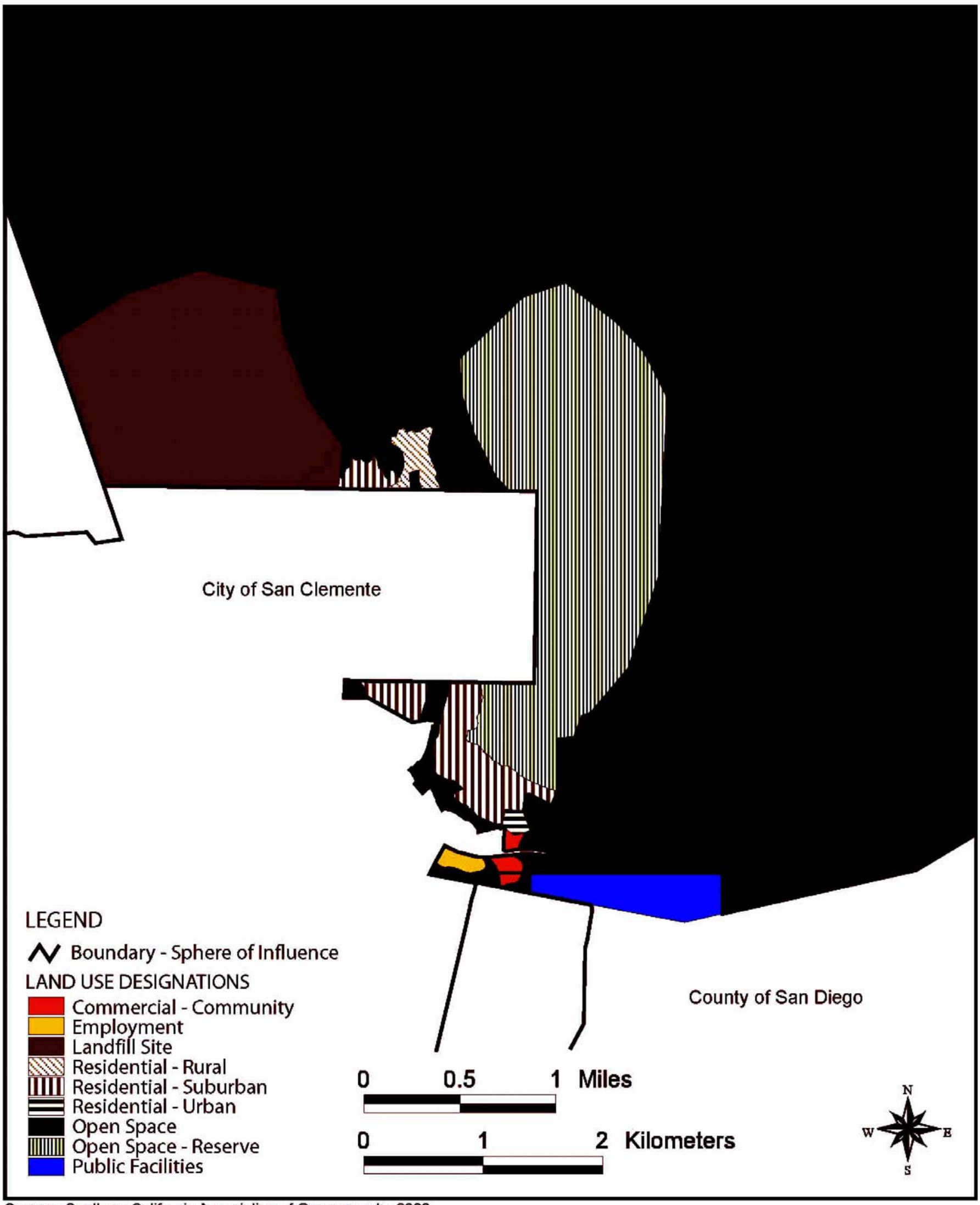
Source: Rancho Mission Viejo (2001).

Rancho Mission Viejo Proposed Development



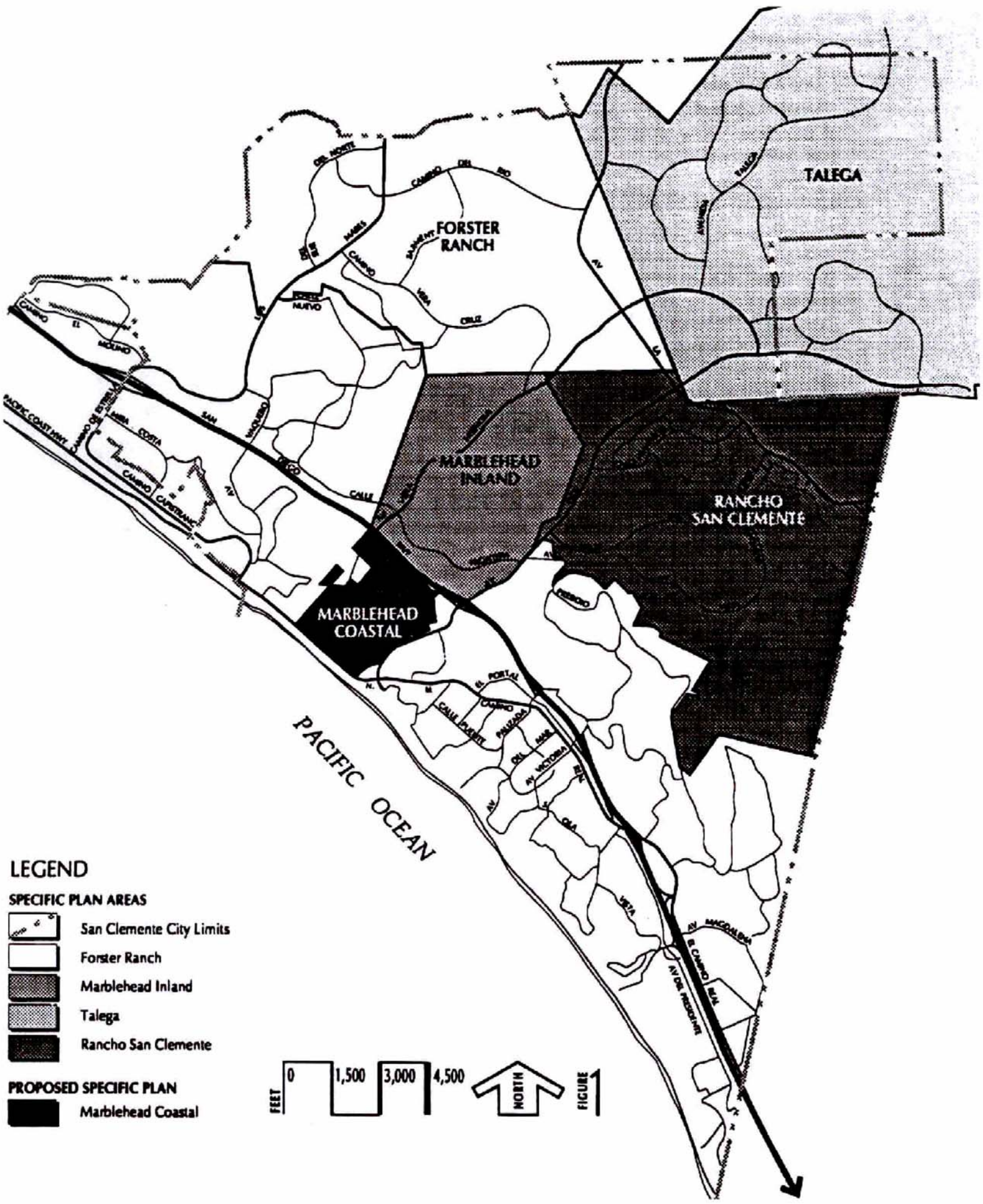
Source: Natural Community Conservation Plan and Habitat Conservation Plan and EIR and EIS (May 1996).

County of Orange Natural Community Conservation Plan Subregions



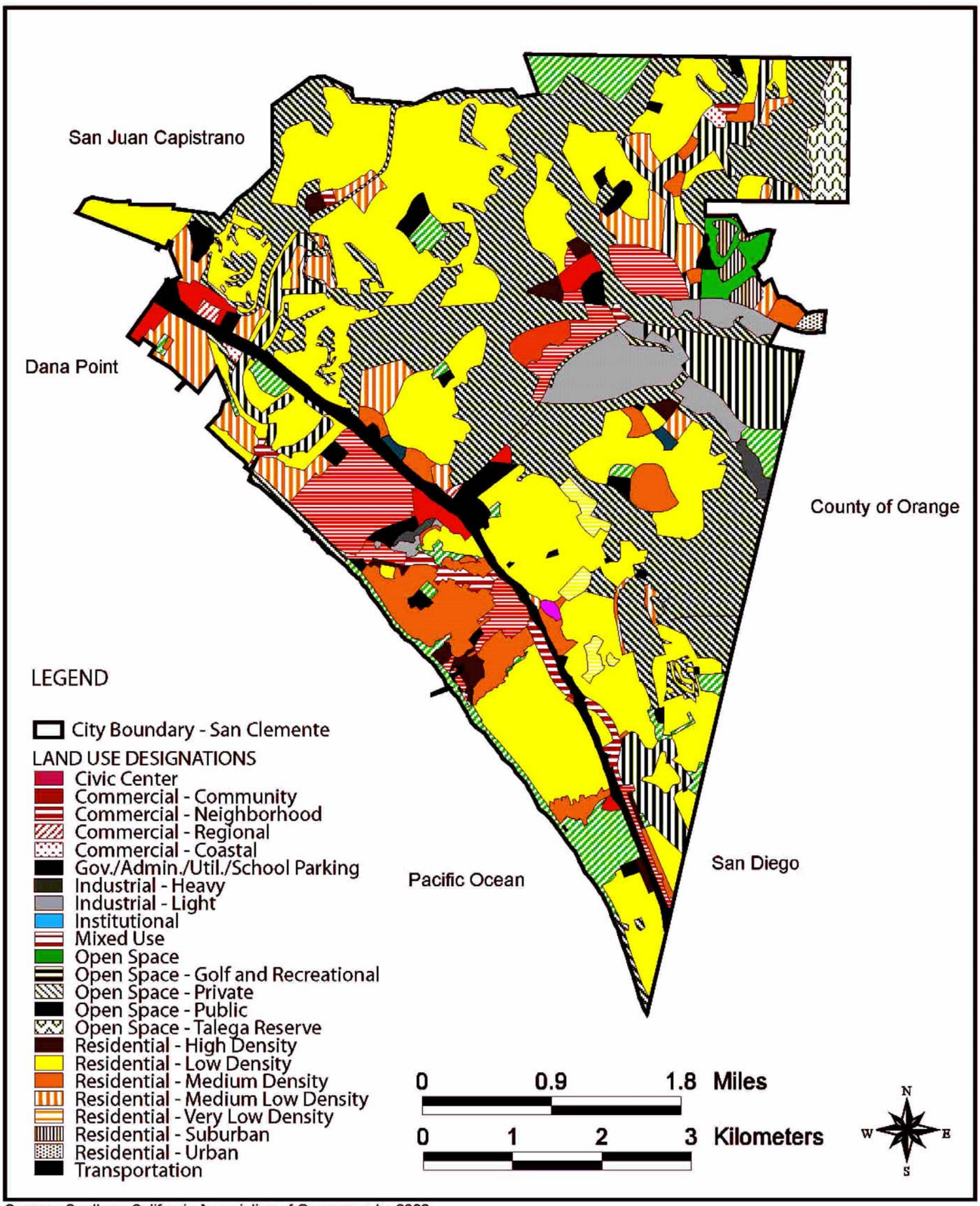
Source: Southern California Association of Governments, 2000.

City of San Clemente Sphere of Influence in the SOCTIIP Study Area



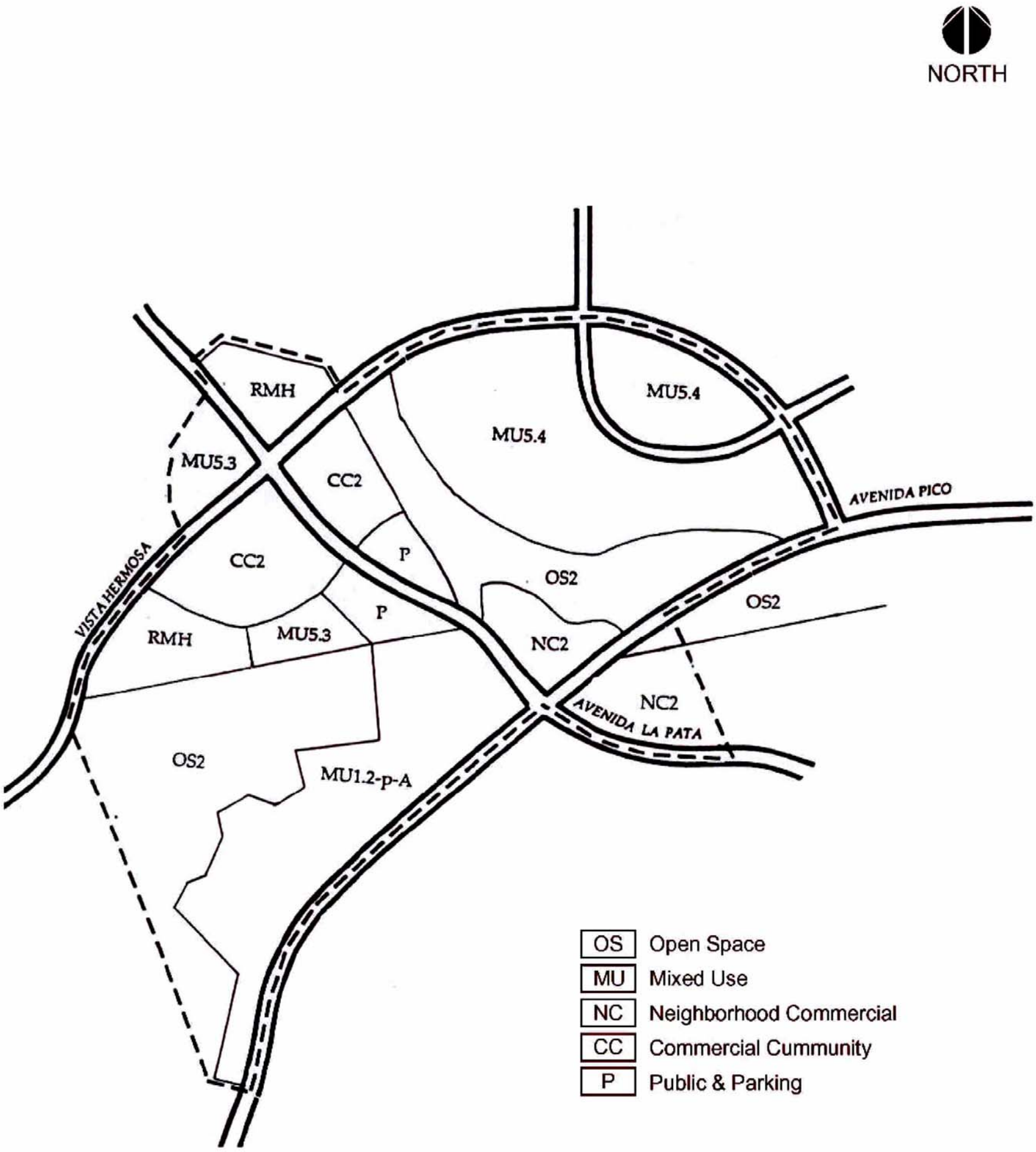
Source: San Clemente General Plan (1999).

Planned Communities in the City of San Clemente



Source: Southern California Association of Governments, 2000.

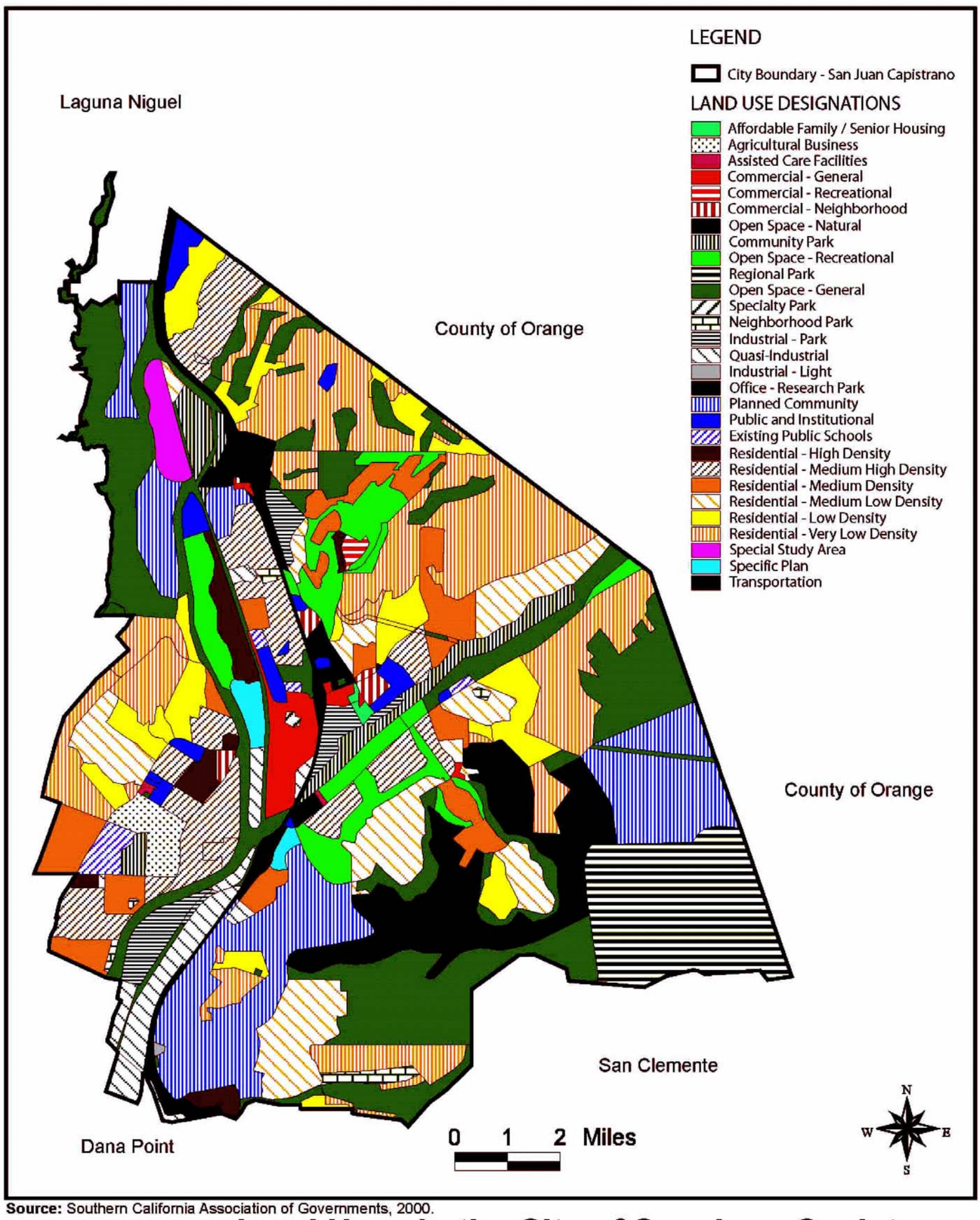
Land Uses in the City of San Clemente in the SOCTIIP Study Area



Note: For the locations along the County of Orange and individual cities in the Study Area, refer to Figure 4.2-1

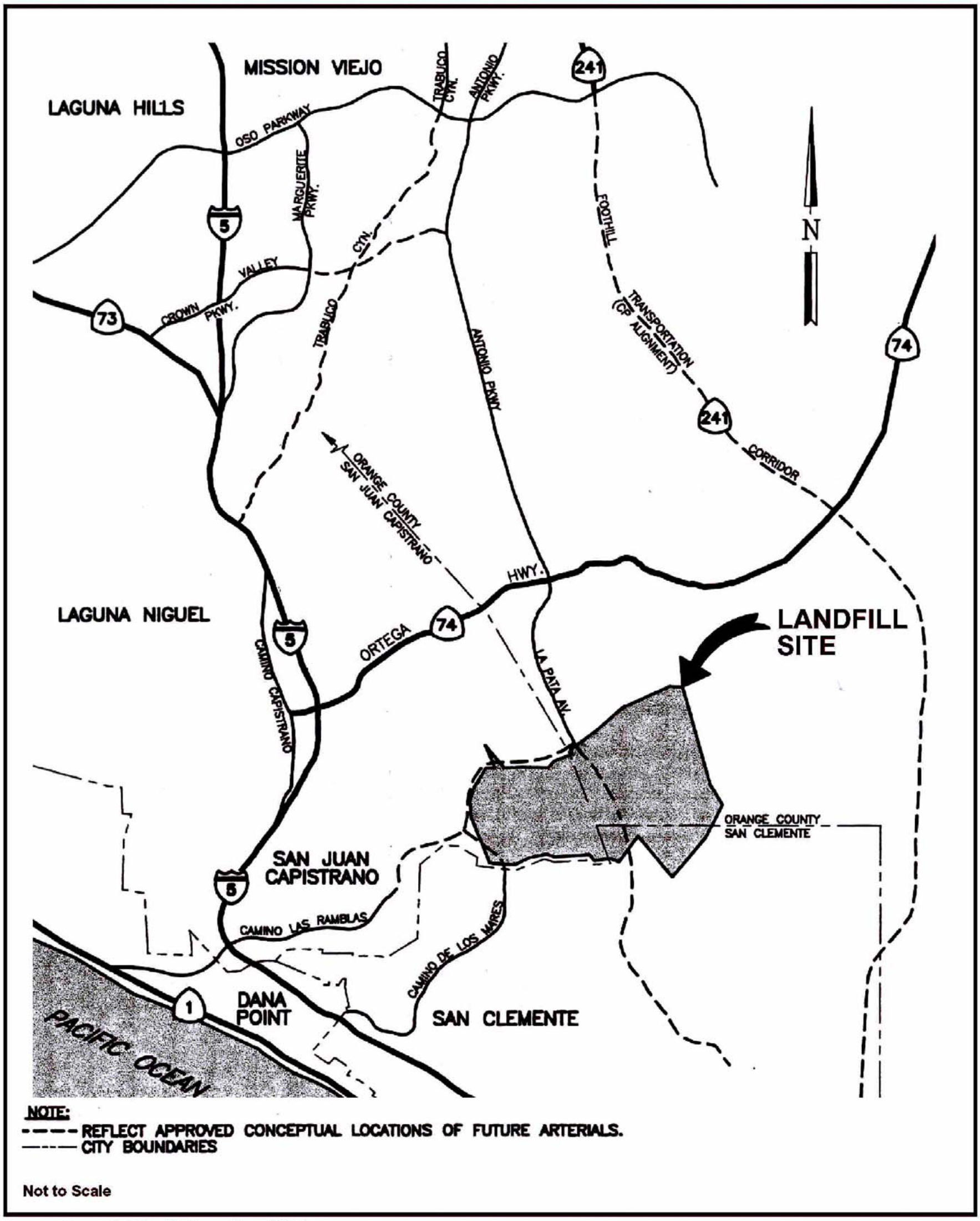
Source: San Clemente General Plan, Figure 1-13, (1993)

San Clemente Integrated Development Planning Area



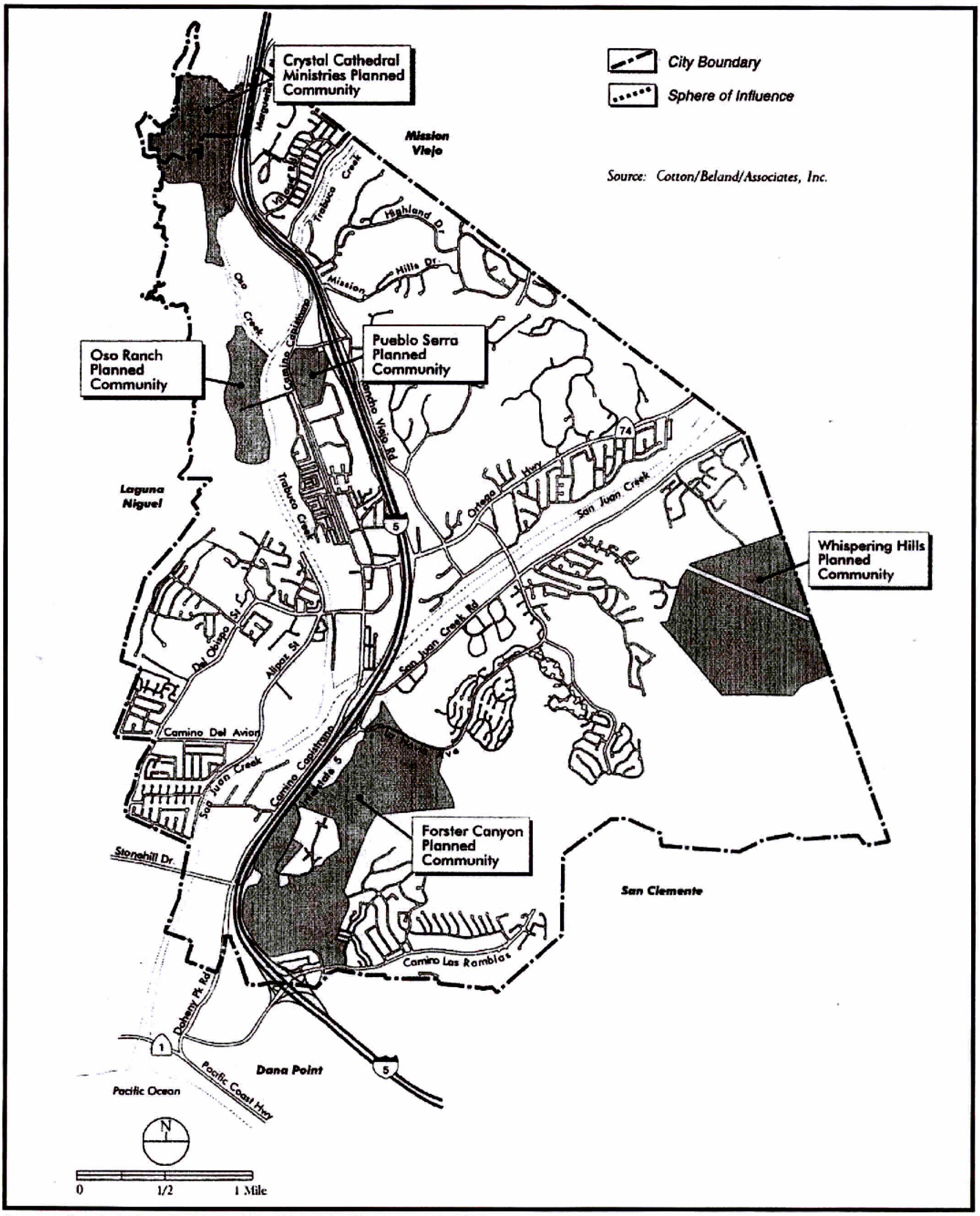
Source: Southern California Association of Governments, 2000.

Land Uses in the City of San Juan Capistrano in the SOCTIIP Study Area



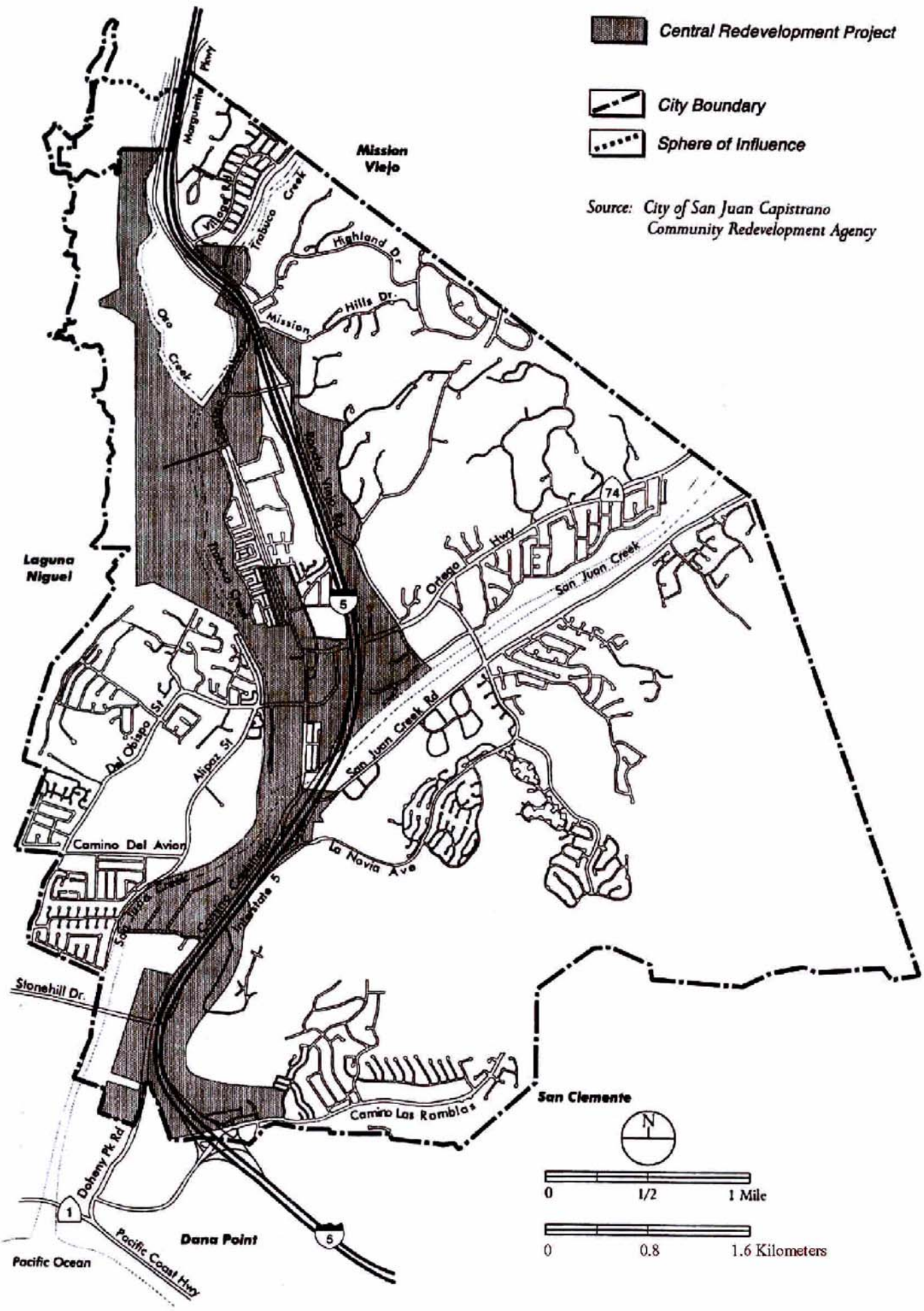
Source: Bryan A. Stirrat & Associates (1998).

Prima Deshecha Sanitary Landfill Regional Location



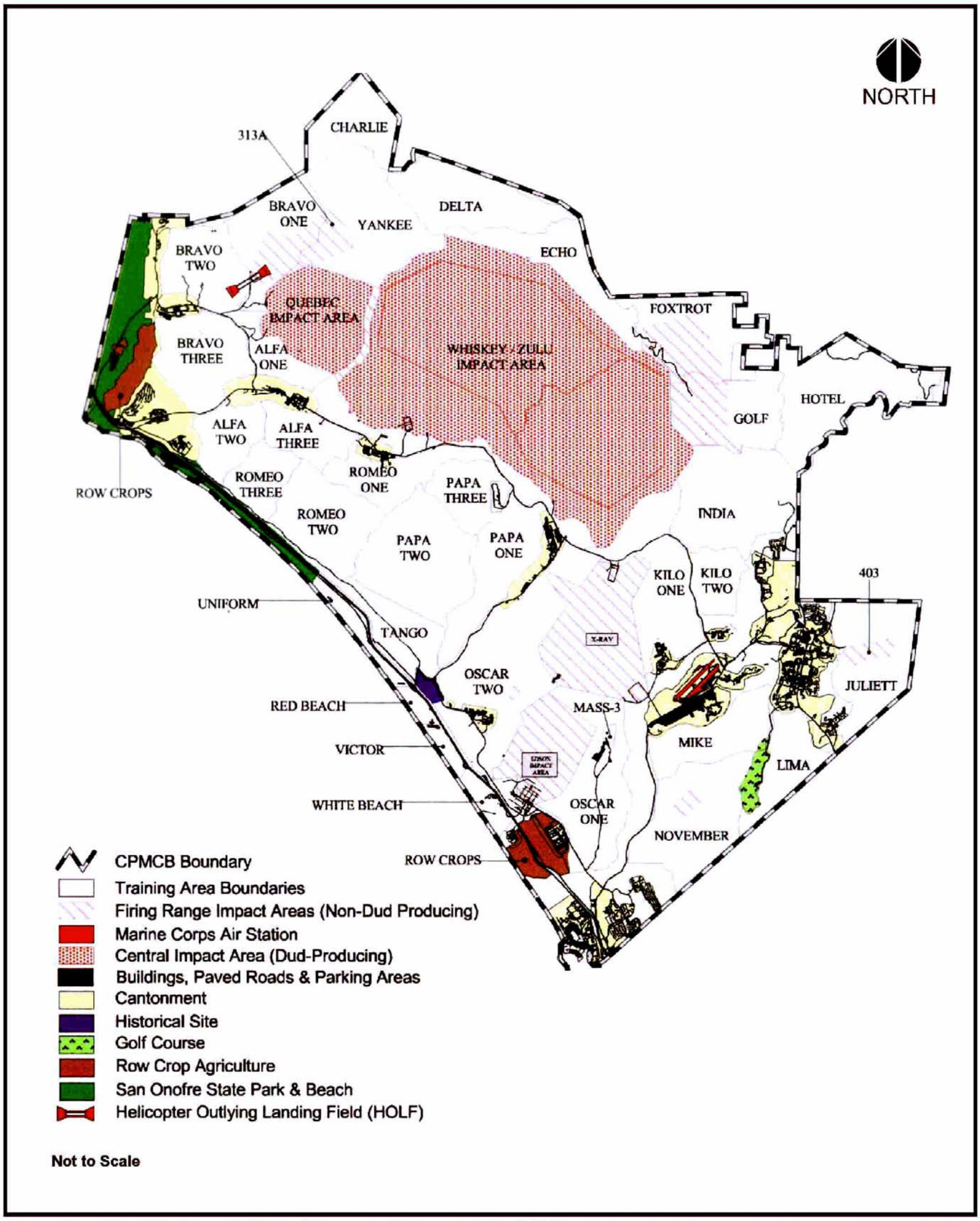
Source: San Juan Capistrano Land Use Element, (December 14, 1999).

City of San Juan Capistrano Planned Communities



Source: San Juan Capistrano General Plan (1999).

City of San Juan Capistrano Central Redevelopment Project

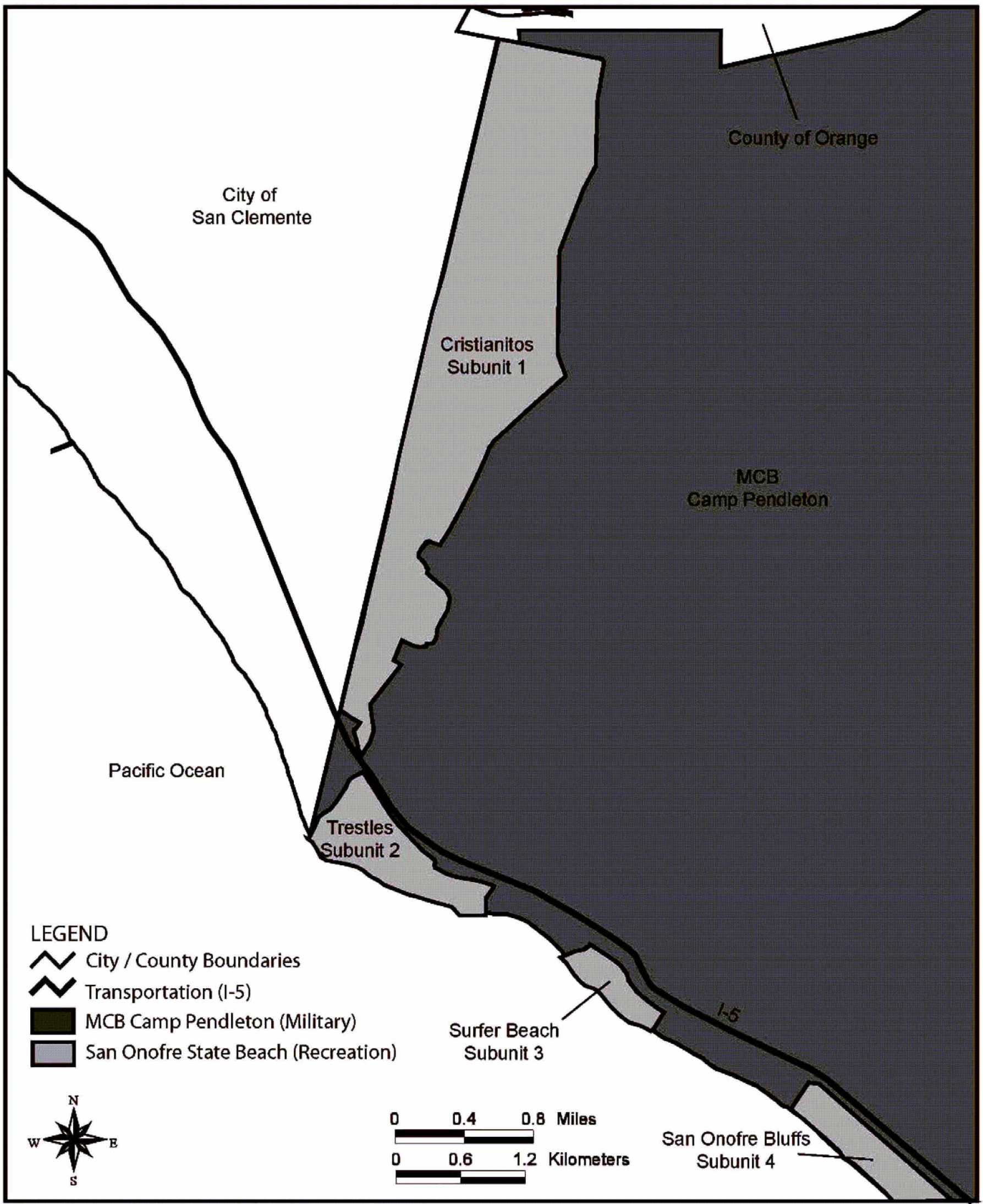


Source: Camp Pendleton Integrated Natural Resources Management Plan (2001).

Marine Corps Base Camp Pendleton Land Uses

Source: Camp Pendleton Special, series V895s, Edition 2-DMA.

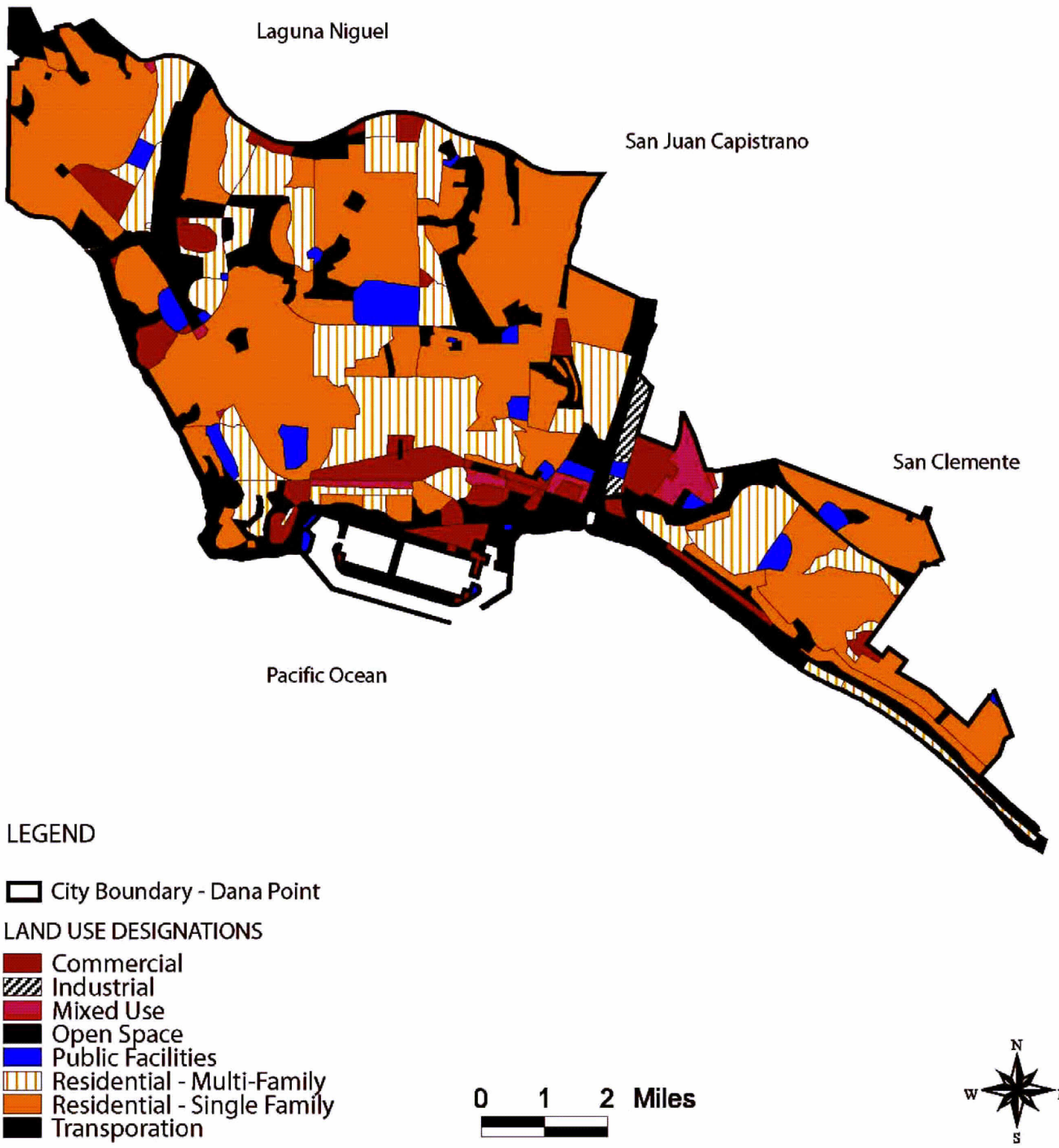
Detailed Land Uses on Camp Pendleton in the SOCTIIP Study Area



Source: Southern California Association of Governments, 2000.

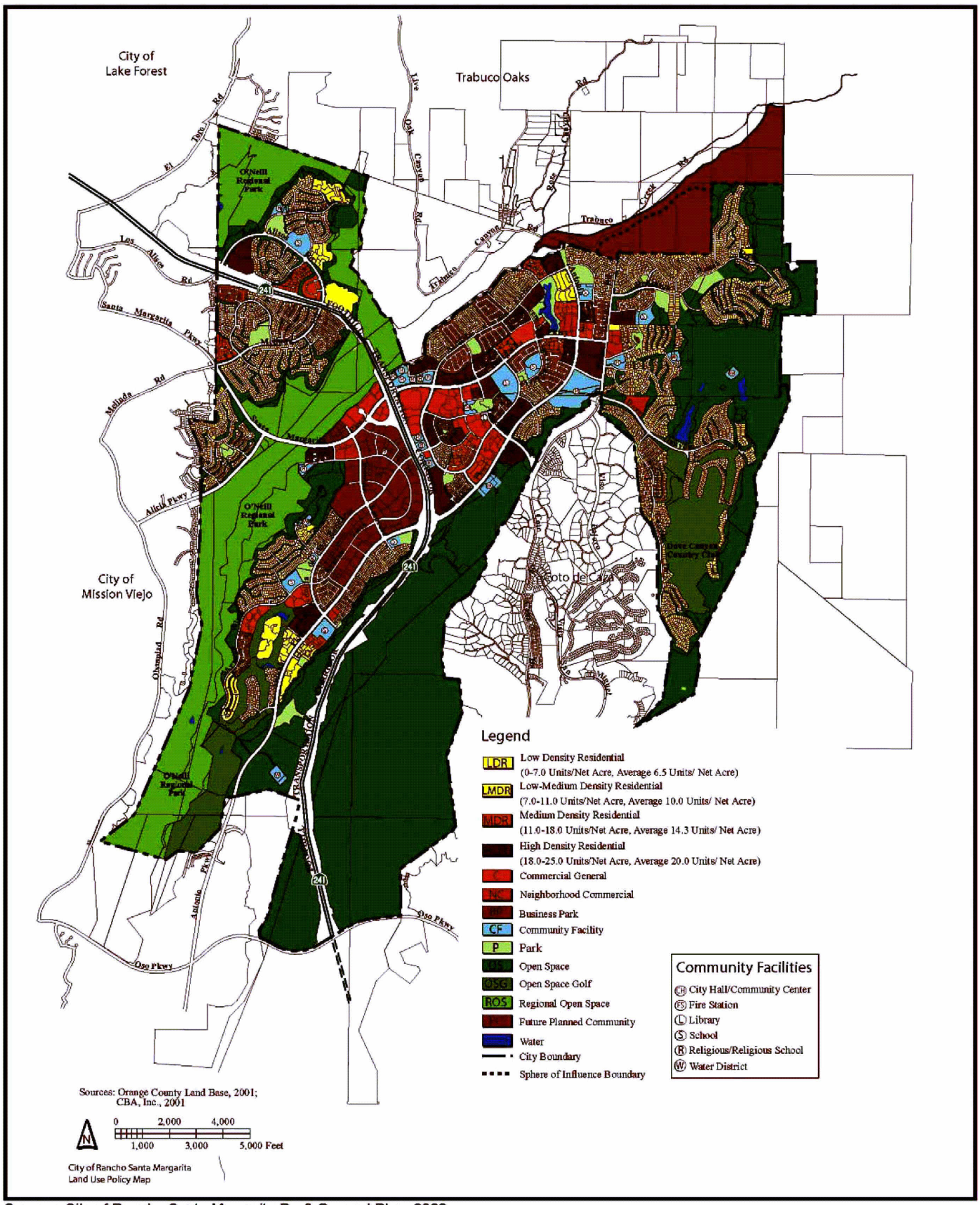
San Onofre State Beach Lease on MCB Camp Pendleton in the SOCTIIP Study Area

Note: For the locations of the County of Orange and individual cities in the Study Area, refer to Figure 3.3-1.



Source: Southern California Association of Governments, 2000.

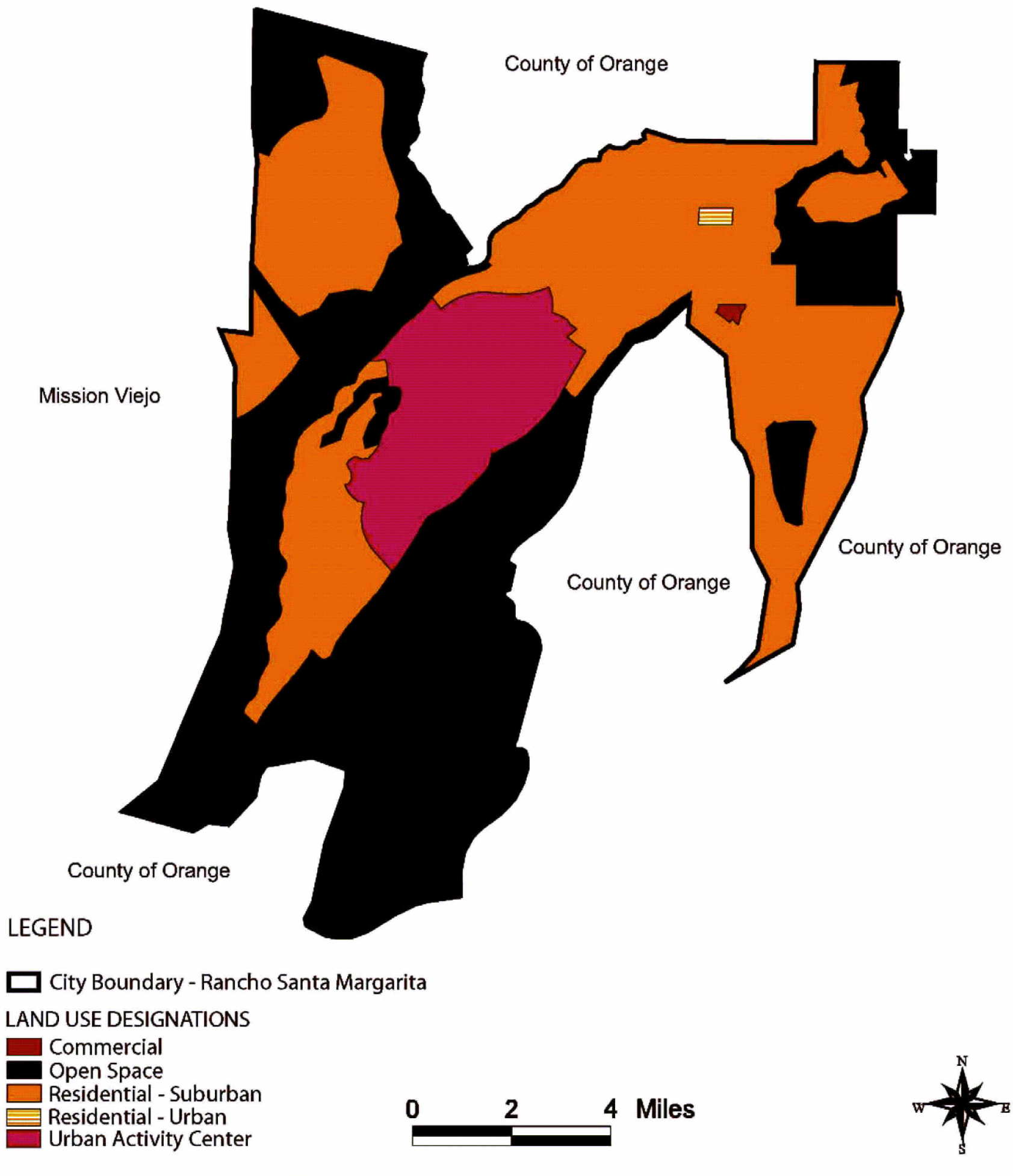
Land Uses in the City of Dana Point in the SOCTIIP Study Area



Source: City of Rancho Santa Margarita Draft General Plan, 2002.

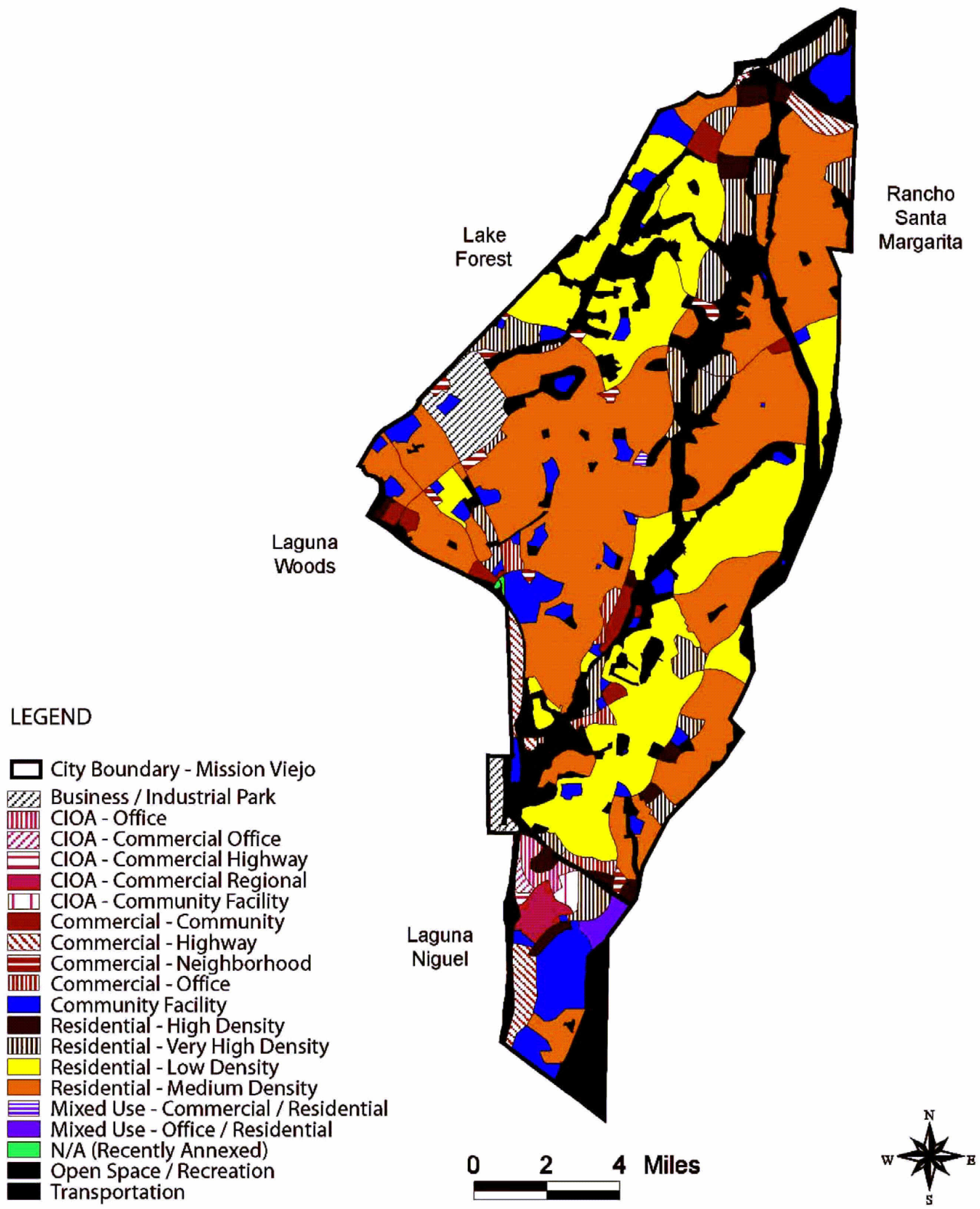
Land Uses in the City of Rancho Santa Margarita in the SOCTIIP Study Area

Note: For the locations of the County of Orange and individual cities in the Studay Area, refer to Figure 3.3-1.



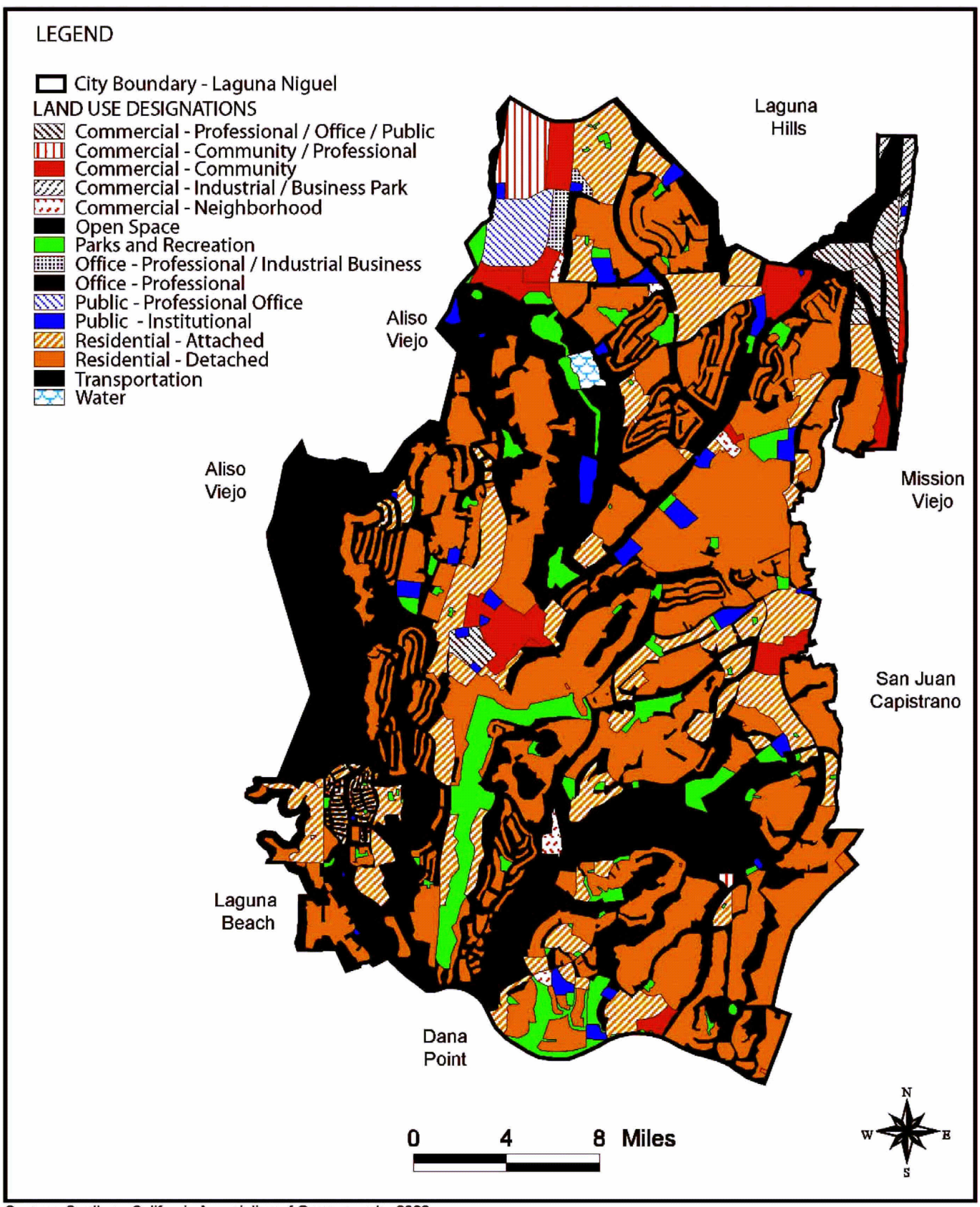
Source: Orange County General Plan, 2000.

Land Uses in the City of Rancho Santa Margarita in the SOCTIPP Study Area



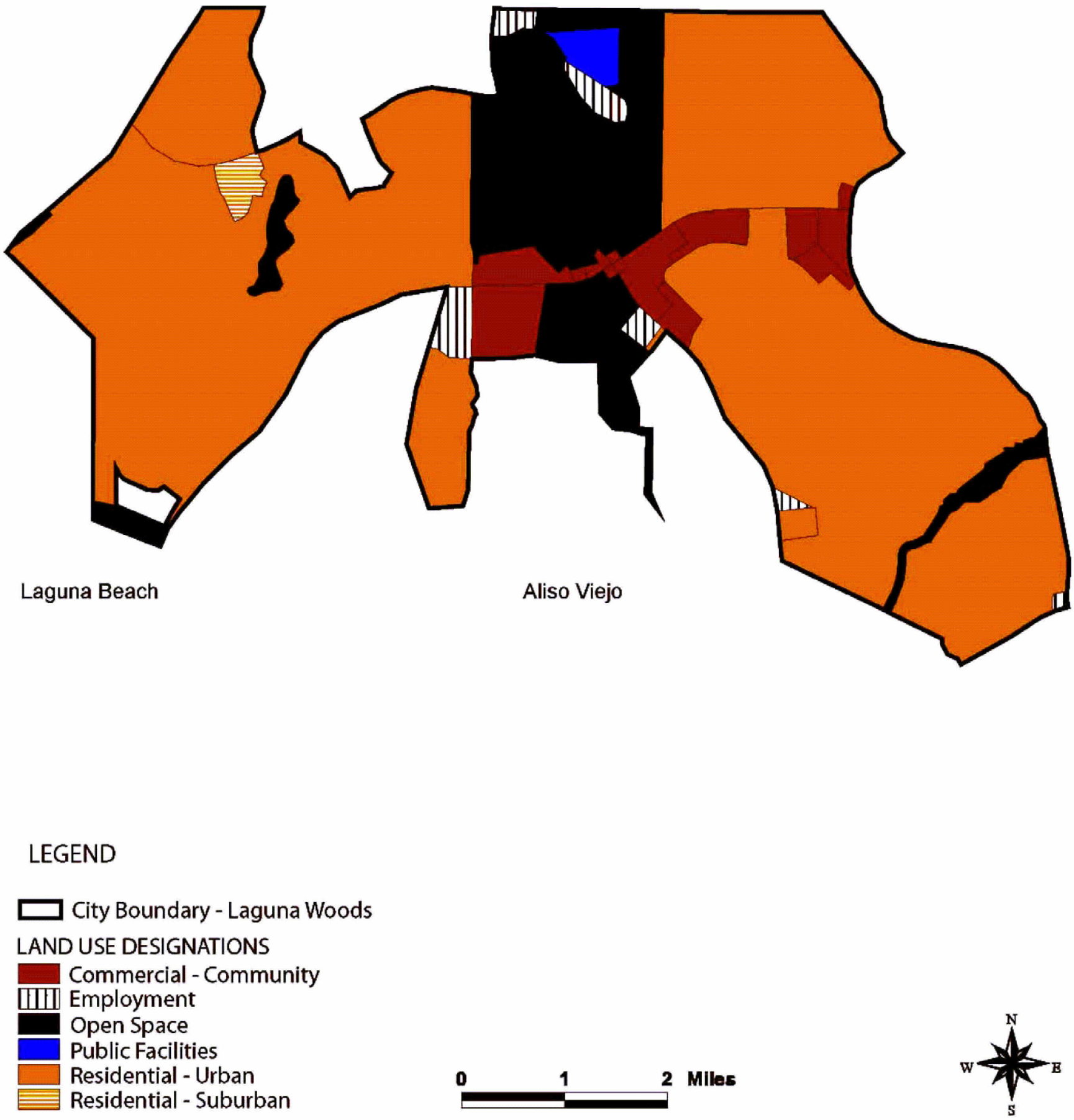
Source: Southern California Association of Governments, 2000.

Land Uses in the City of Mission Viejo in the SOCTIIP Study Area



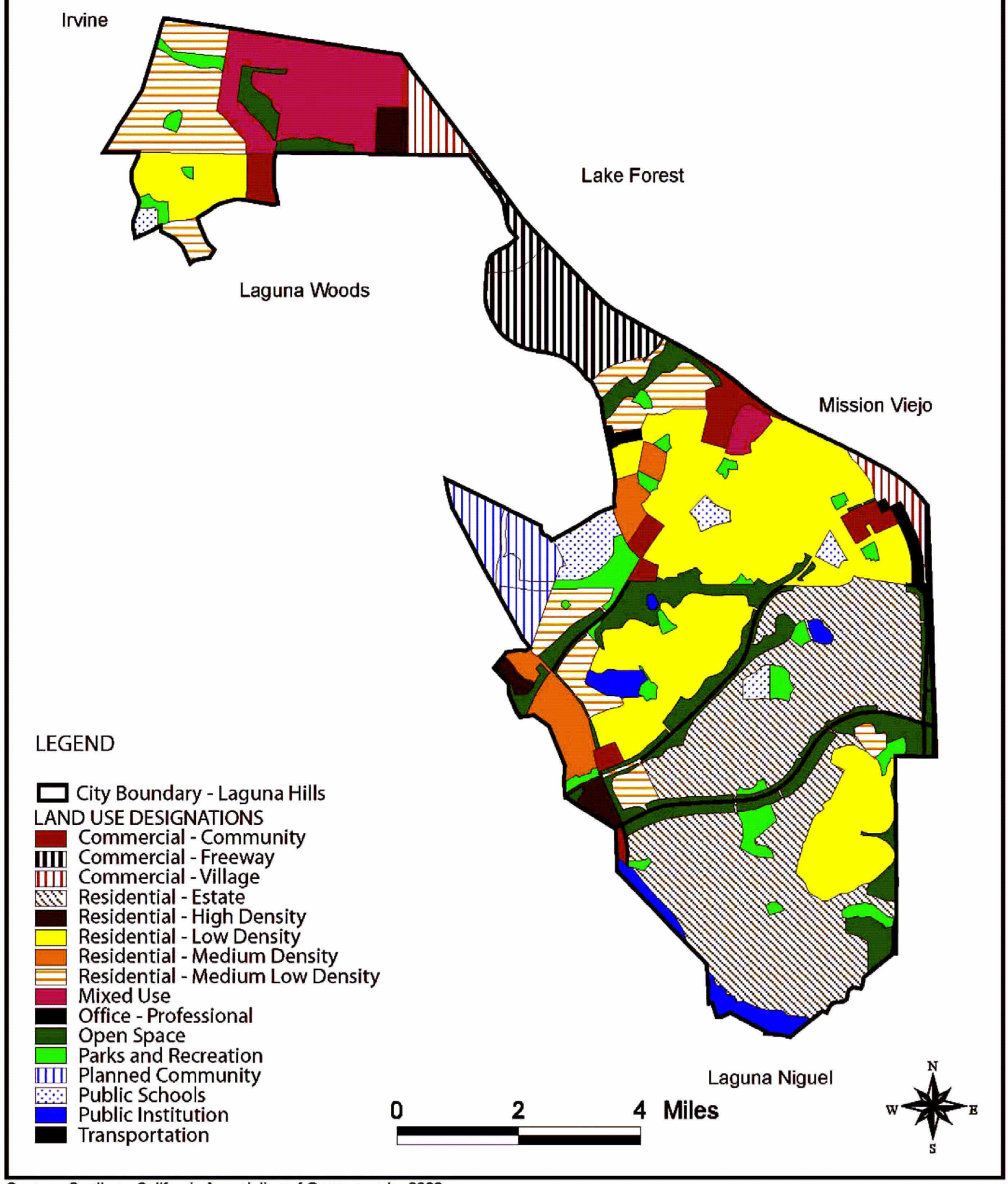
Source: Southern California Association of Governments, 2000.

Land Uses in the City of Laguna Niguel in the SOCTIIP Study Area



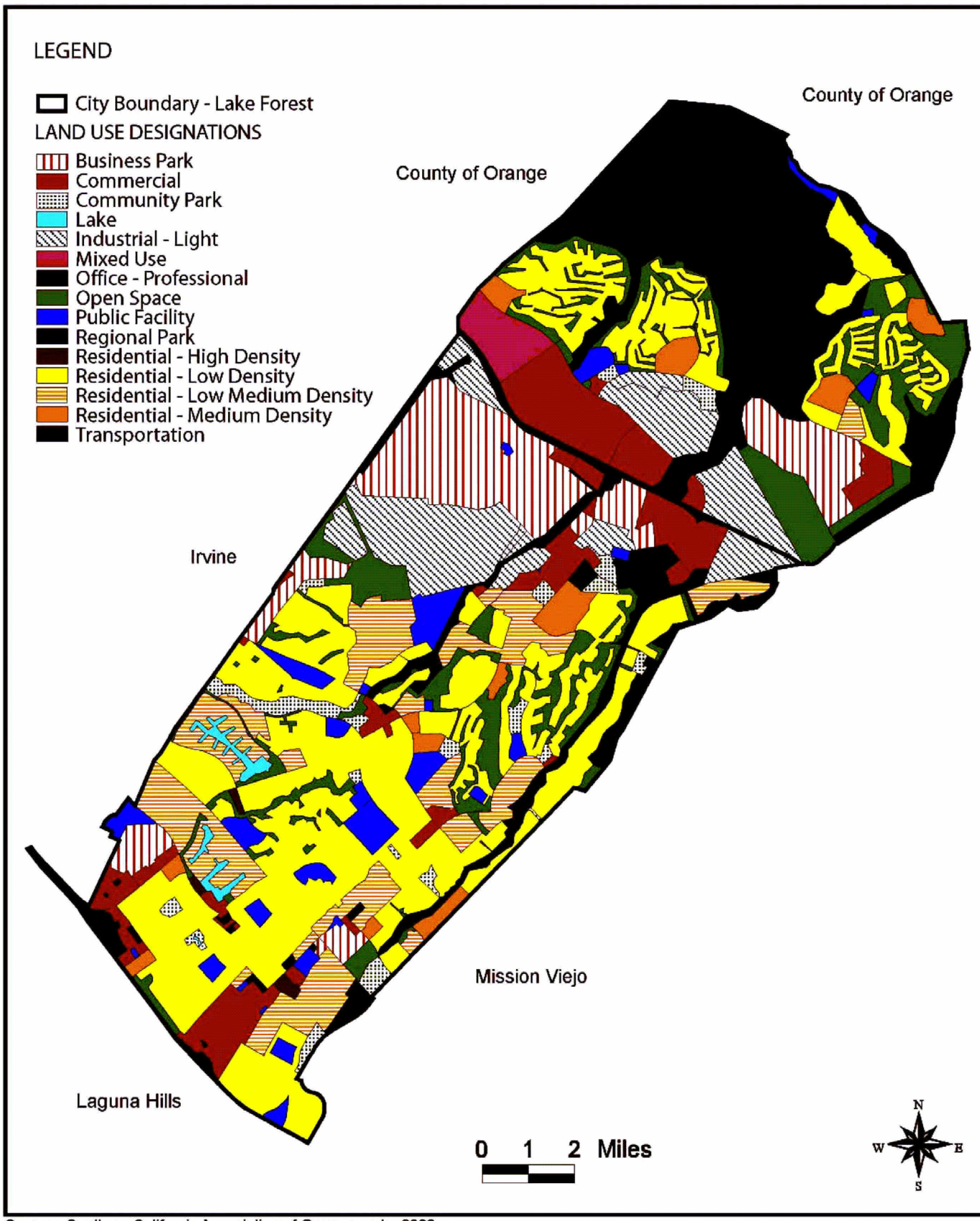
Source: Southern California Association of Governments, 2000.

Land Uses in the City of Laguna Woods in the SOCTIIP Study Area



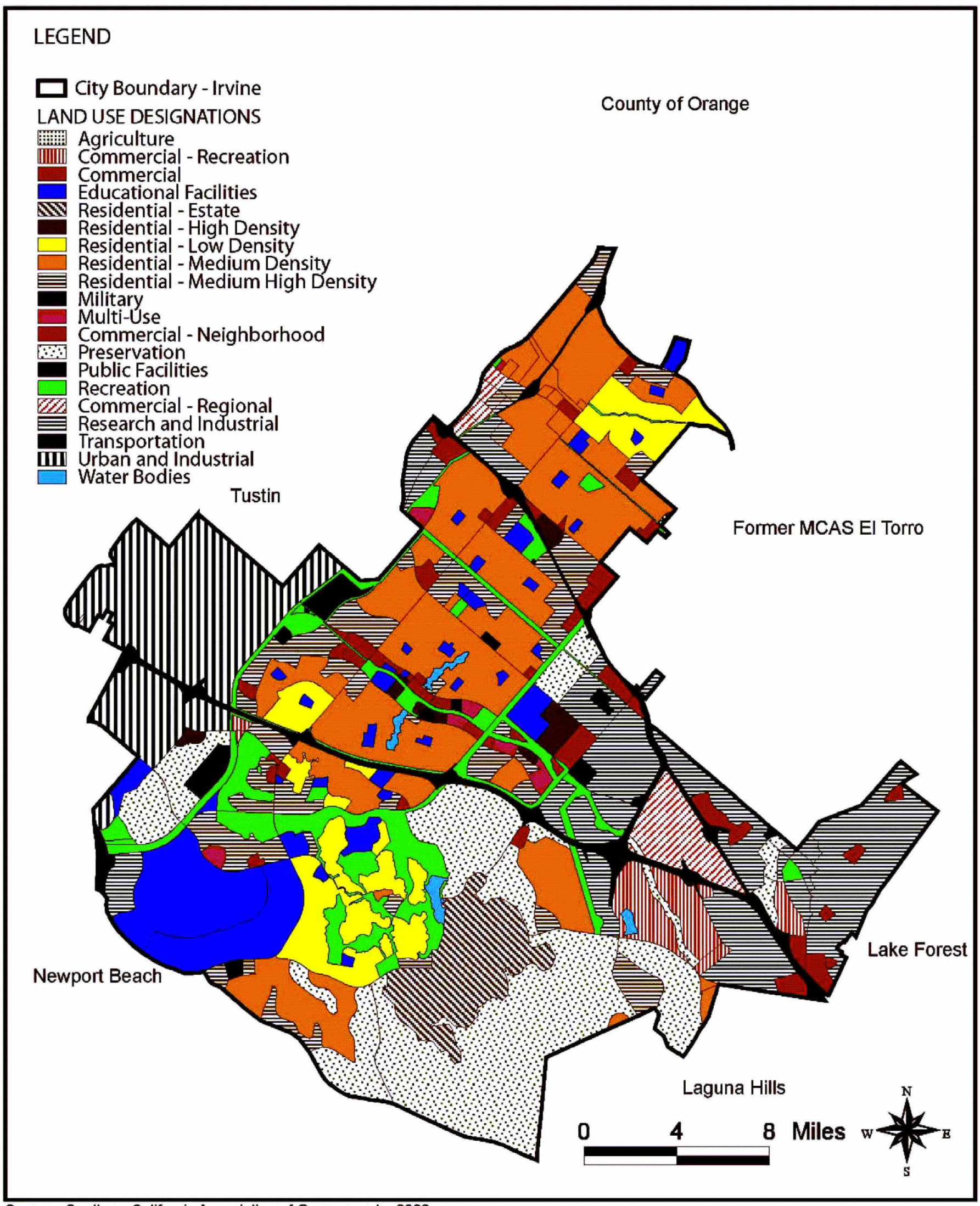
Source: Southern California Association of Governments, 2000.

Land Uses in the City of Laguna Hills in the SOCTIIP Study Area



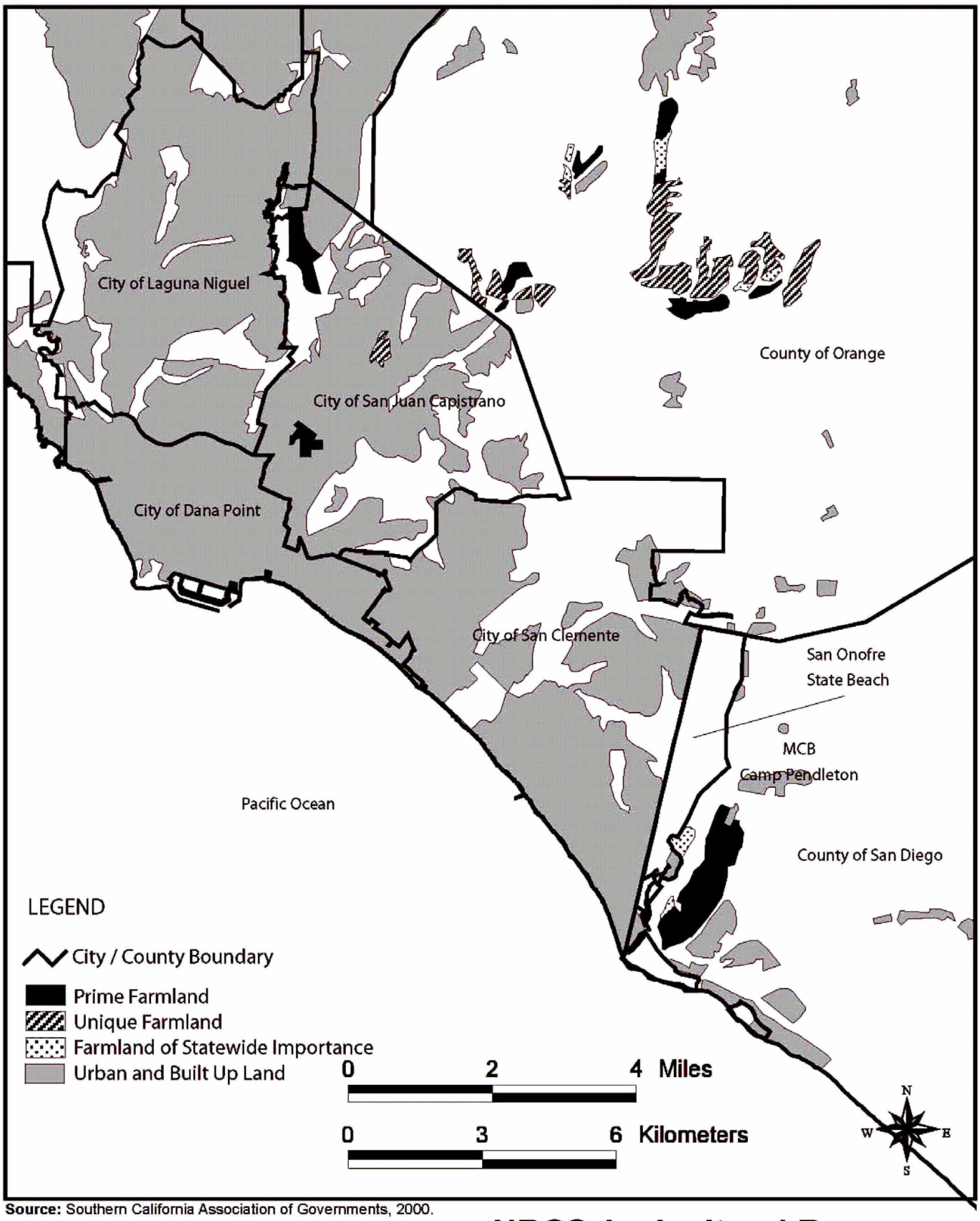
Source: Southern California Association of Governments, 2000.

Land Uses in the City of Lake Forest in the SOCTIIP Study Area



Source: Southern California Association of Governments, 2000.

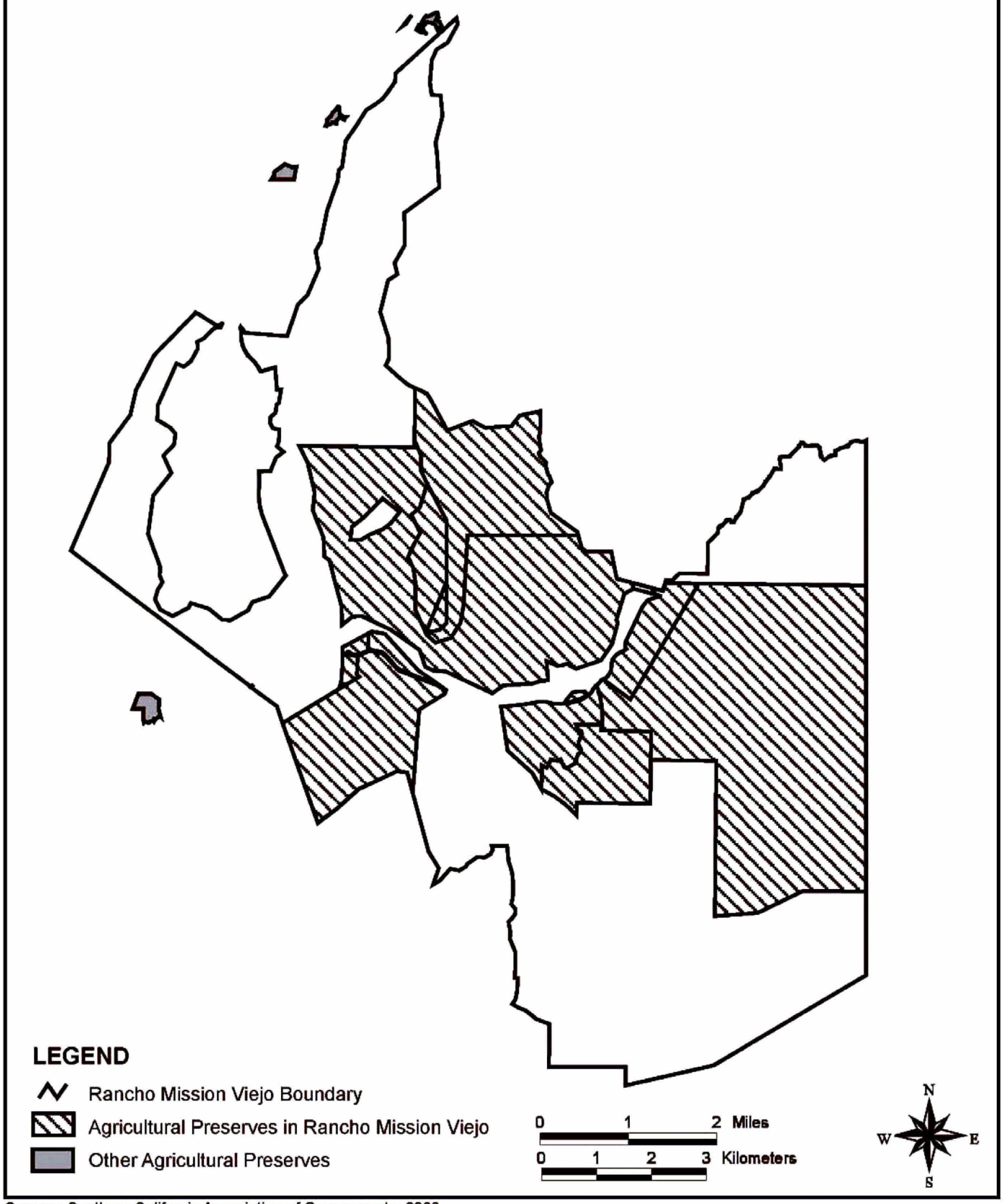
Land Uses in the City of Irvine in the SOCTIIP Study Area



Source: Southern California Association of Governments, 2000.

NRCS Agricultural Resources in the SOCTIIP Study Area

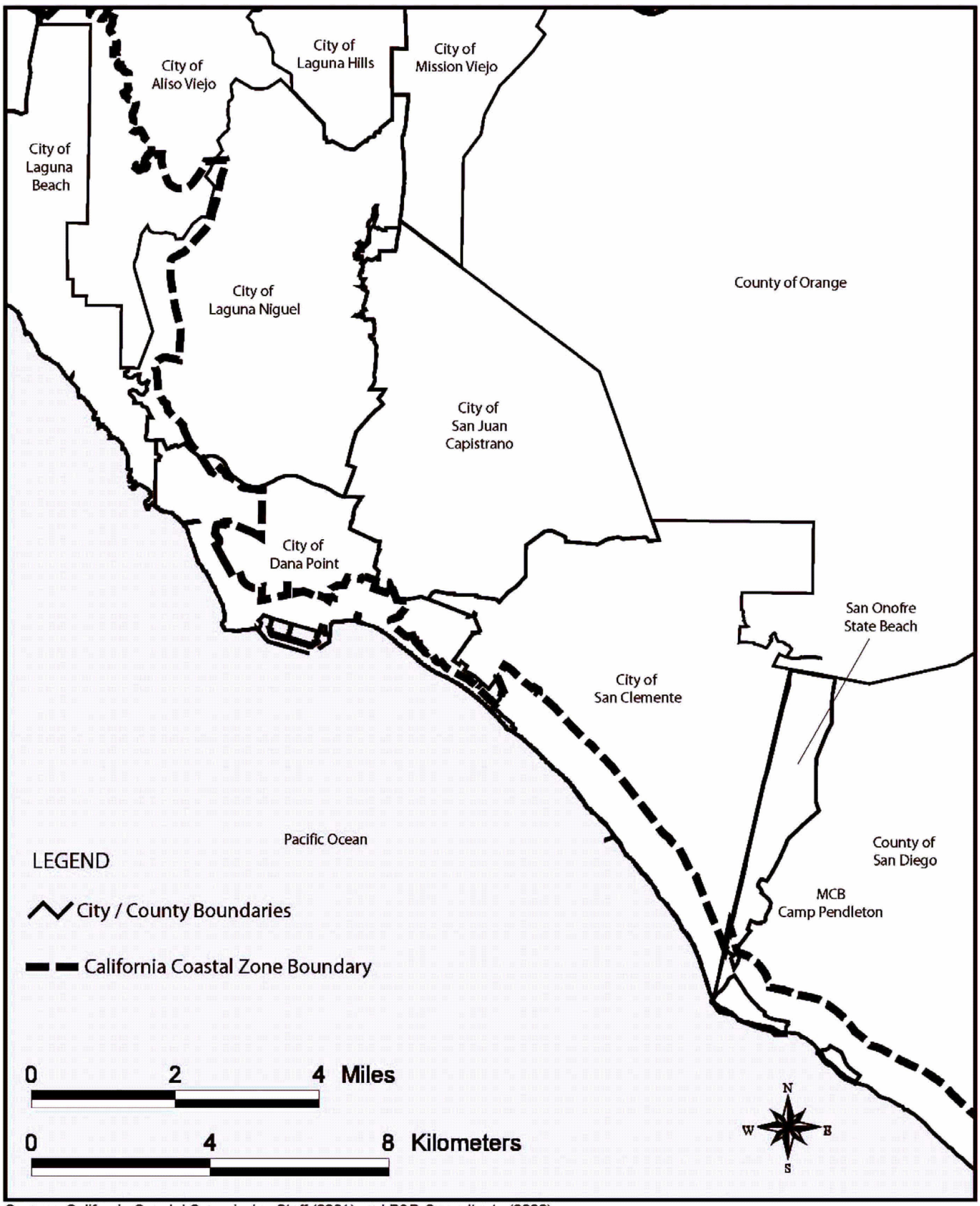
Note: For the locations of the County of Orange and individual cities in the Study Area, refer to Figure 3.3-1.



Source: Southern California Association of Governments, 2000.

Agricultural Preserves in the SOCTIIP Study Area

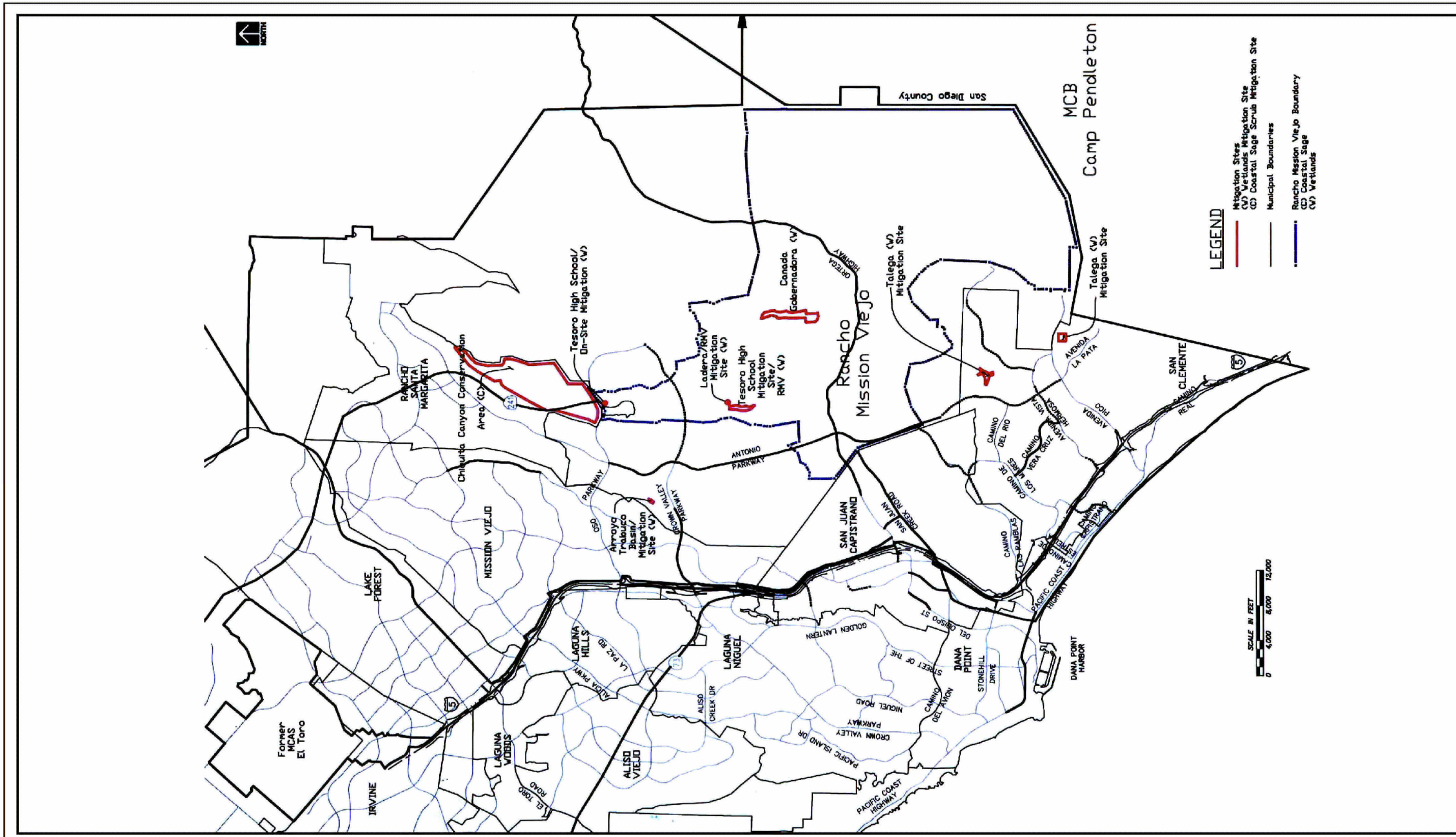
Note: For the locations of the County of Orange and individual cities in the Study Area, refer to Figure 3.3-1.



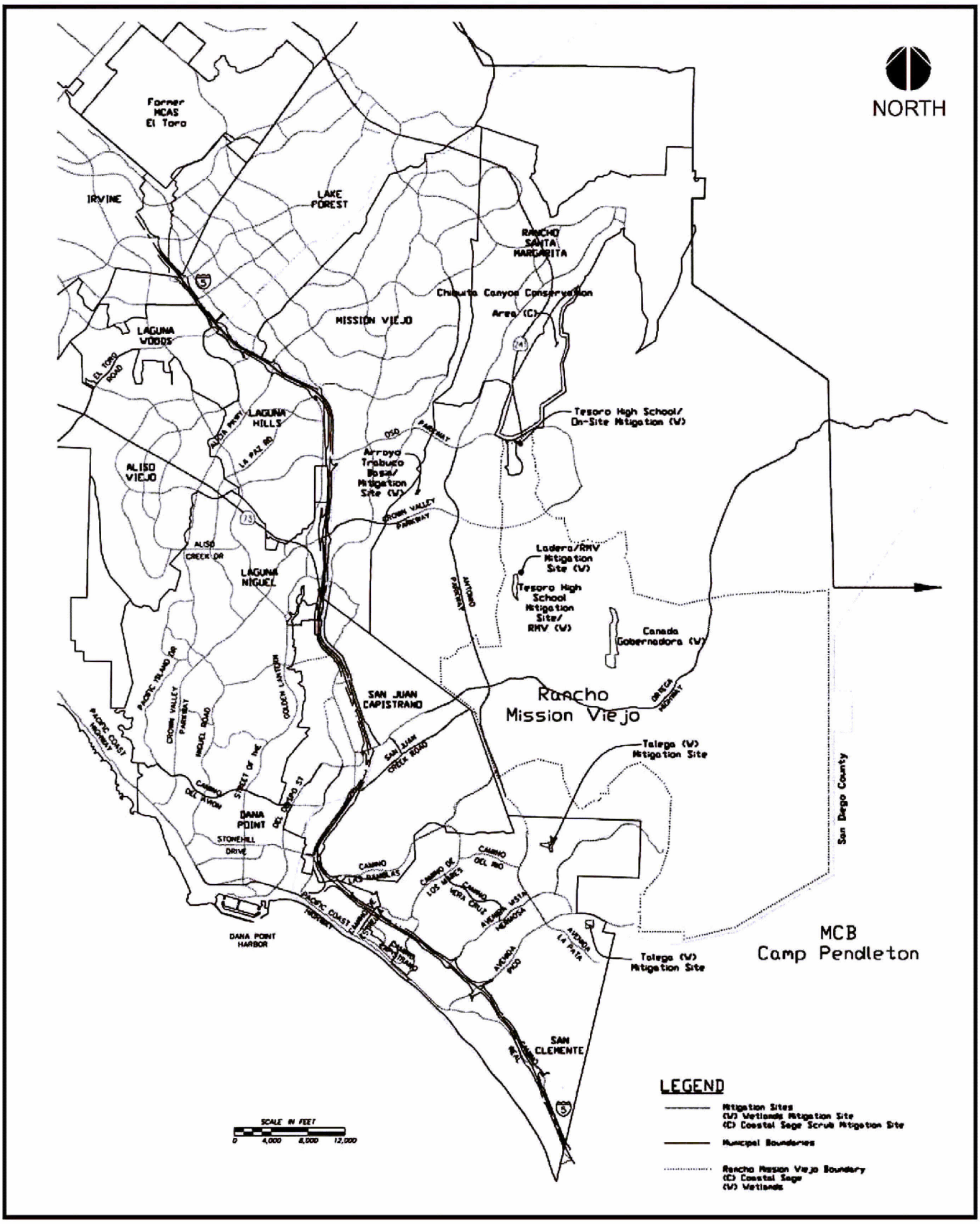
Source: California Coastal Commission Staff (2001) and P&D Consultants (2002).

California Coastal Zone Boundary in the SOCTIIP Study Area

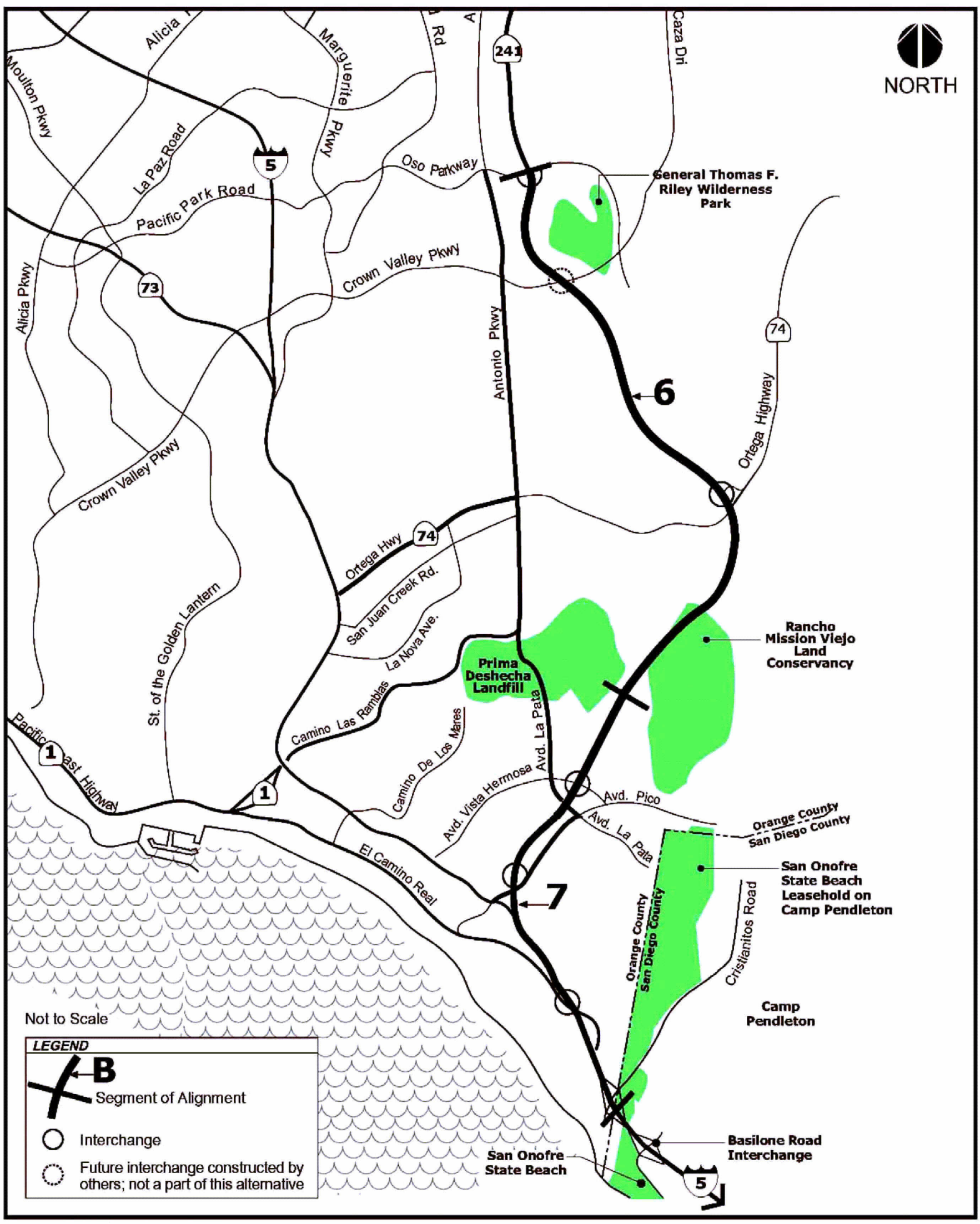
Note: For the locations of the County of Orange and individual cities in the Study Area, refer to Figure 3.3-1.



Mitigation Areas in the SOCTIIP Study Area

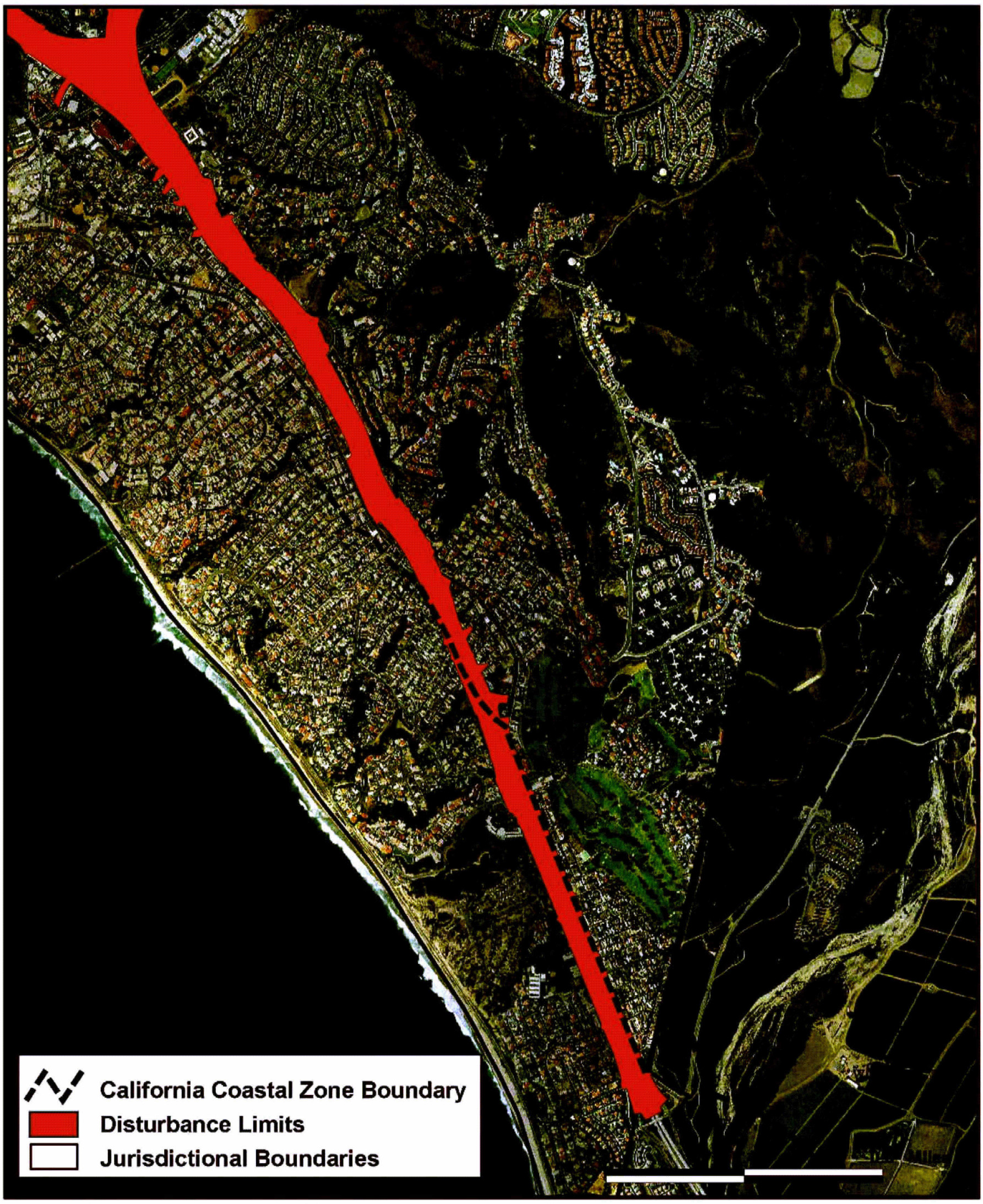


Mitigation Areas in the SOCTIIP Study Area



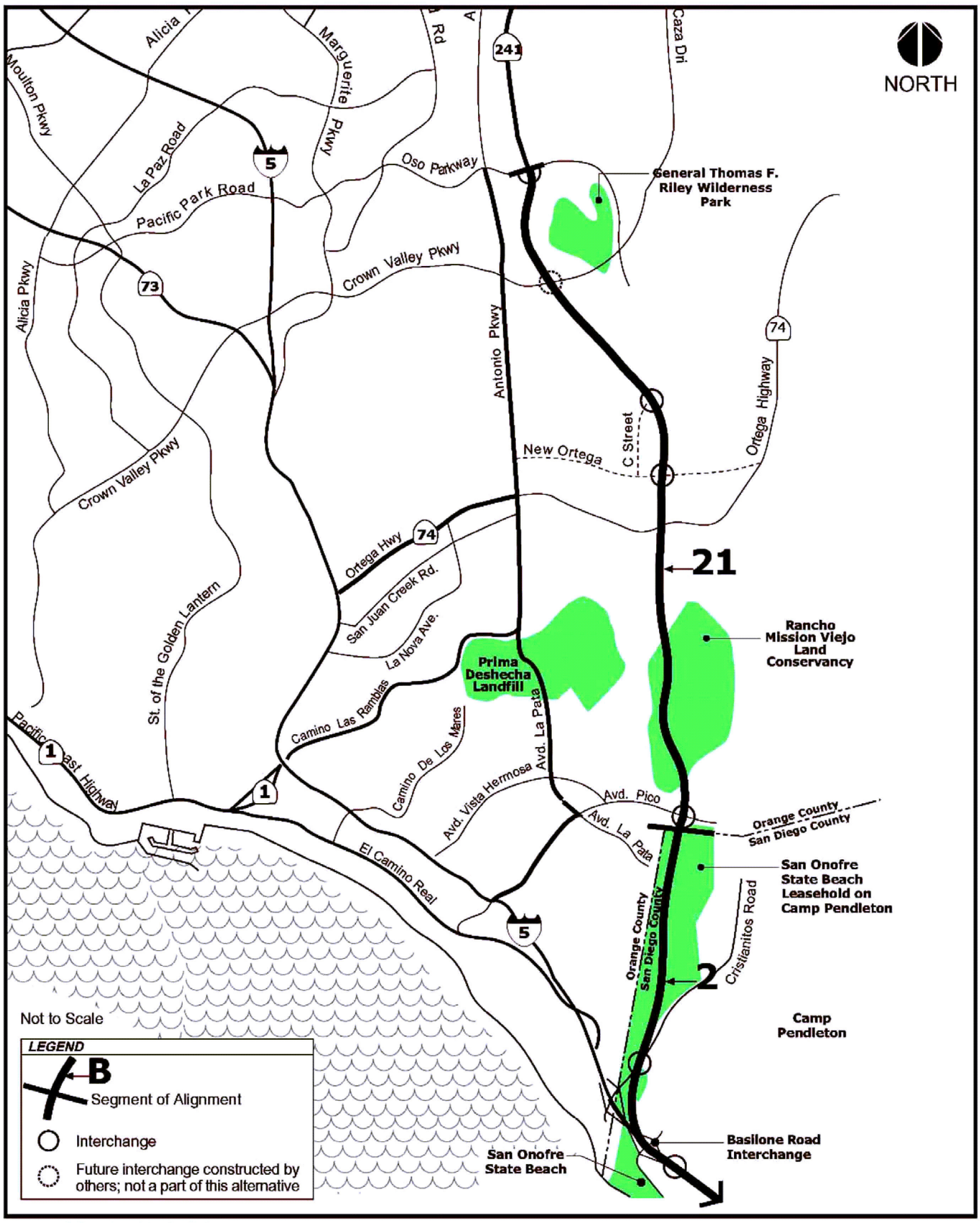
Source: P&D Consultants (2001).

Alignment of the Far East Corridor - Talega Variation Alternatives



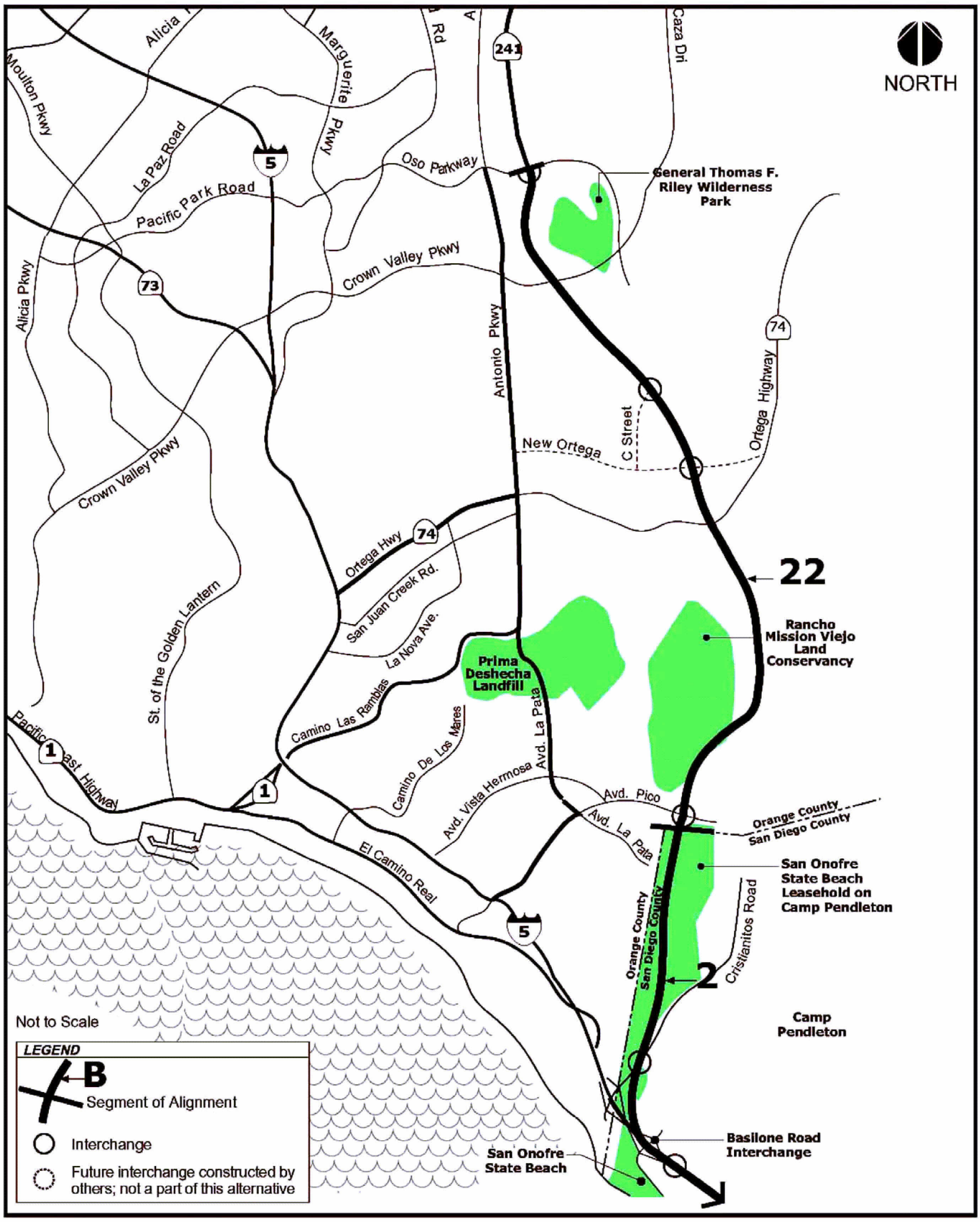
Source: California Coastal Commission Staff (2001) and P&D Consultants (2002)

Area in Coastal Zone for FEC-TV, CC, A7C and A7C-7SV - Initial and Ultimate Alternatives



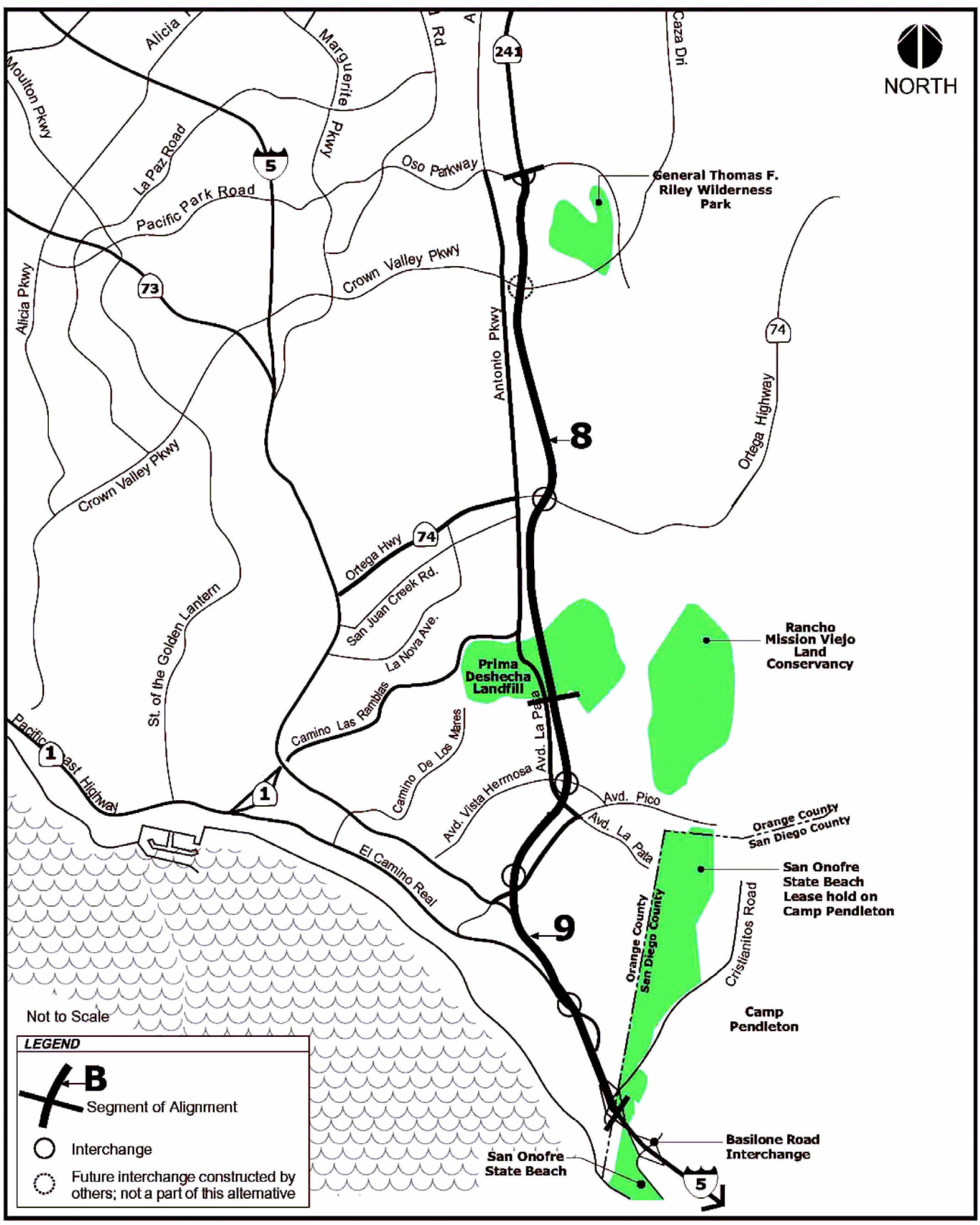
Source: P&D Consultants (2003).

Alignment of the Far East Corridor-West Alternatives



Source: P&D Consultants (2003).

Alignment of the Far East Corridor-Modified Alternatives



Source: P&D Consultants (2001).

Alignment of the Central Corridor - Complete Alternatives

5.3 CONSISTENCY WITH ADOPTED LAND USE PLANS

Each SOCTIIP Alternative was evaluated for consistency with adopted land use plans, as described in the following Sections.

5.3.1 Orange County

General Plans of the cities and the unincorporated Orange County areas in which the alternatives are located were reviewed to determine whether or not a given SOCTIIP Alternative was accommodated in the General Plan Land Use Elements (LUEs) of the affected jurisdictions. LUEs are required to be consistent with the Circulation Element of General Plans which identify all facilities shown on the MPAH including the conceptual alignment of the FTC-South. In Orange County, the SOCTIIP Alternatives consistent with General Plans are the FEC, FEC-AFV and FEC-OHV Initial and Ultimate Alternatives, which include alignments in Orange County similar to the alignments shown on the MPAH for the FTC-South. To a lesser degree, FEC-M, FEC-W, A7C-FEC-M, FEC-CV and FEC-APV Initial and Ultimate Alternatives are consistent, but would have some minor previously unplanned land use impacts on the RMV Land Conservancy, in the case of the FEC-M, FEC-W and A7C-FEC-M in the City of San Clemente to accommodate ramps associated with these alternatives. As discussed earlier in this Section, the inconsistency of an alternative with the adopted land use plans is defined in terms of area of impact of each alternative by jurisdiction and general plan land use category.

The No Action Alternatives would not be consistent with the adopted land use plans in Orange County because they do not include the FTC-S as shown in the MPAH and area General Plans.

5.3.2 San Diego County

There are no cities in San Diego County which would have land uses affected by the SOCTIIP Alternatives. The County of San Diego defers to MCB Camp Pendleton related to land uses and planning on the Base. Therefore, no General Plans for the County or any city were used for the consistency evaluation in San Diego County. The INRMP for MCB Camp Pendleton and the San Onofre State Beach General Plan were reviewed. Both of these planning documents acknowledge the FTC-South planning efforts.

The INRMP discusses the SOCTIIP Alternatives in Section 2.5.1 (Public Interstate Freeway, Railroad Right-of-Ways, and Future Transportation Corridors). The INRMP states the following regarding the SOCTIIP:

> "In 1988 the Marine Corps Commandant agreed that the TCA could evaluate an on-Base alignment of the proposed SOCTIIP toll road project, subject to the following stipulations: (1) that other off-Base alignment alternatives must also be considered and evaluated in an equal manner; (2) that any planned Camp Pendleton alignment must closely adhere to the Base's northern boundary; (3) that any adverse environmental impacts created as a result of siting this route on the Base must be fully and properly mitigated; and most importantly, (4) that any on-Base alignment must not impact the

> Marine Corps' mission nor interfere with the Base's operational flexibility. This Marine Corps position has remained steadfast throughout the years of TCA planning for this proposed toll road; and the Marine Corps continues to monitor and sometimes participate in TCA's further planning efforts for this proposed transportation improvement project. If constructed on Camp Pendleton, only one alignment alternative, meeting the above stipulations, is considered acceptable to the Marine Corps." (pp. 2-55, Final INRMP for Marine Corps Base and Marine Corps Air Station Camp Pendleton, October 2001).

The only alignment that fits this description is the FEC alignment over the Base over the SOSB outlease area. The Department of the Navy (DoN) has stressed this position in official communications (refer to the Military Impacts Technical Report and References). Although this alignment would still have an impact on the military training mission at Camp Pendleton, of the alignments that traverse the base north of I-5, the only acceptable alignment would be an alignment shown generally following the FEC. Four SOCTIIP Alternatives fit this criterion: the FEC and A7C-FECV-Initial and Ultimate Alternatives. The other Alternatives that affect the Base along the I-5 right-of-way or do not affect the Base at all would also be considered consistent. These are the FEC-APV, FEC-OHV, CC, CC-ALPV, CC-OHV, A7C, A7C-7SV, A7C-OHV and A7C-ALPV-Initial and Ultimate Alternatives and the AIP, AIO, I-5 and No Action Alternatives.

Because SOSB is an outlease area of MCB Camp Pendleton and the DoN is the owner/lessor, land use control lies with the DoN. Notwithstanding its lessee status, the California Department of Parks and Recreation adopted a General Plan for SOSB in 1984. The General Plan acknowledges the FTC-South alignment through the Park and east of San Mateo Creek, which had already been on the County or Orange's General Plan for several years. The Planning and Zoning discussion of the Environmental Impact Element of the SOSB General Plan states:

> "The FTC and La Pata Avenue are shown in the Master Plan of Arterial Highways component of the Orange County General Plan, adopted in 1983. The Foothill Transportation Corridor would have six or eight lanes, claiming a right-of-way of 300-400 feet wide. The final route for the FTC has not been selected, but the maps show it running along the east side of San Mateo Creek the full length of Subunit 1, intersecting with the San Diego Freeway at the location of Basilone Road interchange." (pp. 57, 1984 San Onofre State Beach Revised General Plan.)

In addition, the State Department of Parks and Recreation was notified of a variety of conceptual alignments that passed through or near the park in a 1983 letter from Supervisor Thomas F. Riley responding to the public circulation of the Draft SOSB General Plan and EIR. This 1983 letter clarified the intentions of the County to build a corridor in the area. It should be noted that this 1983 correspondence predates the TCA and occurred when Orange County was the lead agency/proponent for the transportation corridors, including FTC-S.

The SOSB General Plan does not discuss any consistency or compatibility of the FTC. However, because the SOSB General Plan anticipated plans for the FTC through the Cristianitos Subunit (Subunit 1) which would actually be on the west and not the east side of the Creek, and

because the entire Subunit lies west of San Mateo Creek, there is no inconsistency with the SOSB General Plan for the FEC, FEC-CV, FEC-AFV, A7C-FECV A7C-FECV-C and the A7C-FECV-AF Initial and Ultimate Alternatives. The other Alternatives that affect SOSB along the I-5 right-of-way or that do not affect the State Beach at all would also be considered consistent. These are the FEC-APV, FEC-OHV, CC, CC-ALPV, CC-OHV, A7C, A7C-7SV, A7C-OHV and A7C-ALPV-Initial and Ultimate Alternatives and the AIP, AIO, I-5 and No Action Alternatives.

5.4 OVERVIEW OF SHORT TERM LAND USE IMPACTS

5.4.1 SHORT TERM LAND USE IMPACTS OF THE SOCTIIP BUILD ALTERNATIVES

During the construction of a SOCTIIP build alternative, existing or planned land uses may be affected by impacts such as dust, noise, views of construction and disturbed areas, and/or disruptions to surface transportation access. These potential short term impacts of the SOCTIIP build alternatives are discussed in detail in the short term impact analyses in the Air Quality, Noise, Visual Impact Assessment and Traffic and Circulation Technical Reports, respectively.

Another potential short term impact of the SOCTIIP build alternatives related to land use would be associated with the recycling of previously developed lands that were acquired and cleared of the existing development to accommodate the construction of the alternative. These are the areas needed during construction, but are outside of the permanent right-of-way area. These left over parcels, called remainder parcels, may be large enough on their own or may potentially be combined to provide new parcels available for development. Remainder parcels which are large enough for reuse would be sold after the completion of the construction of the SOCTIIP build alternative and may be subject to independent environmental review for any planned land use. Uneconomic parcels that are too small for reuse may be retained as part of the right-of-way for any SOCTIIP build alternative. These would not be adverse short term impacts of the SOCTIIP build alternatives.

The construction of the SOCTIIP build alternatives may require the acquisition of land for temporary use during construction only. This may include land to accommodate construction staging, materials storage, equipment storage and other activities during construction only. At the completion of the construction of a SOCTIIP build alternative, these areas would no longer be needed for the SOCTIIP build alternative. Remainder parcels used for temporary construction purposes would be anticipated to be sold or returned to their original owners, as appropriate. The short term use of this land for the construction of the SOCTIIP build alternatives would not be an adverse impact. Tables showing impacts of each Alternative in the subsequent sections quantify the temporary disturbance area, which in most cases is inclusive of the permanent right-of-way impacts.

5.4.2 SHORT TERM IMPACTS OF THE NO ACTION ALTERNATIVES

The No Action Alternatives will not result in the acquisition of any property, the removal of any existing land uses or the construction of any SOCTIIP transportation improvements. Therefore, the No Action Alternatives will not result in short term impacts related to land use.

5.5 FAR EAST CORRIDOR–COMPLETE-INITIAL AND ULTIMATE ALTERNATIVES

The FEC-Initial and Ultimate Alternatives would traverse areas under the jurisdiction of MCB Camp Pendleton, the California Department of Parks and Recreation and the County of Orange (unincorporated areas). Table 5.5-1 summarizes the areas permanently and temporarily impacted by the FEC Alternatives by jurisdiction. The total area of permanent impact, shown in tables in this section as "Permanent ROW," is the land area anticipated to be the permanent right-of-way (ROW) for the road improvements. The total area of temporary impact, shown in this section as "Temporary Disturbance," is the land area that would be disturbed temporarily during construction. This temporary disturbance may include remedial grading, drainage improvements and/or temporary construction staging, storage areas and often includes or overlaps the permanent ROW. Numbers in this table and the rest of the Summary Tables in this Section have been rounded to the nearest whole number. Figure 5.5-1 shows the general alignment of the FEC Alternatives with segments as they apply to the Alternative. As discussed in Section 2.0 (Project Alternatives), the FEC-Initial Alternative has a narrower cross-section than the FEC-Ultimate Alternative and therefore, impacts less area. Figures illustrating specific impacts on land uses of the initial and ultimate Alternatives of each of the corridor alignments are provided in Appendix A.

For this discussion, the term "alignment" refers to the alignment of an Alternative as indicated by the centerline. When reference is made to a specific Alternative, i.e. FEC-Ultimate or FEC-Initial Alternative, it will be called out specifically for that Alternative.

TABLE 5.5-1
SUMMARY OF LAND USE IMPACTS OF THE FEC-INITIAL AND ULTIMATE ALTERNATIVES

Jurisdiction	Land Use Type	FEC-Initial Area Affected hectares/acres		FEC-Ultimate Area Affected hectares/acres	
		Permanent ROW	Temporary Disturbance	Permanent ROW	Temporary Disturbance
County of Orange					
Rancho Mission Viejo	Open Space (5)	339/836	360/889	365/901	472/1,167
Rolling Hills (b)	Community Commercial (2A)	1/3	3/7	3/8	5/13
MCB Camp Pendleton (d)	Public Facilities (4)	3/7	3/8	3/7	4/9
City of San Clemente (c)	Open Space	2/4	2/4	2/4	2/4
MCB Camp Pendleton (a)	Military	49/121	52/129	51/125	56/139
San Onofre State Beach	Public Recreation	117/289	122/302	161/398	167/413
Total Impact Area	--	509/1,260	540/1,337	583/1,442	705/1,745

Source: County of Orange Land Use Element (2000) P&D Consultants (2001), San Clemente Land Use Element (1993), San Onofre State Beach General Plan (1984) and MCB Camp Pendleton Final Integrated Natural Resources Management Plan (October 2001).

(a) The area shown includes the existing I-5 right-of-way area, which results in an overstatement of land use impacts on MCB Camp Pendleton.
(b) This includes the Rolling Hills PC Specific Plan which assumed implementation of a transportation corridor generally following the previous CP Alignment (now referred to as the FEC Alternative). The City of San Clemente is in the process of annexing all the Rolling Hills PC by the end of 2003.
(c) Impacts in San Clemente occur in Talega PC along Avenida Pico in open space to accommodate the interchange.
(d) A small segment of MCB Camp Pendleton is in Orange County at the northern border of SOSB.

5.5.1 OVERVIEW OF THE FEC-INITIAL AND ULTIMATE ALTERNATIVES FROM OSO PARKWAY TO BASILONE ROAD

The analysis of the FEC Alternative is divided into two segments. The first segment of the FEC Alignment extends from the existing terminus of the FTC-North (FTC-N) at Oso Parkway southeast to Ortega Highway, skirts around the Rancho Mission Viejo Land Conservancy, continues south through the Rolling Hills PC, crosses the TRW Capistrano Test Site on RMV, and continues south to the northern boundary of San Onofre State Beach (SOSB) just north of the Orange County/San Diego County boundary. Segment 2 extends south across SOSB and intersects with I-5 close to the Cristianitos exit with ramps and merge lanes continuing south on I-5 to just past Basilone Road. The alignment of the FEC Alternatives and Segments 1 and 2 are shown on Figure 5.5-1.

5.5.2 LAND USE IMPACTS OF THE FEC-INITIAL AND ULTIMATE ALTERNATIVES FROM OSO PARKWAY TO THE SAN DIEGO COUNTY LINE (SEGMENT 1)

Segment 1 lies entirely in the County of Orange jurisdiction. The County of Orange LUE designates this area Open Space (5) with Agricultural District Zoning (A1). Table 5.5-2 summarizes the impacts of this segment of the FEC-Initial and Ultimate Alternatives, based on the existing LUE designations for the areas affected by these Alternatives.

TABLE 5.5-2
LAND USE IMPACTS OF THE FEC-INITIAL AND ULTIMATE ALTERNATIVES FROM OSO PARKWAY TO THE SAN DIEGO COUNTY LINE

Jurisdiction	Land Use Type	FEC-Initial Area Affected hectares/acres		FEC-Ultimate Area Affected hectares/acres	
		Permanent ROW	Temporary Disturbance	Permanent ROW	Temporary Disturbance
County of Orange					
Rancho Mission Viejo	Open Space (5)	339/836	360/889	365/901	472/1,167
Other, (Rolling Hills, Camp Pendleton)	Open Space (5), Public Facilities	3/7	5/12	4/11	8/19
Total Impact Area		341/844	364/900	369/912	480/1,186
Source: County of Orange Land Use Element (2000) and P&D Consultants (2001).					

5.5.2.1 Impacts of the FEC-Initial and Ultimate Alternatives on Existing Land Uses

<u>County of Orange</u>

Segment 1 of the FEC Alternatives would be adjacent to and east of Tesoro High School. There would be no adverse impacts to this school as a result of the FEC Alternatives because this corridor was anticipated in the design of the school as documented in the Chiquita Canyon High School EIR (now "Tesoro High School").

At its closest point, the alignment would be approximately 3.4 km (2.1 miles) east of the Ladera

Ranch PC. There would be no adverse land use impacts on this PC as a result of the distance of existing and planned land uses in this PC from the FEC alignment and the buffer/screening effect provided between the PC and the FEC alignment by topography including Chiquita Ridge.

South of Oso Parkway, Segment 1 would be approximately 2.4 km (1.5 miles) from uses in Coto de Caza PC. The Coto de Caza Specific Plan conceptually shows an alignment for a transportation corridor generally following the FEC alignment. There would be no adverse land use impacts on this PC as a result of an open space green belt and ridgeline between the uses in Coto de Caza and the alignment of the FEC Alternatives.

On RMV, Segment 1 of the FEC Alternatives would directly impact existing farming and agricultural operations, agricultural preserves and lease areas. It would directly impact access roads used for ranch operations. These potential impacts are discussed in Section 6.0 (Impacts to Agricultural Resources). The FEC-Initial and Ultimate Alternatives would directly impact areas leased to AirTouch (Verizon Wireless), Color Spot Nursery, Ewles Aggregates and the TRW Capistrano Test Site, as described below:

AirTouch (Verizon) Antenna Sites. There are two sites north of Ortega Highway which would be impacted by the FEC alignment.

Color Spot Nursery. The FEC alignment would traverse the north part of this lease area, directly impacting the northern part of the nursery. However, the lease is subject to termination in 2003. The nursery would be able to continue operations, and the loss of this part of the nursery would not be considered an adverse impact.

Ewles Aggregates. The FEC alignment would traverse the east part of this lease area, directly impacting it. A reservation for a corridor alignment, similar to the alignment of the FEC Alternative, is included as part of the lease agreement. However, the aggregate operations at this facility and the lease holder would be substantially impacted by the FEC-Initial and Ultimate Alternatives.

TRW Capistrano Test Site

Access to the TRW Capistrano Test Site is from Avenida Pico. The FEC alignment would traverse the west part of the TRW site, truncating access to the site. However, the design of these Alternatives includes provisions to maintain access to the TRW Site. The FEC Alignment would also directly impact the TRW access road and front gate, including the security station in the west part of this lease area.

The other lease areas on this part of the RMV would not be directly impacted by the FEC-Initial and Ultimate Alternatives.

The FEC-Initial and Ultimate Alternatives would not directly impact the ranch uses known as the Last Round Up and Amantes Camp. The FEC Alternatives are the closest any of the SOCTIIP build alternatives will come to these resources on RMV. Impacts to uses supporting agricultural operations are discussed in Section 6.0.

Rolling Hills Planned Community

Approximately 30 meters (m) (100 feet) of the FEC alignment traverses the Rolling Hills PC which is currently being developed. The development plan for Rolling Hills PC was revised in 1999 and 2000. Both revisions reflect the FEC Alternative in the development plans which reserves an area for the FEC alignment in an area designated open space both in the County of Orange LUE and the PC Regulations/Zoning. Additionally, the development agreement with the City of San Clemente, for the Talega Joint Planning Authority, specifically requires the developer to support the FEC Alternative alignment (formerly referred to as the CP) and oppose other alignments that could affect the City. Finally, the City of San Clemente is actively seeking to annex this area and should complete its annexation efforts by the end of 2003.

City of San Clemente

The FEC-Initial and Ultimate Alternatives affect an approximately 1.5 ha (4 ac) parcel on the eastern edge of the City along Avenida Pico. This area is shown as Open Space both Public and Private in the City's General Plan. Because the Talega PC assumed the corridor to occur in along the FEC alignment, this is not considered an adverse impact.

5.5.2.2 Impacts of the FEC-Initial and Ultimate Alternatives on Committed and Planned Development

County of Orange Rancho Mission Viejo

The FEC Alternatives would not adversely impact undeveloped land and would have no impacts on committed or planned development on RMV because there are no committed or planned land uses on the RMV. However, this segment would impact areas in the proposed development plan for RMV (November 2001). Figure 5.5-1A shows the centerlines of the corridor alternatives as they relate to the proposed RMV development. These areas are proposed for residential, business park, commercial, urban activity center (mixed use), regional park and open space in planning areas 12A, 12B, 3B, 3C, 3D and 13. The area south of Ortega Highway is proposed for residential, business park, commercial, golf resort, regional park and open space in planning areas 13, 9B, 6, 7A 9E and 8B. The RMV proposal does not specify the location of any land uses except residential and open space (open space, regional park and O'Neill Ranch overlay). Therefore, exact acreage figures by the proposed land use category that could be affected by this segment of the FEC-Initial and Ultimate Alternatives cannot be determined.

City of San Clemente

At its closest point, the alignment of the FEC Alternatives would be approximately 1.4 km (0.9 mile) east of planned land uses in Champion Hills including business park, golf course, medium density residential and open space uses. There would be no direct or indirect adverse impacts to the planned uses due to distance and the buffer provided by proposed land uses in the Rolling Hills PC (the part of the Talega development in unincorporated Orange County) and the RMV Conservancy. As with Rolling Hills PC, the planning for the Champion Hills PC assumed

implementation of a transportation corridor on the alignment of the FEC Alternative.

5.5.3 LAND USE IMPACTS OF THE FEC-INITIAL AND ULTIMATE ALTERNATIVES FROM THE SAN DIEGO COUNTY LINE TO BASILONE ROAD (SEGMENT 2)

Segment 2 of the FEC Alternatives extends south through the northern boundary of SOSB through SOSB to I-5 at its intersection with Cristianitos Road. The FEC Alternatives merge with I-5 and continue southeast past Basilone Road on MCB Camp Pendleton. SOSB is under the jurisdiction of the State of California Department of Parks and Recreation and is operated as a leased area from MCB Camp Pendleton. Table 5.5-3 summarizes the land use impacts of Segment 2 of the FEC Alternatives.

TABLE 5.5-3
LAND USE IMPACTS OF THE FEC-INITIAL AND ULTIMATE ALTERNATIVES FROM THE SAN DIEGO COUNTY LINE TO BASILONE ROAD

Jurisdiction	Land Use Type	FEC-Initial Area Affected hectares/acres		FEC-Ultimate Area Affected hectares/acres	
		Permanent ROW	Temporary Disturbance	Permanent ROW	Temporary Disturbance
MCB Camp Pendleton (a)	Military	49/121	52/129	51/125	56/139
San Onofre State Beach	Public Recreation	117/289	122/302	161/398	167/413
Total Impact Area	--	166/410	174/431	212/523	223/551

Sources: P&D Consultants (2001), San Onofre State Beach General Plan (1984) and MCB Camp Pendleton Final Integrated Natural Resources Management Plan (October 2001).

(a) The area shown includes the existing I-5 right-of-way area, which results in an overstatement of land use impacts on MCB Camp Pendleton.

5.5.3.1 Impacts of the FEC-Initial and Ultimate Alternatives on Existing Land Uses

<u>San Onofre State Beach</u>

Segment 2 extends south through the Cristianitos Subunit of SOSB, the inland area. As it enters this lease area, it abuts an electrical substation in SOSB. Most of the 535 ha (1,321 acre) subunit of SOSB is open space with dirt hiking trails. The most prominent uses in the inland area are the San Mateo Campground and the hiking trails extending inland and beachward from the Campground. The FEC alignment would impact the San Mateo Campground by temporarily interfering with the access during construction. Segment 2 would have impacts on the general operations and resource value of SOSB, as it would introduce an urban use to an area that is valued for its outdoor recreation opportunities. Further, the direct impacts to the Cristianitos Subunit would reduce the size of SOSB by approximately 117 ha (289 ac) under the FEC-Initial Alternative and 161 ha (398 ac) under the FEC-Ultimate Alternative. These impacts to this existing land use would be adverse. No impacts on SOSB Trestles Subunit are expected as a result of the elevated ramp connecting the FEC Alternatives to I-5.

For some time, an alignment for the FTC has been anticipated to be in the vicinity of the SOSB and was expected to affect the SOSB property. The FEC alignment would affect the SOSB, especially the Cristianitos Subunit, as it bisects this area. The revised General Plan (1984) for the SOSB (pp.57) acknowledged the effects of three projects that had the potential to impact the SOSB, one of which was the corridor, as follows:

> "Three proposed transportation projects would have a major impact on Subunit 1 of San Onofre State Beach, if carried out as planned. These projects are the Foothill Transportation Corridor, the La Pata Avenue Parkway and the bullet train.
>
> The FTC and La Pata Avenue are shown in the Master Plan of Arterial Highways component of the Orange County General Plan, adopted in 1983. The Foothill Transportation Corridor would have six or eight lanes, claiming a right-of-way of 300-400 feet wide. The final route for the FTC has not been selected, but the maps show it running along the east side of San Mateo Creek the full length of Subunit 1, intersecting with the San Diego Freeway at the location of Basilone Road interchange." (pp. 57, 1984 San Onofre State Beach Revised General Plan.)

The reference to the FTC running along the east side is consistent with earlier plans for the FTC. In 1984, the SOSB General Plan was adopted. Since then, the lanes planned for the Alternatives affecting SOSB would be four to six lanes even under the FEC-Ultimate Alternative. The La Pata Avenue extension through the State Beach and the bullet train project have since been abandoned.

City of San Clemente

The FEC Alternatives travel east of and parallel to the east boundary of the City of San Clemente. The distances from the alignment to existing land uses in the City range from 170 meters (557 feet) immediately south of the San Clemente Municipal Golf Course to over 0.5 km (0.3 mile) in the north part of the City. The City's General Plan includes a transportation corridor, generally following the alignment of the FEC Alternatives. There are no impacts to existing, committed and planned land uses in the City as a result of the FEC Alternatives because the alignment does not traverse land within the corporate boundary of the City. The future annexation area in Rolling Hills PC has accommodated the alignment of the FEC Alternatives. Therefore, no direct impacts to the City's sphere of influence would occur under these Alternatives.

MCB Camp Pendleton

The FEC Alternatives include ramps at Basilone Road at Green Beach and near the San Onofre Gate below Camp San Onofre (Area 51). The construction and operations of these Alternatives in this area could impact MCB Camp Pendleton Green Beach. Impacts would occur only during construction and relate mostly to negative externalities such as noise, access and dust which impact the recreation uses in 51 Area at MCB Camp Pendleton. Temporary impacts to recreation uses are Green Beach are discussed in the Recreation Technical Report. Impacts to amphibious landings and training uses at Green Beach are discussed in detail in the Military

Impacts Technical Report.

Military impacts, including impacts to training operations and existing and planned land uses, are discussed in detail in the Military Impacts Technical Report. Impacts to the SOSB, which is on property leased from the United States of America, are discussed above and in the Recreation Resources Technical Report.

Two existing lease areas on Camp Pendleton in the SOCTIIP study area are the San Onofre State Beach and the agricultural lease area. These leases, their land uses and the potential impacts of the SOCTIIP alternatives on these land uses are discussed earlier in this Section and in Section 6.0 (Impacts Related to Agricultural Resources), respectively.

5.5.3.2 Impacts of the Far East Corridor-Initial and Ultimate Alternatives on Committed and Planned Development

San Onofre State Beach

The SOSB General Plan and Land Use & Facilities Map discusses and depicts areas where a proposed 18-hole golf course directly west of the San Mateo Camp Ground, primitive camps and two additional campgrounds north of the San Mateo Campground are conceptually planned for the Cristianitos Subunit. However, there are no existing implementation plans for these facilities and the California Department of Parks and Recreation would be required to get permission from MCB Camp Pendleton to build the golf course on the leased property. The alignment of the FEC Alternatives and the remaining years on the lease would likely preclude the implementation of a golf course of this size in the planned location shown in the SOSB General Plan. This would be an adverse impact of the FEC Alternatives on planned land uses at SOSB.

MCB Camp Pendleton

There are no known committed or planned land uses on MCB Camp Pendleton that would be affected along this segment of the FEC-Initial and Ultimate Alternatives.

5.5.4 COASTAL ACT COMPLIANCE FOR THE FEC-INITIAL AND ULTIMATE ALTERNATIVES

The California Coastal Zone in the SOCTIIP study area and the alignments of the SOCTIIP build alternatives which occur in the coastal zone are shown on Figure 5.5-2. Figure 5.5-3 and Figure 5.5-4 show the disturbance limits for the FEC-Initial and Ultimate Alternatives in the Coastal Zone, respectively. Improvements to I-5 and the San Mateo Creek overpass will likely require a Coastal Development Permit (California) and a Coastal Program Consistency Finding (federal) as described in Section 3.18 (Coastal Zone). This Permit and Finding will be required under the FEC-Initial and Ultimate Alternatives because the alignment of these Alternatives is in the Coastal Zone.

5.6 FAR EAST CORRIDOR-CRISTIANITOS VARIATION-INITIAL AND ULTIMATE ALTERNATIVES

The alignment of the FEC-CV-Initial and Ultimate Alternatives generally follows the same centerline alignment and a similar cross section as the FEC Alternatives until it intersects Avenida Pico. It then enters SOSB and veers southeast across SOSB and into MCB Camp Pendleton where it proceeds south on the west side of Cristianitos Creek and follows the existing alignment of Cristianitos Road west side of Cristianitos Creek. Figure 5.6-1 shows the FEC-CV Alternative alignment and its segments. Table 5.6-1 summarizes both the temporary right-of-way and the permanent right-of-way impacts of the FEC-CV-Initial and Ultimate Alternatives by affected jurisdiction. The temporary disturbance area is often inclusive of or overlaps the permanent ROW.

5.6.1 OVERVIEW OF THE FEC-CV-INITIAL AND ULTIMATE ALTERNATIVES

The alignment of these Alternatives is essentially the same as for the segment discussed previously for the FEC Alternatives from Oso Parkway to Avenida Pico. The second segment of the FEC-CV alignment, Segment 3, extends from Avenida Pico to I-5, crossing SOSB and San Mateo Creek in the I-5 right-of-way. The terminus of the alignment of the FEC-CV Alternatives involves the redesign and construction of the Cristianitos interchange at I-5 which would impact existing uses along I-5 in the City of San Clemente. The FEC-CV Alternatives and Segments 1 and 3 are shown on Figure 5.6-1. Figures illustrating specific impacts on land uses under the FEC-CV-Initial and Ultimate Alternatives are provided in Appendix A.

5.6.2 LAND USE IMPACTS OF THE FEC-CV-INITIAL AND ULTIMATE ALTERNATIVES FROM OSO PARKWAY TO THE SAN DIEGO COUNTY LINE (SEGMENT 1)

As discussed previously, the impacts to land use for the segment between Oso Parkway and the San Diego County line for the FEC-CV Alternatives are similar to those under the FEC Alternatives (Section 5.5.2). Table 5.6-2 summarizes the impacts of the FEC-CV Alternatives from Oso Parkway to the San Diego County line related to land use. However, because the profiles and horizontal alignments of the FEC-CV Alternatives differ slightly from the FEC Alternatives, there is some variation in the total areas impacted by jurisdiction.

TABLE 5.6-2
LAND USE IMPACTS OF THE FEC-CV-INITIAL AND ULTIMATE ALTERNATIVES FROM OSO PARKWAY TO THE SAN DIEGO COUNTY LINE

Jurisdiction	Land Use Type	FEC-CV-Initial Area Affected hectares/acres		FEC-CV-Ultimate Area Affected hectares/acres	
		Permanent ROW	Temporary Disturbance	Permanent ROW	Temporary Disturbance
County of Orange					
Rancho Mission Viejo	Open Space (5)	338/836	360/888	364/900	472/1,167
Other, (Rolling Hills, Camp Pendleton)	Open Space (5), Public Facilities	3/7	5/12	3/7	6/14
Total Impact Area		341/843	364/900	367/907	478/1,181
Sources: County of Orange Land Use Element (2000) and P&D Consultants (2001).					

5.6.3 LAND USE IMPACTS OF THE FEC-CV-INITIAL AND ULTIMATE ALTERNATIVES FROM THE SAN DIEGO COUNTY LINE TO I-5 (SEGMENT 3)

Segment 3 of the FEC-CV Alternatives enters SOSB at about the same point as the FEC Alternatives. It then veers to the southeast toward Cristianitos Creek. It proceeds south through SOSB until it reaches existing Cristianitos Road on MCB Camp Pendleton. It follows the alignment of Cristianitos Road south to I-5 and is configured as a four-lane arterial. Improvements to the I-5 Cristianitos ramps are included as part of these Alternatives. Table 5.6-3 summarizes the impacts of Segment 3 related to land use.

TABLE 5.6-3
LAND USE IMPACTS OF THE FEC-CV-INITIAL AND ULTIMATE ALTERNATIVES FROM THE SAN DIEGO COUNTY LINE TO I-5

Jurisdiction	Land Use Type	FEC-CV-Initial Area Affected hectares/acres		FEC-CV-Ultimate Area Affected hectares/acres	
		Permanent ROW	Temporary Disturbance	Permanent ROW	Temporary Disturbance
MCB Camp Pendleton (a)	Military	33/82	34/84	29/72	39/96
San Onofre State Beach	Public Recreation	71/175	75/185	75/186	134/331
City of San Clemente	Residential-Low Density	1.75/4.3	1.75/4.3	1.75/4.3	1.75/4.3
Total Impact Area	--	106/261	111/273	106/262	175/431
Sources: P&D Consultants (2001), San Onofre State Beach General Plan (1984) and MCB Camp Pendleton Final Integrated Natural Resources Management Plan (October 2001). (a) The area shown includes the existing I-5 right-of-way area, which results in an overstatement of land use impacts on MCB Camp Pendleton					

5.6.3.1 Impacts of the FEC-CV-Initial and Ultimate Alternatives on Existing Land Uses

<u>San Onofre State Beach</u>

Segment 3 affects only the northernmost part of the SOSB. Segment 3 would affect areas of the SOSB that are not widely used as most of the activity in the SOSB occurs in the southern area on

or near the beach and campground. These Alternatives would also affect access to SOSB, because access is currently provided by Cristianitos Road. The affected area in SOSB would be adversely impacted by the FEC-CV Alternatives. Impacts to the SOSB associated with the FEC-CV-Initial and Ultimate Alternatives are addressed in detail in the Recreation Resources Technical Report.

MCB Camp Pendleton

From SOSB, Segment 3 would continue on MCB Camp Pendleton on the northeast corner next to the Talega substation near the Talega Cantonment area. Although the FEC-CV Alternatives would not directly impact these uses, it would still encroach on the north end of the Base thereby truncating the buffer and usable area on the northern part of the Base. The majority of impacts on the Base in this area would concern security, encroachment and ability for night flight aviation training. These would be adverse impacts to the military training uses at MCB Camp Pendleton. Access to the Base via Cristianitos Road would not be adversely affected by these Alternatives. The impacts of the FEC-CV-Initial and Ultimate Alternatives on the Base are discussed in detail in the Military Impacts Technical Report.

City of San Clemente

To accommodate the ramps for the FEC-CV Alternatives, approximately 1.75 ha (4.3 ac) of Low Density Residential land uses in south San Clemente along I-5 would be impacted. This would be an adverse impact of the FEC-CV-Initial and Ultimate Alternatives.

5.6.3.2 Impacts of the FEC-CV-Initial and Ultimate Alternatives on Committed and Planned Development

MCB Camp Pendleton

Segment 3 of the FEC-CV Alternatives would enter MCB Camp Pendleton next to the electrical substation and Camp Talega on the northeast corner of the Base. The majority of impacts on the future land uses on the Base in this area would concern the ability to continue future military training. These Alternatives would encroach on the north end of the Base thereby truncating the buffer provided by SOSB and the usable area on the north part of the Base. This encroachment could limit future uses of the cantonment areas (Cristianitos and Talega) as well as the northern training ranges. This would be an adverse impact to the future military training uses at MCB Camp Pendleton.

San Onofre State Beach

The SOSB General Plan and Land Use & Facilities Map depicts areas where primitive camps and two additional campgrounds north of the San Mateo Campground are conceptually planned for the Cristianitos Subunit. The northern area would be impacted by FEC-CV Alternatives. However, there are no implementation plans for these facilities. Therefore, it is not possible to measure impacts to these proposed facilities. It is assumed that these Alternatives would result in adverse impacts to these planned land uses in the SOSB.

5.6.4 COASTAL ACT COMPLIANCE FOR THE FEC-CV-INITIAL AND ULTIMATE ALTERNATIVES

The California Coastal Zone in the SOCTIIP study area, with the alignments of the SOCTIIP build alternatives, is shown on Figure 5.5-2. Figure 5.6-2 and Figure 5.6-3 show the disturbance limits for the FEC-CV-Initial and Ultimate Alternatives in the Coastal Zone, respectively. Improvements to I-5 and the San Mateo Creek overpass will likely require a Coastal Development Permit (California) and a Coastal Program Consistency Finding (federal) as described in Section 3.18 (Coastal Zone). This Permit and Finding will be required under the FEC-CV-Initial and Ultimate Alternatives because the alignment of these Alternatives is in the Coastal Zone.

5.7 FAR EAST CORRIDOR - AGRICULTURAL FIELDS VARIATION-INITIAL AND ULTIMATE ALTERNATIVES

The alignment of the FEC-AFV Alternatives generally follows the alignment of the FEC Alternatives until intersecting with Avenida Pico. South of Avenida Pico, the alignment shifts to the southeast and then proceeds south on the west side of Cristianitos Creek. As it crosses Cristianitos Road and San Mateo Creek, it follows the west edge of the agricultural fields on MCB Camp Pendleton until it joins I-5. Figure 5.7-1 shows the alignment of the FEC-AFV Alternatives by segment. Table 5.7-1 summarizes the impacts of the FEC-AFV Alternatives related to land use. The temporary disturbance area is often inclusive of or overlaps the permanent right-of-way.

5.7.1 OVERVIEW OF THE FEC-AFV-INITIAL AND ULTIMATE ALTERNATIVES

The alignment of these Alternatives is essentially the same as the segment discussed previously for the FEC Alternatives from Oso Parkway to the San Diego County line. However, the profile may vary slightly and the hectares/acres of land used differ slightly. Segment 4, from the County line to Basilone Road, is what distinguishes these Alternatives, as it crosses San Mateo Creek and skirts the west edge of the agricultural fields on MCB Camp Pendleton. It connects with I-5 south of San Mateo Creek. Improvements to the I-5 extend south of Basilone Road. Figures illustrating specific impacts on land uses of the FEC-AFV-Initial and Ultimate Alternatives alignment are provided in Appendix A.

TABLE 5.7-1
SUMMARY OF LAND USE IMPACTS OF THE FEC-AFV-INITIAL AND ULTIMATE ALTERNATIVES

Jurisdiction	Land Use Type	FEC-AFV-Initial Area Affected hectares/acres		FEC-AFV-Ultimate Area Affected hectares/acres	
		Permanent ROW	Temporary Disturbance	Permanent ROW	Temporary Disturbance
County of Orange					
Rancho Mission Viejo	Open Space (5)	356/830	360/888	362/894	472/1,167
Rolling Hills (c)	Community Commercial (2A)	1/3	3/7	2/4	5/11
MCB Camp Pendleton		3/7	3/8	4/8	4/10
City of San Clemente (b)	Open Space	2/4	2/4	1/3	2/4
San Onofre State Beach	Public Recreation	53/130	55/135	62/154	110/271
MCB Camp Pendleton (a)	Military/Agricultural	88/218	94/231	95/234	112/278
Total Impact Area	--	484/1,197	574/1,272	528/1,301	703/1,739

Source: County of Orange Land Use Element (2000), P&D Consultants (2001), San Clemente Land Use Element (1993), San Onofre State Beach General Plan (1984) and MCB Camp Pendleton Final Integrated Natural Resources Management Plan (October 2001).

(a) Represents areas on MCB Camp Pendleton not leased to SOSB which are on DON property. The area shown includes the existing I-5 right-of-way area, which results in an overstatement of land use impacts on MCB Camp Pendleton.
(b) The FEC-AFV traverses mostly Orange County except for a small area in the Talega development in San Clemente.
(c) The Rolling Hills PC Specific Plan assumed implementation of a transportation corridor generally following the CP Alignment (now referred to as the FEC Alternative). The City of San Clemente is in the process of annexing all the Rolling Hills PC by the end of 2003.
(d) A small segment of MCB Camp Pendleton is in Orange County at the northern border of SOSB.

5.7.2 LAND USE IMPACTS OF THE FEC-AFV-INITIAL AND ULTIMATE ALTERNATIVES FROM OSO PARKWAY TO THE SAN DIEGO COUNTY LINE (SEGMENT 1)

As discussed previously, the impacts to land use for the segments between Oso Parkway and Avenida Pico for the FEC-AFV Alternatives are the similar to those analyzed under the FEC Alternatives (Sections 5.5.2 and 5.5.3). Table 5.7-2 summarizes the impacts of the FEC-AFV Alternative from Oso Parkway to the San Diego County line related to land use.

TABLE 5.7-2
LAND USE IMPACTS OF THE FEC-AFV-INITIAL AND ULTIMATE ALTERNATIVES FROM OSO PARKWAY TO THE SAN DIEGO COUNTY LINE

Jurisdiction	Land Use Type	FEC-AFV-Initial Area Affected hectares/acres		FEC-AFV-Ultimate Area Affected hectares/acres	
		Permanent ROW	Temporary Disturbance	Permanent ROW	Temporary Disturbance
County of Orange					
Rancho Mission Viejo	Open Space (5)	339/836	360/888	365/901	472/1167
Other, (Rolling Hills, Camp Pendleton)	Open Space (5), Public Facilities	3/7	5/12	4/8	7/17
City of San Clemente	Open Space	2/4	2/4	1/3	2/6
Total Impact Area		**343/848**	**366/904**	**370/915**	**481/1,201**

Source: County of Orange Land Use Element (2000) and P&D Consultants (2001).

5.7.3 LAND USE IMPACTS OF THE FEC-AFV-INITIAL AND ULTIMATE ALTERNATIVES FROM AVENIDA PICO TO BASILONE ROAD (SEGMENT 4)

This segment of the FEC-AFV Alternatives extends from SOSB south to Cristianitos Road and then follows the west edge of the leased agricultural fields on MCB Camp Pendleton. It continues on Base and merges with I-5 just south of Cristianitos Road. Merging lanes and ramps on the I-5 continue to Basilone Road. Table 5.7-3 summarizes the impacts of Segment 4 related to land use.

TABLE 5.7-3
LAND USE IMPACTS OF THE FEC-AFV-INITIAL AND ULTIMATE ALTERNATIVES FROM THE SOSB TO I-5

Jurisdiction	Land Use Type	FEC-AFV-Ultimate Area Affected hectares/acres		FEC-AFV-Initial Area Affected hectares/acres	
		Permanent ROW	Temporary Disturbance	Permanent ROW	Temporary Disturbance
San Onofre State Beach	Public Recreation	53/130	55/135	62/154	110/271
MCB Camp Pendleton (a)	Military/Agricultural	88/218	94/231	95/234	112/278
Total Impact Area	--	**141/348**	**149/366**	**157/388**	**222/549**

(a) The area shown includes the existing I-5 right-of-way area, which results in an overstatement of land use impacts on MCB Camp Pendleton.
Sources: P&D Consultants (2001), San Onofre State Beach General Plan (1984) and MCB Camp Pendleton Final Integrated Natural Resources Management Plan (October 2001).

5.7.3.1 Impacts of the FEC-AFV-Initial and Ultimate Alternatives on Existing Land Uses

<u>San Onofre State Beach</u>

The FEC-AFV Alternatives would impact SOSB at the upper eastern corner of the Cristianitos Subunit. Although, this area is in a more remote part of the SOSB, this impact would reduce the size of the SOSB which would be an adverse impact of the FEC-AFV Alternatives.

<u>MCB Camp Pendleton</u>

Segment 4 of the FEC-AFV Alternatives would enter MCB Camp Pendleton next to the electrical substation and Camp Talega on the northeast corner of the Base. The majority of impacts on the Base in this area would concern security, encroachment and ability for night flight aviation training. These Alternatives would encroach on the north end of the Base thereby truncating the buffer provided by SOSB and the usable area on the north part of the Base. This would be an adverse impact to the military training uses at MCB Camp Pendleton. The impacts of the FEC-AFV Alternatives to the military training mission are discussed in detail in the Military Impacts Technical Report.

These Alternatives would impact the existing agricultural lease on MCB Camp Pendleton which is the largest singular contiguous agricultural lease on the Base at 240 ha (592 ac). The impacts

of the FEC-AFV Alternatives to this agricultural area are discussed in detail in Section 6.0 (Impacts to Agricultural Resources).

5.7.3.2 Impacts of the FEC-AFV-Initial and Ultimate Alternatives on Committed and Planned Development

San Onofre State Beach

The impacts of the FEC-AFV Alternatives on planned land uses at SOSB would be the same as those described under the FEC-CV Alternatives. This potential impact of the FEC-AFV Alternatives on planned recreational uses in SOSB is discussed in detail in the Recreation Resources Technical Report.

MCB Camp Pendleton

Segment 4 of the FEC-AFV Alternatives would enter MCB Camp Pendleton next to the electrical substation and Camp Talega on the northeast corner of the Base. The majority of impacts on the future land uses on the Base in this area would concern the ability to continue future military training. These Alternatives would encroach on the north end of the Base thereby truncating the buffer provided by SOSB and the usable area on the north part of the Base. This encroachment could limit future uses of the cantonment areas (Cristianitos and Talega) as well as the northern training ranges. This would be an adverse impact to the future military training uses at MCB Camp Pendleton.

5.7.4 COASTAL ACT COMPLIANCE FOR THE FEC-AFV-INITIAL AND ULTIMATE ALTERNATIVES

The California Coastal Zone in the SOCTIIP study area, with the alignments of the SOCTIIP build alternatives, is shown on Figure 5.5-2. Figure 5.7-2 and Figure 5.7-3 show the disturbance limits for the FEC-AFV-Initial and Ultimate Alternatives in the Coastal Zone, respectively. Improvements to I-5 and the San Mateo Creek overpass under the FEC-AFV Alternatives will likely require a Coastal Development Permit (California) and a Coastal Program Consistency Finding (Federal) as described in Section 3.18 (Coastal Zone). This Permit and Finding will be required under the FEC-AFV Alternatives because the alignment is in the Coastal Zone.

5.8 FAR EAST CORRIDOR - ORTEGA HIGHWAY VARIATION-INITIAL AND ULTIMATE ALTERNATIVES

5.8.1 LAND USE IMPACTS OF THE FEC-OHV-INITIAL AND ULTIMATE ALTERNATIVES FROM OSO PARKWAY TO ORTEGA HIGHWAY (SEGMENT 5)

The FEC-OHV Alternatives would follow the alignment of the FEC Alternatives from Oso Parkway except they would terminate at Ortega Highway and would not have the offset ramp at Ortega Highway. Figure 5.8-1 shows the alignment of the FEC-OHV Alternatives. These Alternatives are entirely in the County of Orange on RMV. These Alternatives have fewer

impacts to land use than the other FEC Alternatives because they are much shorter. Table 5.8-1 shows the impacts of the FEC-OHV Alternatives related to land use. The temporary disturbance area is often inclusive of or overlaps the permanent right-of-way. The Transportation Systems Management (TSM) improvements on Ortega Highway under these Alternatives would not impact any area outside the ultimate MPAH right-of-way limits for Ortega Highway and, therefore, would result in no impacts related to land use along Ortega Highway. Figures illustrating specific impacts on land uses of the FEC-OHV-Initial and Ultimate Alternatives are provided in Appendix A.

TABLE 5.8-1
SUMMARY OF LAND USE IMPACTS OF THE FEC-OHV-INITIAL AND ULTIMATE ALTERNATIVES

Jurisdiction	Land Use Type	FEC-OHV-Initial Area Affected hectares/acres		FEC-OHV-Ultimate Area Affected hectares/acres	
		Permanent ROW	Temporary Disturbance	Permanent ROW	Temporary Disturbance
COUNTY OF ORANGE					
Rancho Mission Viejo	Open Space (5)	145/358	159/393	208/514	246/608
Source: P&D Consultants (2001) and County of Orange LUE (2000).					

5.8.1.1 Impacts of the FEC-OHV-Initial and Ultimate Alternatives on Existing Land Uses

Segment 5 of the FEC-OHV alignment would be adjacent to and east of Tesoro High School. There would be no adverse impacts to this school as a result of the FEC-OHV Alternatives because this corridor was anticipated in the design of the school as documented in the Chiquita Canyon High School EIR.

At its closest point, the alignment of the FEC-OHV Alternatives would be approximately 3.4 km (2.1 miles) east of the Ladera Ranch PC. There would be no adverse land use impacts on this PC as a result of the distance of existing and planned land uses in this PC from the corridor alignment and the buffer/screening effect provided between the PC and the corridor by topography including Chiquita Ridge.

South of Oso Parkway, this segment would be approximately 2.4 km (1.5 miles) from uses in Coto de Caza PC. The Coto de Caza Specific Plan conceptually shows an alignment for a transportation corridor generally following the FEC-OHV alignment. There would be no adverse land use impacts on this PC as a result of an open space green belt and ridgeline between the uses in Coto de Caza and the alignment of the FEC-OHV Alternatives.

On RMV, Segment 5 of the FEC-OHV Alternatives would directly impact existing farming and agricultural operations, agricultural preserves and lease areas. It would directly impact access roads used for ranch operations. These potential impacts are discussed in Section 6.0. The FEC-OHV Alternatives would directly impact areas leased to AirTouch (Verizon) Wireless, Color Spot Nursery and Ewles Aggregates, as described below:

AirTouch (Verizon) Antenna Sites. There are two sites north of Ortega Highway which would be impacted by the FEC-OHV alignment.

Color Spot Nursery. The FEC-OHV alignment would traverse the north part of this lease area, directly impacting the northern part of the nursery. However, the lease is subject to termination in 2003. The nursery would be able to continue operations, and the loss of this part of the nursery would not be considered an adverse impact.

Ewles Aggregates. The FEC-OHV alignment would traverse the east part of this lease area, directly impacting it. A reservation for a corridor alignment, similar to the alignment of the FEC-OHV Alternatives, is included as part of the lease agreement. However, the aggregate operations at this facility and the lease holder would be substantially impacted by these Alternatives.

5.8.1.2 Impacts of the FEC-OHV-Initial and Ultimate Alternatives on Planned Land Uses

The FEC-OHV Alternatives would not adversely impact undeveloped land and have no impacts on committed or planned development because there are no committed or planned land uses on the RMV. However, Segment 5 would impact areas in the proposed development plan for RMV (November 2001). These areas are proposed to have residential, business park, commercial, urban activity center (mixed use), regional park and open space in planning areas 2, 12, 3 and 13. The RMV proposal does not specify the location of any land uses except residential and open space (open space, regional park and O'Neill Ranch overlay). Therefore, acreage figures by the proposed land use category that could be affected by this segment of the FEC-OHV Alternatives cannot be determined.

5.8.2 COASTAL ACT COMPLIANCE FOR THE FAR EAST CORRIDOR-ORTEGA HIGHWAY VARIATION-INITIAL AND ULTIMATE ALTERNATIVES

The California Coastal Zone in the SOCTIIP study area, with the alignments of the SOCTIIP build alternatives, is shown on Figure 5.5-2. A Coastal Development Permit (California) and a Coastal Program Consistency Finding (federal) will not be required for the FEC-OHV Alternative because these Alternatives are not in the Coastal Zone.

5.9 FAR EAST CORRIDOR-AVENIDA PICO VARIATION-INITIAL AND ULTIMATE ALTERNATIVES

The FEC-APV Alternatives would follow the alignment of the FEC Alternatives from Oso Parkway except they would terminate at the intersection with Avenida Pico in the Rolling Hills PC. Figure 5.9-1 shows the alignment of the FEC-APV Alternative. Under these Alternatives, impacts to land use would be similar to the impacts discussed previously for the FEC Alternatives, except the profile may vary slightly and the hectares (acres) used differ slightly. Table 5.9-1 shows the impacts of the FEC-APV Alternatives related to land use. The temporary disturbance area is often inclusive of or overlaps the permanent right-of-way. The TSM improvements on Avenida Pico under these Alternatives would not impact any area outside the ultimate MPAH right-of-way limits for Avenida Pico and, therefore, would result in no impacts

related to land use. Figures illustrating specific impacts on land uses of the FEC-APV-Initial and Ultimate Alternatives are provided in Appendix A.

TABLE 5.9-1
SUMMARY OF LAND USE IMPACTS OF THE FEC-APV-INITIAL AND ULTIMATE ALTERNATIVES

Jurisdiction	Land Use Type	FEC-APV-Initial Area Affected hectares/acres		FEC-APV-Ultimate Area Affected hectares/acres	
		Permanent ROW	Temporary Disturbance	Permanent ROW	Temporary Disturbance
County Of Orange					
Rancho Mission Viejo	Open Space (5)	329/813	350/865	357/883	467/1,155
Rolling Hills (a)	Open Space	0.2/0.4	2/5	1/3	3/7
Total Impact Area	--	329/814	352/870	358/886	470/1,162

Source: P&D Consultants (2001), County of Orange LUE (2000) and Rolling Hills PC AMR (1999).
(a) This includes the Rolling Hills PC Specific Plan which assumed implementation of a transportation corridor generally following the CP alignment (now referred to as the FEC Alignment). The City of San Clemente is in the process of annexing all the Rolling Hills PC by the end of 2003.

5.9.1 LAND USE IMPACTS OF THE FEC-APV-INITIAL AND ULTIMATE ALTERNATIVES FROM OSO PARKWAY TO AVENIDA PICO (SEGMENT 1)

The impacts of the FEC-APV Alternatives on land use would be the same as those discussed previously for Segment 1 of the FEC Alternatives except, because the profiles vary slightly, the hectares (acres) also differ slightly. As can be seen in Table 5.9-1, the alignment of the FEC-APV Alternatives is entirely in the jurisdiction of the County of Orange.

5.9.2 COASTAL ACT COMPLIANCE FOR THE FEC-APV-INITIAL AND ULTIMATE ALTERNATIVES

The California Coastal Zone in the SOCTIIP study area, with the alignments of the SOCTIIP build alternatives, is shown on Figure 5.5-2. A Coastal Development Permit (California) and a Coastal Program Consistency Finding (federal) will not be required for the FEC-APV Alternatives because these Alternatives are not in the Coastal Zone.

5.10 FAR EAST CORRIDOR-TALEGA VARIATION-INITIAL AND ULTIMATE ALTERNATIVES

The FEC-TV Alternatives and segments are shown on Figure 5.10-1. Table 5.10-1 summarizes the potential land use impacts of the FEC-TV Alternatives. The temporary disturbance area is often inclusive of or overlaps the permanent right-of-way. These land use impacts are discussed below, by segment for the FEC-TV Alternatives.

TABLE 5.10-1
SUMMARY OF LAND USE IMPACTS OF THE FEC-TV-INITIAL AND ULTIMATE ALTERNATIVES

Jurisdiction	Land Use Type	FEC-TV-Initial Area Affected hectares/acres		FEC-TV-Ultimate Area Affected hectares/acres	
		Permanent ROW	Temporary Disturbance	Permanent ROW	Temporary Disturbance
County of Orange					
Rancho Mission Viejo	Open Space (5)	265/655	277/684	280/693	381/941
RMV Conservancy	Open Space Reserve	26/63	26/63	29/72	35/87
City of San Clemente					
Talega PC, Rancho San Clemente PC, Marblehead Inland PC, Other	Community – Commercial	2/5.1	2.1/5.3	2/5.1	2.1/5.3
	Neighborhood – Commercial	5.6/13.8	5.6/13.8	5.7/14.2	5.8/14.4
	Regional – Commercial	1.3/3.1	1.3/3.3	1.3/3.1	1.3/3.3
	Government (a)	3.8/9.5	4.5/11.1	4.2/10.4	5/12.5
	Commercial - Mixed Use Residential	23.8/58.8	26.4/65.2	27.1/67	28.8/71.1
	Open Space – Golf	10.7/26.5	12.6/31	12/29.7	15.1/37.4
	Open Space – Private	80.8/199.7	91.6/226.3	93.2/230.03	105.3/260.2
	Open Space – Public	1.2/3	1.2/3	1.2/3	1.2/3
	Residential – High	0.9/2.3	0.9/2.3	0.9/203	0.9/2.3
	Residential – Low	10/24.6	10.4/25.7	10.9/26.8	12.4/30.6
	Residential – Medium	1.6/3.9	1.6/3.9	1.6/3.9	4/10
	Residential - Medium Low	13.7/33.7	13.9/34.3	13.5/33.3	15.1/37.2
	Transportation (I-5) (b)	60.8/150.1	60.8/150.1	60.8/150.1	60.8/150.1
Subtotal for San Clemente	--	216/534	233/576	235/579	258/638
Total Impact Area (c)	--	508/1,256	537/1,326	546/1,348	675/1,669

Source: P&D Consultants (2001), County of Orange LUE (2000) and San Clemente Land Use Element (1993).

(a) Government is a category "P" in the San Clemente General Plan that includes Governmental, Administrative, Utilities, Schools, Public and Private Parking.
(b) This land use category reflects the right-of-way for I-5 as specified in all General Plans for cities that border I-5 in the SOCTIIP study area.
(c) This includes a 0.1 km (300 ft) segment of I-5 that occurs in San Diego County with the existing I-5 right-of-way.

5.10.1 OVERVIEW OF THE FEC-TV-INITIAL AND ULTIMATE ALTERNATIVES

The alignment of the FEC-TV Alternatives differs from the other FEC Alternatives because it follows the FEC alignment until south of Ortega Highway. There, the alignment veers southwest across RMV through the northwest edge of the RMV Conservancy and through the City of San Clemente. The alignment runs roughly parallel to and west of Avenida Pico. It continues southwest and curves to the southeast over Avenida Pico to join I-5. Improvements to I-5 to accommodate ramps and transition lanes occur on both sides of I-5 from approximately 0.9 km (3,000 ft) north of the Avenida Pico interchange to approximately 0.1 km (300 ft) south of the Orange/San Diego County line at the Cristianitos Road interchange. Appendix A shows the

impacts of the FEC-TV Alternatives on land uses in the County of Orange and the City of San Clemente.

5.10.2 LAND USE IMPACTS OF THE FEC-TV-INITIAL AND ULTIMATE ALTERNATIVES FROM OSO PARKWAY TO THE SAN CLEMENTE CITY LIMIT (SEGMENT 6)

The impacts of the FEC-TV Alternatives related to land use occur on both RMV and the RMV Conservancy. Impacts would be the same as those discussed previously for the FEC Alternatives in Section 5.5 up to Ortega Highway. As can be seen on Figure 5.10-1, the geographic area is approximately the same as for the FEC-OHV Alternatives. The southwest trend of the alignment runs through the northwest corner of the RMV Conservancy over the Orange County/San Clemente boundary. Table 5.10-2 shows the impacts of Segment 6 related to land use.

TABLE 5.10-2
LAND USE IMPACTS OF THE FEC-TV-INITIAL AND ULTIMATE ALTERNATIVES FROM OSO PARKWAY TO THE SAN CLEMENTE CITY LIMIT

Jurisdiction	Land Use Type	FEC-TV-Initial Area Affected hectares/acres		FEC-TV-Ultimate Area Affected hectares/acres	
		Permanent ROW	Temporary Disturbance	Permanent ROW	Temporary Disturbance
County of Orange					
Rancho Mission Viejo	Open Space (5)	265/655	277/684	280/693	381/941
RMV Conservancy	Open Space Reserve	26/63	26/63	29/72	35/87
Total Impact Area	**--**	**291/718**	**302/747**	**310/765**	**416/1,028**
Source: P&D Consultants (2001), County of Orange LUE (2000).					

5.10.2.1 Impacts of the FEC-TV-Initial and Ultimate Alternatives on Existing Land Uses

Rancho Mission Viejo

Segment 6 of the alignment of FEC-TV Alternatives proceeds south across RMV from its junction with Ortega Highway generally following the FEC Alternative for about 0.83 km (0.5 mi). This area is undeveloped ranch land. Segment 6 is south of Amantes Camp and the Last Round Up as described for the FEC Alternative. Segment 6 would not adversely affect these existing land uses because it is approximately 0.4 km (0.25 mile) away.

Rancho Mission Viejo Land Conservancy

The RMV Land Conservancy is privately owned/dedicated open space which is technically part of the development of Talega Development. The RMV Conservancy is an approximate 486 ha (1,200 ac) open space area with approximately 425 ha (1,050 ac) in the Rolling Hills PC and the remaining 61 ha (150 ac) in the Champion Hills PC in the City of San Clemente. It is shown on the County LUE as Open Space (5) with the Open Space Reserve Overlay, which identifies permanent open space in the General Plan. The impacts of the FEC-TV Alternative on this regional permanent open space would be considered an adverse impact. There are no other existing land uses in this part of the Rolling Hills PC.

5.10.2.2 Impacts of the FEC-TV-Initial and Ultimate Alternatives on Committed and Planned Development

Rancho Mission Viejo

The FEC-TV Alternatives would not adversely impact undeveloped land and have no impact no impacts on committed or planned development because there are no committed or planned land uses on RMV except the existing agricultural operations which are discussed in Section 6.0 (Agricultural Impacts).

However, this segment would impact areas in the proposed development plan for RMV (November 2001). These areas are proposed to have residential, business park, commercial, urban activity center (mixed use), regional park and opens space in planning areas 2, 12, 3, 13, 9, and 6. The RMV proposal does not specify the location of any land uses except residential and open space. Therefore, it is not possible to determine what specific land uses might be affected by the FEC-TV Alternatives.

Rolling Hills Planned Community

The FEC-TV Alternatives would impact planned open space associated with Rolling Hills PC in Planning Area 100. It may also affect the Low Density Residential uses planned for Planning Area 68 and the conceptual access plan in the north part of the Rolling Hills PC. This would be considered an adverse impact of the FEC-TV Alternatives.

5.10.3 LAND USE IMPACTS OF THE FEC-TV-INITIAL AND ULTIMATE ALTERNATIVES FROM THE SAN CLEMENTE CITY LIMIT TO CRISTIANITOS ROAD (SEGMENT 7)

As the alignment of the FEC-TV Alternatives proceeds south through the City of San Clemente, it would affect areas in the Talega, Rancho San Clemente and Marblehead Inland PCs. It would also affect older existing development along I-5 as it proceeds south along I-5. Table 5.10-3 shows the total impacts to the City of San Clemente and lists impacted land uses by community. Table 5.10-4 shows the acreage of area impacted for each land use category for the FEC-TV Alternatives based on disturbance limits.

5.10.3.1 Impacts of the FEC-TV-Initial and Ultimate Alternatives on Existing Land Uses

Talega PC

The lower part of the Talega PC is developed with residential, golf course and commercial uses. The FEC-TV Alternatives would directly affect these existing uses, and would divide the existing community as well as the planned part of the community. This would be an adverse impact. These direct impacts to land uses under the FEC-TV Alternatives would be adverse.

TABLE 5.10-3
LAND USE IMPACTS OF THE FEC-TV-INITIAL AND ULTIMATE ALTERNATIVES FROM THE SAN CLEMENTE CITY LIMIT TO CRISTIANITOS ROAD

Jurisdiction	Land Use Type	FEC-TV-Initial Area Affected hectares/acres		FEC-TV-Ultimate Area Affected hectares/acres	
		Permanent ROW	Temporary Disturbance	Permanent ROW	Temporary Disturbance
City of San Clemente		216/534	233/576	235/579	258/638
Talega PC	Talega Reserve, Low, Medium-Low, and Medium Density Residential, Private Open Space, Golf, Mixed Use Commercial/Res., Civic Center, Neighborhood Commercial				
Rancho San Clemente PC	Mixed-Use Commercial/ Res.(Medium Density Residential) (*), Private Open Space				
Marblehead Inland PC	Private and Public Open Space				
Other	Regional, Community, Neighborhood and Mixed Use Commercial, Low, Medium Low, Medium and High Density Residential, Government(**), Transportation (I-5) (***)				

* The boundaries of the medium density residential part of this mixed use is not reflected in the City's General Plan LUE.
** Government is a category "P" in the San Clemente General Plan that includes Governmental, Administrative, Utilities, Schools, Public and Private Parking.
*** This land use category reflects the right-of-way for I-5 as specified in all General Plans for cities that border I-5 in the SOCTIIP study area.
Sources: P&D Consultants (2001) and City of San Clemente (1993).

TABLE 5.10-4
LAND USE IMPACTS OF THE FEC-TV ALTERNATIVES BY LAND USE CATEGORY FROM THE SAN CLEMENTE CITY LIMIT TO CRISTIANITOS ROAD

Land Use Type	FEC-TV-Initial		FEC-TV-Ultimate	
	Hectares	Acres	Hectares	Acres
Community – Commercial	2.1	5.3	2.1	5.3
Neighborhood – Commercial	5.6	13.8	5.8	14.4
Regional – Commercial	1.3	3.3	1.3	3.3
Government	4.5	11.1	5.0	12.5
Commercial - Mixed Use Residential	26.4	65.2	28.8	71.1
Open Space – Golf	12.6	31.0	15.1	37.4
Open Space – Private	91.6	226.3	105.3	260.2
Open Space – Public	1.2	3.0	1.2	3.0
Residential – High	0.9	2.3	0.9	2.3
Residential – Low	10.4	25.7	12.4	30.6
Residential – Medium	1.6	3.9	4.0	10.0
Residential - Medium Low	13.9	34.3	15.1	37.2
Transportation (I-5) *	60.8	150.1	60.8	150.1
TOTAL	**233**	**576**	**258**	**638**

* This land use category reflects the right-of-way for I-5 as specified in all General Plans for cities that border I-5 in the SOCTIIP study area.
Sources: San Clemente General Plan LUE (1993) and P&D (2002).

Rancho San Clemente (RSC PC) (Plaza Pacifica)

South of Avenida La Pata and west of Avenida Pico, Segment 7 would traverse the Plaza Pacifica Development (Planning Area 1 for the RSC PC) which has existing residential and commercial uses. The residential component of this area would be impacted which would be considered adverse. The retail commercial component of this development would not be directly impacted. Segment 7, which would extend onto the west side of Avenida Pico, would not directly impact commercial, industrial and residential uses east of Avenida Pico in the RSC PC.

Marblehead Inland PC

The location of the Marblehead Inland PC is shown in Figure 3.4-2. The loss of private open space as a result of the FEC-TV Alternatives would be an adverse impact as this loss would be inconsistent with the City's General Plan policies related to the preservation of open space.

These Alternatives would result in the displacement of the east part (slope area) of the St. Andrews by the Sea property. The existing church would not be displaced. This would not be considered an adverse impact.

Regional Commercial Site

Directly west of San Clemente High School is a commercial zone with two restaurants and a gas station. This area is part of the General Planned Regional Commercial center that also includes San Clemente High School. According to the San Clemente General Plan, this area is an overlay for the future reuse of San Clemente High School into a major retail shopping center, which is reflected in its current land use designation of Regional Commercial. The FEC-TV Alternatives would displace these three uses. Because these are commercial uses that could relocate in the area, this is not considered an adverse impact to land use.

San Clemente High School and Ole Hanson Elementary School

The northbound connectors for the FEC-TV Alternatives from I-5 would result in direct adverse impacts to San Clemente High School and Ole Hansen Elementary School. Discussion of the impacts to the athletic fields at these facilities is provided in the Recreation Resources Technical Report and in the Utilities and Public Services Technical Report.

Impacts Along I-5

From 0.9 km (3,000 ft) north of the Avenida Pico interchange to the Cristianitos Road interchange along I-5, the FEC-TV Alternatives would require additional right-of-way for transition lanes and ramps connecting the corridor with I-5. This additional right-of-way would result in the acquisition of property along I-5 for this entire segment. These impacts to land uses along I-5 are considered adverse.

5.10.3.2 Impacts of the FEC-TV-Initial and Ultimate Alternatives on Committed and Planned Development

Talega PC

The entire north part of the Talega PC from the existing golf course and residential area is planned for residential and open space uses. Areas in the Mixed Use area would be impacted by the FEC-TV Alternatives. These Alternatives would physically divide this community which would be an adverse impact to both existing and planned land uses.

Avenida La Pata Extension

The proposed extension of Avenida La Pata intersects the FEC-TV Alternatives. Avenida La Pata is a planned six lane arterial from north San Clemente to its terminus at the San Clemente/San Diego County border as shown on the MPAH. Avenida La Pata is a continuation of Antonio Parkway which currently terminates at the Prima Deshecha Sanitary Landfill and then resumes south of Avenida Pico in the City of San Clemente. Preliminary planning for this project is underway and funding has not been committed to building this extension. However, because it is on the MPAH, it is expected to be built at some time after 2010 unless it is deleted from the MPAH. If either of the FEC-TV Alternatives were to be constructed, it would accommodate this planned arterial extension. Therefore, the FEC-TV Alternatives would not have any adverse impacts on this planned development.

Regional Commercial Site

Along the southern segment of the FEC-TV Alternatives and according to the San Clemente General Plan, there is an overlay zone for the future reuse of San Clemente High School into a major retail shopping center, which is reflected in its current land use designation of Regional Commercial. There are currently no commitments to implement this reuse of the site. Therefore, it is not possible to evaluate the effect the FEC-TV Alternatives would have on this planned reuse. However, implementation of the FEC-TV Alternatives should not preclude the reuse of the site.

5.10.4 OTHER PLANS AND POLICIES OF THE CITY OF SAN CLEMENTE

The FEC-TV Alternatives would have an adverse impact on the City's Integrated Development Planning Area (IDPA) as shown earlier on Figure 3.4-4. This area generally encompasses the property between Avenida Vista Hermosa and Avenida Pico north of Marblehead Inland in the Talega and Rancho San Clemente PCs. The FEC-TV Alternatives would generally bisect the planned IDPA, which includes development (Plaza Pacifica) in Planning Area 1 of RSC PC as discussed earlier and the Mixed-Use area in the Talega. The removal of uses in the IDPA could result in an imbalance of commercial and residential uses in the City of San Clemente, particularly in the inland PCs. Inconsistency with the respective Specific Plans and disruption of the overall planning efforts for the City of San Clemente would be considered an adverse impact. These impacts could also result in economic impacts, which are discussed in the Relocation and Socioeconomics Technical Reports.

These Alternatives would require land use amendments to the City's General Plan and the respective specific plans. Land uses would need to be fitted around the alignment of the FEC-TV Alternatives and the master plans for these communities would need to be revised. These would be considered adverse impacts. As previously discussed under short term impacts, the remainder parcels would need to be evaluated as they are created and depending whether they are large enough to support a viable use, they may be recycled into new uses.

5.10.5 COASTAL ACT COMPLIANCE FOR THE FEC-TV ALTERNATIVES

The California Coastal Zone in the SOCTIIP study area, with the alignments of the SOCTIIP build alternatives, is shown on Figure 5.5-2. Figure 5.10-2 shows the disturbance limits for the FEC-TV-Initial and Ultimate Alternatives in the Coastal Zone. A Coastal Development Permit (California) and a Coastal Program Consistency Finding (federal) may be required for the FEC-TV Alternatives because the southern part of the I-5 improvements under the FEC-TV Alternatives is in the Coastal Zone.

5.10A FAR EAST CORRIDOR-WEST-INITIAL AND ULTIMATE ALTERNATIVES

The FEC-W-Initial and Ultimate Alternatives would traverse areas under the jurisdiction of MCB Camp Pendleton, the California Department of Parks and Recreation and the County of Orange (unincorporated areas). Table 5.10A-1 summarizes the areas permanently and temporarily impacted by the FEC-W Alternatives by jurisdiction. The temporary disturbance area is often inclusive of or overlaps the permanent right-of-way. Figure 5.10A-1 shows the general alignment of the FEC-W Alternatives with segments as they apply to the Alternative. As discussed in Section 2.0 (Project Alternatives), the FEC-W-Initial Alternative has a narrower cross-section than the FEC-W-Ultimate Alternative and therefore, impacts less area. Figures illustrating specific impacts on land uses of the initial and ultimate Alternatives of each of the corridor alignments are provided in Appendix A.

TABLE 5.10A-1
SUMMARY OF LAND USE IMPACTS OF THE FEC-W-INITIAL AND ULTIMATE ALTERNATIVES

Jurisdiction	Land Use Type	FEC-W-Initial Area Affected hectares/acres		FEC-W-Ultimate Area Affected hectares/acres	
		Permanent ROW	Temporary Disturbance	Permanent ROW	Temporary Disturbance
County of Orange					
Rancho Mission Viejo	Open Space (5)	202/498	216/533	210/520	225/556
Rolling Hills (b)	Community Commercial (2A)	2/5	2/6	2/5	2/6
RMV Conservancy	Open Space Reserve	41/101	42/104	42/105	44/108
MCB Camp Pendleton (d)	Public Facilities (4)	3/8	5/12	3/9	5/13
City of San Clemente (c)	Open Space Public	2/4	2/4	2/4	2/4
RMV Conservancy	Open Space Private	22/55	25/61	22/56	25/62
MCB Camp Pendleton (a)	Military	36/89	41/101	36/89	41/102

TABLE 5.10A-1
SUMMARY OF LAND USE IMPACTS OF THE FEC-W-INITIAL AND ULTIMATE ALTERNATIVES

Jurisdiction	Land Use Type	FEC-W-Initial Area Affected hectares/acres		FEC-W-Ultimate Area Affected hectares/acres	
		Permanent ROW	Temporary Disturbance	Permanent ROW	Temporary Disturbance
San Onofre State Beach	Public Recreation	119/295	135/334	125/309	134/357
Total Impact Area	--	427/1,056	467/1,155	443/1,097	489/1,208

Source: County of Orange Land Use Element (2000) P&D Consultants (2001), San Clemente Land Use Element (1993), San Onofre State Beach General Plan (1984) and MCB Camp Pendleton Final Integrated Natural Resources Management Plan (October 2001).

(a) The area shown includes the existing I-5 right-of-way area, which results in an overstatement of land use impacts on MCB Camp Pendleton.
(b) This includes the Rolling Hills PC Specific Plan which assumed implementation of a transportation corridor generally following the previous CP Alignment (now referred to as the FEC Alternative). The City of San Clemente is in the process of annexing all the Rolling Hills PC by the end of 2003.
(c) Impacts in San Clemente occur in Talega PC along Avenida Pico in open space to accommodate the interchange.
(d) A small segment of MCB Camp Pendleton is in Orange County at the northern border of SOSB.

5.10A.1 OVERVIEW OF THE FEC-W-INITIAL AND ULTIMATE ALTERNATIVES FROM OSO PARKWAY TO BASILONE ROAD

The analysis of the FEC-W Alternative is divided into two segments. The first segment of the FEC-W Alignment extends from the existing terminus of the FTC-North (FTC-N) at Oso Parkway southeast along a similar alignment as the FEC Alternatives and then turns south to Ortega Highway and continues south through the west part of the Rancho Mission Viejo Land Conservancy and then turns southeast on the Conservancy and follows the FEC alignment on the southeast side of the conservancy just north of the Rolling Hills/Talega PC. It continues south through the Rolling Hills PC, crosses the TRW Capistrano Test Site on RMV, and continues south to the northern boundary of San Onofre State Beach (SOSB) just north of the Orange County/San Diego County boundary. Segment 2 is the same as previously described for the FEC Alternative with a minor modification in the alignment as it extends south across SOSB and intersects with I-5 close to the Cristianitos exit with ramps and merge lanes continuing south on I-5 to just past Basilone Road. The alignment of the FEC-W Alternatives and Segments 21 and 2 are shown on Figure 5.10A-1.

5.10A.2 LAND USE IMPACTS OF THE FEC-W-INITIAL AND ULTIMATE ALTERNATIVES FROM OSO PARKWAY TO THE SAN DIEGO COUNTY LINE (SEGMENT 21)

Segment 21 lies partly in the County of Orange and partly in the City of San Clemente. The County of Orange LUE designates this area Open Space Reserve and Open Space (5) with Agricultural District Zoning (A1). Table 5.10A-2 summarizes the impacts of this segment of the FEC-W-Initial and Ultimate Alternatives, based on the existing LUE designations for the areas affected by these Alternatives.

TABLE 5.10A-2
LAND USE IMPACTS OF THE FEC-W-INITIAL AND ULTIMATE ALTERNATIVES FROM OSO PARKWAY TO THE SAN DIEGO COUNTY LINE

Jurisdiction	Land Use Type	FEC-W-Initial Area Affected hectares/acres		FEC-W-Ultimate Area Affected hectares/acres	
		Permanent ROW	Temporary Disturbance	Permanent ROW	Temporary Disturbance
County of Orange					
Rancho Mission Viejo	Open Space (5)	202/498	216/533	210/520	225/556
Rolling Hills (b)	Community Commercial (2A)	2/5	2/6	2/5	2/6
RMV Conservancy	Open Space Reserve	41/101	42/104	42/105	44/108
MCB Camp Pendleton (d)	Public Facilities (4)	3/8	5/12	3/9	5/13
County of Orange Subtotal	--	248/613	265/655	258/639	277/683
City of San Clemente ©	Open Space Public	2/4	2/4	2/4	2/4
RMV Conservancy	Open Space Private	22/55	25/61	22/56	25/62
City of San Clemente Subtotal	--	24/59	26/65	24/59	27/66
Total for Orange County	--	272/672	291/720	282/699	304/749
Source: P&D Consultants (2003), City of San Clemente Land Use Element (1993) and County of Orange LUE (2000).					

5.10A.2.1 Impacts of the FEC-W-Initial and Ultimate Alternatives on Existing Land Uses

County of Orange

Segment 21 of the FEC-W Alternatives would be adjacent to and east of Tesoro High School. There would be no adverse impacts to this school as a result of the FEC Alternatives because this corridor was anticipated in the design of the school as documented in the Chiquita Canyon High School EIR (now "Tesoro High School").

At its closest point, the alignment would be approximately 3.4 km (2.1 miles) east of the Ladera Ranch PC. There would be no adverse land use impacts on this PC as a result of the distance of existing and planned land uses in this PC from the FEC-W alignment and the buffer/screening effect provided between the PC and the FEC-W alignment by topography including Chiquita Ridge.

South of Oso Parkway, Segment 21 would be approximately 2.4 km (1.5 miles) from uses in Coto de Caza PC. The Coto de Caza Specific Plan conceptually shows an alignment for a transportation corridor generally following the FEC-W alignment in this area. There would be no adverse land use impacts on this PC as a result of an open space green belt and ridgeline between the uses in Coto de Caza and the alignment of the FEC-W Alternatives.

On RMV, Segment 21 of the FEC-W Alternatives would directly impact existing farming and agricultural operations, agricultural preserves and lease areas. It would directly impact access roads used for ranch operations. These potential impacts are discussed in Section 6.0 (Impacts to Agricultural Resources). The FEC-Initial and Ultimate Alternatives would directly impact areas leased to AirTouch (Verizon Wireless), Color Spot Nursery, California Silica and the TRW Capistrano Test Site, as described below:

AirTouch (Verizon) Antenna Sites. There are two sites north of Ortega Highway which would be impacted by the FEC-W alignment.

Color Spot Nursery. The FEC-W alignment would traverse the middle part of the east side of this lease area, directly impacting it. However, the lease is subject to termination in 2003. The nursery would be able to continue operations, and the loss of this part of the nursery would not be considered an adverse impact.

Oglebay Norton (California Silica). The FEC-W alternatives would traverse east side of the lease area and would require the realignment of the access road. The FEC-W Alternatives would not preclude the continuation of this use and is considered an adverse impact.
TRW Capistrano Test Site

Access to the TRW Capistrano Test Site is from Avenida Pico. The FEC-W alignment would not directly impact the TRW site, but would truncate the access road and front gate, including the security station in the west part of this lease area.. However, the design of these Alternatives includes provisions to maintain access to the TRW Site.

The other lease areas on this part of the RMV would not be directly impacted by the FEC-W-Initial and Ultimate Alternatives.

The FEC-W-Initial and Ultimate Alternatives would not directly impact the ranch uses known as the Last Round Up and Amantes Camp. However, the FEC-W Alternatives would require the realignment of the access roads to these resources. This is not considered an adverse impact since access would still be provided. Impacts to uses supporting agricultural operations are discussed in Section 6.0.

Rolling Hills Planned Community

The FEC-W Alignment traverses the Rolling Hills PC through the RMV Land Conservancy for approximately 3.9 km (2.4 mi). Approximately 30 meters (m) (100 feet) of the FEC-W alignment traverses lower part of the Rolling Hills PC which is currently being developed. The development plan for Rolling Hills PC was revised in 1999 and 2000. Neither revision reflects an alignment along the FEC-W Alternatives through the RMV Conservancy in the development plans. Additionally, the development agreement with the City of San Clemente, for the Talega Joint Planning Authority, specifically requires the developer to support the FEC Alternative alignment (formerly referred to as the CP) and oppose other alignments that could affect the City. Finally, the City of San Clemente is actively seeking to annex this area and should complete its annexation efforts by the end of 2003.

City of San Clemente

The FEC-W-Initial and Ultimate Alternatives affect an approximately 1.5 ha (4 ac) parcel on the eastern edge of the City along Avenida Pico. This area is shown as Open Space both Public and Private in the City's General Plan. Because the Talega PC assumed the corridor to occur in along

the FEC alignment, this is not considered an adverse impact.

5.10A.2.2 Impacts of the FEC-W-Initial and Ultimate Alternatives on Committed and Planned Development

County of Orange Rancho Mission Viejo

The FEC-W Alternatives would not adversely impact undeveloped land and would have no impacts on committed or planned development on RMV because there are no committed or planned land uses on the RMV. However, this segment would impact areas in the proposed development plan for RMV (November 2001). Figure 5.5-1A shows the centerlines of the corridor alternatives as they relate to the proposed RMV development. These areas are proposed for residential, business park, commercial, urban activity center (mixed use), regional park and open space in planning areas 12A, 12B, 3B, 3D, 3E and 13. The area south of Ortega Highway is proposed for residential, business park, commercial, golf resort, regional park and open space in planning areas 13, 9B.5 and 9E. The RMV proposal does not specify the location of any land uses except residential and open space (open space, regional park and O'Neill Ranch overlay). Therefore, exact acreage figures by the proposed land use category that could be affected by this segment of the FEC-Initial and Ultimate Alternatives cannot be determined.

City of San Clemente/Talega

At its closest point, the alignment of the FEC-W Alternatives would be approximately 1.4 km (0.9 mile) east of planned land uses in Champion Hills including business park, golf course, medium density residential and open space uses. There would be no direct or indirect adverse impacts to the planned uses other than open space in Talega due to distance and the buffer provided by proposed land uses in the Rolling Hills PC (the part of the Talega development in unincorporated Orange County) and the RMV Conservancy. As with Rolling Hills PC, the planning for the Champion Hills PC assumed implementation of a transportation corridor on the alignment of the FEC Alternative.

5.10A.3 LAND USE IMPACTS OF THE FEC-W-INITIAL AND ULTIMATE ALTERNATIVES FROM THE SAN DIEGO COUNTY LINE TO BASILONE ROAD (SEGMENT 2)

This segment of the FEC-W alternative is similar to Segment 2 of the FEC Alternatives, which extends south through the northern boundary of SOSB through SOSB to I-5 at its intersection with Cristianitos Road. There is one minor modification in the alignment which has no implications on land use impacts. The FEC-W Alternatives merge with I-5 and continue southeast past Basilone Road on MCB Camp Pendleton. Table 5.10A-3 summarizes the land use impacts of Segment 2 of the FEC Alternatives.

TABLE 5.10A -3
LAND USE IMPACTS OF THE FEC-W-INITIAL AND ULTIMATE ALTERNATIVES FROM THE SAN DIEGO COUNTY LINE TO BASILONE ROAD

Jurisdiction	Land Use Type	FEC-W-Initial Area Affected hectares/acres		FEC-W-Ultimate Area Affected hectares/acres	
		Permanent ROW	Temporary Disturbance	Permanent ROW	Temporary Disturbance
MCB Camp Pendleton (a)	Military	36/89	41/101	36/89	41/102
San Onofre State Beach	Public Recreation	119/295	135/334	125/309	144/357
Total Impact Area	--	155/383	176/435	161/398	185/459

Sources: P&D Consultants (2001), San Onofre State Beach General Plan (1984) and MCB Camp Pendleton Final Integrated Natural Resources Management Plan (October 2001).

(a) The area shown includes the existing I-5 right-of-way area, which results in an overstatement of land use impacts on MCB Camp Pendleton.

5.10A.3.1 Impacts of the FEC-W-Initial and Ultimate Alternatives on Existing Land Uses

Please refer to Section 5.5.3.1 of the FEC Alternatives for impacts on existing land uses of Segment 2.

5.10A.3.2 Impacts of the Far East Corridor-W-Initial and Ultimate Alternatives on Committed and Planned Development

Please refer to Section 5.5.3.2 of the FEC Alternatives for impacts of Segment 2 on committed and planned development.

5.10A.4 COASTAL ACT COMPLIANCE FOR THE FEC-W-INITIAL AND ULTIMATE ALTERNATIVES

The California Coastal Zone in the SOCTIIP study area and the alignments of the SOCTIIP build alternatives which occur in the coastal zone are shown on Figure 5.5-2. Figure 5.5-3 and Figure 5.5-4 show the disturbance limits for the FEC-W-Initial and Ultimate Alternatives in the Coastal Zone, respectively, which are the same as the FEC Alternatives. Improvements to I-5 and the San Mateo Creek overpass will likely require a Coastal Development Permit (California) and a Coastal Program Consistency Finding (federal) as described in Section 3.18 (Coastal Zone). This Permit and Finding will be required under the FEC-Initial and Ultimate Alternatives because the alignment of these Alternatives is in the Coastal Zone.

5.10B FAR EAST CORRIDOR-MODIFIED-INITIAL AND ULTIMATE ALTERNATIVES

The FEC-M-Initial and Ultimate Alternatives follow a very similar alignment to the FEC Alternatives. The FEC-M Alignment comprises minor modifications to the FEC alignment at the area north of Ortega Highway traversing the agricultural area on RMV, the Ortega Highway interchange, northeast and east of the RMV Conservancy and across the RMV Conservancy. Like the FEC, this alignment would traverse areas under the jurisdiction of MCB Camp

Pendleton, the California Department of Parks and Recreation and the County of Orange (unincorporated areas). Table 5.10B-1 summarizes the areas permanently and temporarily impacted by the FEC-M Alternatives by jurisdiction. The temporary disturbance area is often inclusive of or overlaps the permanent right-of-way. Figure 5.10B-1 shows the general alignment of the FEC-M Alternatives with segments as they apply to the Alternative. As discussed in Section 2.0 (Project Alternatives), the FEC-M-Initial Alternative has a narrower cross-section than the FEC-M-Ultimate Alternative and therefore, impacts less area. Figures illustrating specific impacts on land uses of the initial and ultimate Alternatives of each of the corridor alignments are provided in Appendix A.

TABLE 5.10B-1
SUMMARY OF LAND USE IMPACTS OF THE FEC-M-INITIAL AND ULTIMATE ALTERNATIVES

Jurisdiction	Land Use Type	FEC-M-Initial Area Affected hectares/acres		FEC-M-Ultimate Area Affected hectares/acres	
		Permanent ROW	Temporary Disturbance	Permanent ROW	Temporary Disturbance
County of Orange					
Rancho Mission Viejo	Open Space (5)	232/574	280/692	276/682	300/742
Rolling Hills (b)	Community Commercial (2A)	2/5	2/6	2/5	2/6
RMV Conservancy	Open Space Reserve	22/55	22/55	22/55	22/55
MCB Camp Pendleton (d)	Public Facilities (4)	3/8	3/84	4/11	5/12
City of San Clemente (c)	Open Space	2/5	2/5	2/5	3/6
MCB Camp Pendleton (a)	Military	36/89	41/101	36/90	41/102
San Onofre State Beach	Public Recreation	119/295	135/334	125/309	144/357
Total Impact Area	--	417/1,031	488/1,206	467/1,156	519/1,282

Source: County of Orange Land Use Element (2000) P&D Consultants (2001), San Clemente Land Use Element (1993), San Onofre State Beach General Plan (1984) and MCB Camp Pendleton Final Integrated Natural Resources Management Plan (October 2001).

(a) The area shown includes the existing I-5 right-of-way area, which results in an overstatement of land use impacts on MCB Camp Pendleton.
(b) This includes the Rolling Hills PC Specific Plan which assumed implementation of a transportation corridor generally following the previous CP Alignment (now referred to as the FEC Alternative). The City of San Clemente is in the process of annexing all the Rolling Hills PC by the end of 2003.
(c) Impacts in San Clemente occur in Talega PC along Avenida Pico in open space to accommodate the interchange.
(d) A small segment of MCB Camp Pendleton is in Orange County at the northern border of SOSB.

5.10B.1 OVERVIEW OF THE FEC-M-INITIAL AND ULTIMATE ALTERNATIVES FROM OSO PARKWAY TO BASILONE ROAD

The analysis of the FEC-M Alternative is divided into two segments. The first segment of the FEC-M Alignment extends from the existing terminus of the FTC-N at Oso Parkway southeast along a similar alignment as the FEC Alternatives to just east of the RMV Conservancy. Here the alignment is just east of the FEC Alternatives. It then veers west through the east part of the RMV Land Conservancy and then turns south on the Conservancy and joins the FEC alignment on the southeast side of the conservancy just north of the Rolling Hills/Talega PC. It continues south through the Rolling Hills PC, crosses the TRW Capistrano Test Site on RMV, and continues south to the northern boundary of San Onofre State Beach (SOSB) just north of the Orange County/San Diego County boundary. Segment 2 is the same as previously described for

the FEC Alternative with a minor modification in the alignment as it extends south across SOSB and intersects with I-5 close to the Cristianitos exit with ramps and merge lanes continuing south on I-5 to just past Basilone Road. The alignment of the FEC-M Alternatives and Segments 22 and 2 are shown on Figure 5.10B-1.

5.10B.2 LAND USE IMPACTS OF THE FEC-M-INITIAL AND ULTIMATE ALTERNATIVES FROM OSO PARKWAY TO THE SAN DIEGO COUNTY LINE (SEGMENT 22)

Segment 22 lies entirely in the County of Orange jurisdiction. The County of Orange LUE designates this area Open Space Reserve and Open Space (5) with Agricultural District Zoning (A1). Table 5.10B-2 summarizes the impacts of this segment of the FEC-M-Initial and Ultimate Alternatives, based on the existing LUE designations for the areas affected by these Alternatives.

TABLE 5.10B-2
LAND USE IMPACTS OF THE FEC-M-INITIAL AND ULTIMATE ALTERNATIVES FROM OSO PARKWAY TO THE SAN DIEGO COUNTY LINE

Jurisdiction	Land Use Type	FEC-M-Initial Area Affected hectares/acres		FEC-M-Ultimate Area Affected hectares/acres	
		Permanent ROW	Temporary Disturbance	Permanent ROW	Temporary Disturbance
County of Orange					
Rancho Mission Viejo	Open Space (5)	232/574	280/692	276/682	300/742
Rolling Hills (b)	Community Commercial (2A)	2/5	2/6	2/5	2/6
RMV Conservancy	Open Space Reserve	22/55	22/55	22/55	22/55
MCB Camp Pendleton (d)	Public Facilities (4)	3/8	3/84	4/11	5/12
County of Orange Subtotal	--	260/642	310/766	304/751	331/817
City of San Clemente	Open Space	2/5	2/5	2/5	3/6
Total for Orange County		262/647	312/771	306/756	334/823
Source: County of Orange Land Use Element (2000) and P&D Consultants (2001).					

5.10B.2.1 Impacts of the FEC-M-Initial and Ultimate Alternatives on Existing Land Uses

<u>County of Orange</u>

Segment 22 of the FEC-M Alternatives would be adjacent to and east of Tesoro High School. There would be no adverse impacts to this school as a result of the FEC-M Alternatives because this corridor was anticipated in the design of the school as documented in the Chiquita Canyon High School EIR (now "Tesoro High School").

At its closest point, the alignment would be approximately 3.4 km (2.1 miles) east of the Ladera Ranch PC. There would be no adverse land use impacts on this PC as a result of the distance of existing and planned land uses in this PC from the FEC-M alignment and the buffer/screening effect provided between the PC and the FEC-M alignment by topography including Chiquita Ridge.

South of Oso Parkway, Segment 22 would be approximately 2.4 km (1.5 miles) from uses in Coto de Caza PC. The Coto de Caza Specific Plan conceptually shows an alignment for a transportation corridor generally following the FEC-M alignment in this area. There would be no adverse land use impacts on this PC as a result of an open space green belt and ridgeline between the uses in Coto de Caza and the alignment of the FEC-M Alternatives.

On RMV, Segment 22 of the FEC-M Alternatives would directly impact existing farming and agricultural operations, agricultural preserves and lease areas. It would directly impact access roads used for ranch operations. These potential impacts are discussed in Section 6.0 (Impacts to Agricultural Resources). The FEC-M-Initial and Ultimate Alternatives would directly impact areas leased to AirTouch (Verizon Wireless), Color Spot Nursery, Ewles Aggregates and the TRW Capistrano Test Site, as described below:

AirTouch (Verizon) Antenna Sites. There are two sites north of Ortega Highway which would be impacted by the FEC-M alignment.

Color Spot Nursery. The FEC-M alignment would traverse the north part of this lease area, directly impacting the northern part of the nursery. However, the lease is subject to termination in 2003. The nursery would be able to continue operations, and the loss of this part of the nursery would not be considered an adverse impact.

Ewles Aggregates. The FEC-M alignment would traverse the east part of this lease area, directly impacting it. A reservation for a corridor alignment, similar to the alignment of the FEC-M Alternative, is included as part of the lease agreement. However, the aggregate operations at this facility and the lease holder would be substantially impacted by the FEC-M-Initial and Ultimate Alternatives.

TRW Capistrano Test Site

Access to the TRW Capistrano Test Site is from Avenida Pico. The FEC-M alignment would traverse a small part of the west part of the TRW site. The FEC-M Alignment would also directly impact the TRW access road and front gate, including the security station in the west part of this lease area. However, the design of these Alternatives includes provisions to maintain access to the TRW Site.

The other lease areas on this part of the RMV would not be directly impacted by the FEC-M-Initial and Ultimate Alternatives.

The FEC-M-Initial and Ultimate Alternatives would not directly or indirectly impact the ranch uses known as the Last Round Up and Amantes Camp, which are areas available on RMV to conduct special events.

Rolling Hills Planned Community

Once the alignment traverses the RMV Conservancy, it follows the alignment of the FEC Alternatives. Approximately 30 meters (m) (100 feet) of the FEC-M alignment traverses the Rolling Hills PC which is currently being developed. The development plan for Rolling Hills PC was revised in 1999 and 2000. Both revisions reflect an alignment along the FEC-M Alternatives in the development plans which reserves an area for the FEC-M alignment in an area designated open space both in the County of Orange LUE and the PC Regulations/Zoning. Additionally, the development agreement with the City of San Clemente, for the Talega Joint Planning Authority, specifically requires the developer to support the FEC Alternative alignment (formerly referred to as the CP), which is similar to the FEC-M in this area, and oppose other alignments that could affect the City. Finally, the City of San Clemente is actively seeking to annex this area and should complete its annexation efforts by the end of 2003.

City of San Clemente

The FEC-M-Initial and Ultimate Alternatives affect an approximately 1.5 ha (4 ac) parcel on the eastern edge of the City along Avenida Pico. This area is shown as Open Space both Public and Private in the City's General Plan. Because the Talega PC assumed the corridor to occur in along the FEC alignment, this is not considered an adverse impact.

5.10B.2.2 Impacts of the FEC-M-Initial and Ultimate Alternatives on Committed and Planned Development

County of Orange Rancho Mission Viejo

The FEC-M Alternatives would not adversely impact undeveloped land and would have no impacts on committed or planned development on RMV because there are no committed or planned land uses on the RMV. However, this segment would impact areas in the proposed development plan for RMV (November 2001). Figure 5.5-1A shows the centerlines of the corridor alternatives as they relate to the proposed RMV development. These areas are proposed for residential, business park, commercial, urban activity center (mixed use), regional park and open space in planning areas 12A, 12B, 3B, 3D, 3E and 13. The area south of Ortega Highway is proposed for residential, business park, commercial, golf resort, regional park and open space in planning areas 13, 9B, 7A and 9E. The RMV proposal does not specify the location of any land uses except residential and open space (open space, regional park and O'Neill Ranch overlay). Therefore, exact acreage figures by the proposed land use category that could be affected by this segment of the FEC-Initial and Ultimate Alternatives cannot be determined.

City of San Clemente

At its closest point, the alignment of the FEC-M Alternatives would be approximately 1.4 km (0.9 mile) east of planned land uses in Champion Hills including business park, golf course, medium density residential and open space uses. There would be no direct or indirect adverse impacts to the planned uses due to distance and the buffer provided by proposed land uses in the Rolling Hills PC (the part of the Talega development in unincorporated Orange County) and the

RMV Conservancy. As with Rolling Hills PC, the planning for the Champion Hills PC assumed implementation of a transportation corridor on the alignment of the FEC Alternative.

5.10B.3 LAND USE IMPACTS OF THE FEC-INITIAL AND ULTIMATE ALTERNATIVES FROM THE SAN DIEGO COUNTY LINE TO BASILONE ROAD (SEGMENT 2)

This segment of the FEC-M alternative is similar to Segment 2 of the FEC Alternatives, which extends south through the northern boundary of SOSB through SOSB to I-5 at its intersection with Cristianitos Road. There is one minor modification in the alignment which has no implications on land use impacts. The FEC-M Alternatives merge with I-5 and continue southeast past Basilone Road on MCB Camp Pendleton. Table 5.10B-3 summarizes the land use impacts of Segment 2 of the FEC Alternatives.

TABLE 5.10B -3
LAND USE IMPACTS OF THE FEC-M-INITIAL AND ULTIMATE ALTERNATIVES FROM THE SAN DIEGO COUNTY LINE TO BASILONE ROAD

Jurisdiction	Land Use Type	FEC-M-Initial Area Affected hectares/acres		FEC-M-Ultimate Area Affected hectares/acres	
		Permanent ROW	Temporary Disturbance	Permanent ROW	Temporary Disturbance
MCB Camp Pendleton (a)	Military	36/89	41/101	36/90	41/102
San Onofre State Beach	Public Recreation	119/295	135/334	125/309	144/357
Total Impact Area	--	155/384	176/435	161/399	185/459

Sources: P&D Consultants (2001), San Onofre State Beach General Plan (1984) and MCB Camp Pendleton Final Integrated Natural Resources Management Plan (October 2001).

(a) The area shown includes the existing I-5 right-of-way area, which results in an overstatement of land use impacts on MCB Camp Pendleton.

5.10B.3.1 Impacts of the FEC-M-Initial and Ultimate Alternatives on Existing Land Uses

Please refer to Section 5.5.3.1 of the FEC Alternatives for impacts on existing land uses of Segment 2.

5.10B.3.2 Impacts of the Far East Corridor-W-Initial and Ultimate Alternatives on Committed and Planned Development

Please refer to Section 5.5.3.2 of the FEC Alternatives for impacts of Segment 2 on committed and planned development.

5.10B.4 COASTAL ACT COMPLIANCE FOR THE FEC-M-INITIAL AND ULTIMATE ALTERNATIVES

The California Coastal Zone in the SOCTIIP study area and the alignments of the SOCTIIP build alternatives which occur in the coastal zone are shown on Figure 5.5-2. Figure 5.5-3 and Figure

5.5-4 show the disturbance limits for the FEC-Initial and Ultimate Alternatives in the Coastal Zone, respectively, which are the same as the FEC Alternatives. Improvements to I-5 and the San Mateo Creek overpass will likely require a Coastal Development Permit (California) and a Coastal Program Consistency Finding (federal) as described in Section 3.18 (Coastal Zone). This Permit and Finding will be required under the FEC-Initial and Ultimate Alternatives because the alignment of these Alternatives is in the Coastal Zone.

5.11 CENTRAL CORRIDOR-COMPLETE-INITIAL AND ULTIMATE ALTERNATIVES

Similar to the FEC-TV Alternatives, several communities in the City of San Clemente would be impacted by these Alternatives, as identified in Table 5.11-1. The temporary disturbance area is often inclusive of or overlaps the permanent right-of-way. The CC Alternatives would generally follow the alignment of the FEC-TV Alternatives south of Avenida La Pata. Figure 5.11-1 shows the segments of the CC Alternatives.

The CC Alternatives would traverse areas under the jurisdictions of the County of Orange and the City of San Clemente. The CC Alternatives would traverse primarily undeveloped areas in unincorporated Orange County on RMV. Potential impacts to existing and planned recreation resources in this jurisdiction, including the planned Prima Deshecha Regional Park and regional riding and hiking trails, are discussed in detail in the Recreation Resources Technical Report. Potential impacts to Prima Deshecha Sanitary Landfill and the CWRP are discussed in the Utilities and Public Services Technical Report.

TABLE 5.11-1
SUMMARY OF LAND USE IMPACTS OF THE CC-INITIAL AND ULTIMATE ALTERNATIVES

Jurisdiction	Land Use Type	CC-Initial Area Affected hectares/acres		CC-Ultimate Area Affected hectares/acres	
		Permanent ROW	Temporary Disturbance	Permanent ROW	Temporary Disturbance
County of Orange					
Rancho Mission Viejo	Open Space (5)	181/448	260/643	227/560	282/697
Prima Deshecha Landfill	Public Facilities - Landfill Site (LS)	23/57	28/69	29/72	31/78
City of San Clemente					
Forster Ranch PC, Rancho San Clemente PC, Marblehead Inland PC and Other	Community – Commercial	2/5	2/5	2/5	2/5
	Neighborhood - Commercial	6/14	6/14	6/14	6/14
	Regional - Commercial	1/3	1/3	1/3	1/3
	Government (a)	8/21	9/23	9/23	10/25
	Commercial - Mixed Use Residential	12/30	14/35	12/30	13/33
	Open Space - Private	66/164	74/184	76/187	81/201
	Open Space - Public	8/19	9/22	9/23	10/27
	Residential - High	1/3	1/3	1/3	1/3
	Residential - Low	17/43	18/44	19/48	20/49

TABLE 5.11-1
SUMMARY OF LAND USE IMPACTS OF THE CC-INITIAL AND ULTIMATE ALTERNATIVES

Jurisdiction	Land Use Type	CC-Initial Area Affected hectares/acres		CC-Ultimate Area Affected hectares/acres	
		Permanent ROW	Temporary Disturbance	Permanent ROW	Temporary Disturbance
	Residential - Medium	2/4	2/4	2/4	2/4
	Residential - Medium Low	7/17	7/17	8/19	8/19
	Transportation (I-5)(b)	61/150	61/150	61/150	61/150
Subtotal for San Clemente	--	191472	205/507	205/507	215/530
Total Impact Area (c)	--	395/976	488/1,206	460/1,138	527/1,305

Source: P&D Consultants (2001), County of Orange LUE (2000) and San Clemente Land Use Element (1993).

(a) Government is a category "P" in the San Clemente General Plan that includes Governmental, Administrative, Utilities, Schools, Public and Private Parking.
(b) This land use category reflects the right-of-way for I-5 as specified in all General Plans for cities that border I-5 in the SOCTIIP study area.
(c) This includes a 0.1 km (300 ft) segment of I-5 that occurs in San Diego County with the existing I-5 right-of-way.

5.11.1 OVERVIEW OF THE CC-INITIAL AND ULTIMATE ALTERNATIVES

The alignment of the CC Alternatives proceeds south from the existing terminus of the FTC at Oso Parkway approximately 1 km (0.6 mile) east of the Ladera PC. The alignment jogs southwest and then proceeds south in a curvilinear fashion along an existing ranch access road on RMV to Ortega Highway. It continues south through Prima Deshecha Sanitary Landfill near La Pata Avenue to the north boundary of the City of San Clemente. The alignment generally parallels existing Antonio/La Pata. The alignment would extend through the City of San Clemente paralleling Avenida Pico through the Marblehead Inland PC and converging with I-5 just south of the intersection of Avenida Pico and I-5. Merging lanes and accommodations for ramps would occur along I-5 from approximately 0.9 km (3,000 ft) north of the Avenida Pico interchange to the Cristianitos Road interchange at San Onofre State Beach. Appendix A shows the impacts of both the CC-Initial and Ultimate Alternatives on land uses in the study area.

5.11.2 LAND USE IMPACTS OF THE CC-INITIAL AND ULTIMATE ALTERNATIVES FROM OSO PARKWAY TO THE SAN CLEMENTE CITY LIMIT (SEGMENT 8)

Segment 8 lies entirely in the County of Orange on RMV. The alignment runs south from Oso Parkway adjacent to Tesoro High School along the west side of Chiquita Canyon past the Rancho Santa Margarita Water District parcel. It continues south to Ortega Highway east of the Oaks Grazing pasture and between the DM Color Express nurseries. Table 5.11-2 summarizes the impacts of Segment of the CC Alternatives related to land use.

TABLE 5.11-2
LAND USE IMPACTS OF THE CC-INITIAL AND ULTIMATE ALTERNATIVES FROM OSO PARKWAY TO THE SAN CLEMENTE CITY LIMIT

Jurisdiction	Land Use Type	CC-Initial Area Affected hectares/acres		CC-Ultimate Area Affected hectares/acres	
		Permanent ROW	Temporary Disturbance	Permanent ROW	Temporary Disturbance
County of Orange					
Rancho Mission Viejo	Open Space (5)	181/448	260/643	227/560	282/697
Prima Deshecha Landfill	Public Facilities - Landfill Site (LS)	23/57	28/69	29/72	31/78
County of Orange Total		**204/504**	**288/712**	**256/632**	**313/775**
Source: County of Orange LUE (2000).					

5.11.2.1 Impacts of the CC-Initial and Ultimate Alternatives on Existing Land Uses

Rancho Mission Viejo

The CC Alternatives would impact lands on RMV in unincorporated Orange County. This area is currently used for ranching and agricultural operations including preserve areas, or is leased for various uses. Impacts to agricultural resources and operations are discussed in Section 6.0.

Minor improvements to Ortega Highway to accommodate the interchange with the CC Alternatives would require the use of a part of the southeast corner of the DM Color Express nursery lease area. The use of this property would adversely impact ongoing nursery operations. The Creekside Equestrian Center north and south of Ortega Highway and west of La Pata Avenue would not be directly or indirectly impacted by the CC Alternatives.

Tesoro High School

The alignment of the CC Alternatives would be adjacent to Tesoro High School and would not have direct or indirect adverse impacts on this land use. The Final EIR for Tesoro High School (formerly Chiquita Canyon High School) included measures to mitigate potential indirect noise impacts associated with a transportation facility in the area of the SOCTIIP corridor alternatives. Although that EIR specifically considered the alignment of the FEC Alternative, the CC and FEC Alternatives share a common alignment in this area. Therefore, the CC Alternatives would not result in adverse land use impacts at Tesoro High School.

BFI Greenwaste

The alignment of the CC Alternatives would bisect BFI Greenwaste, a composting business at the edge of the Prima Deshecha Sanitary Landfill, on La Pata Avenue. It is assumed that this operation, which benefits from its location near the Landfill, could be relocated to another suitable site in the area. This is not considered an adverse impact of the CC Alternatives.

Prima Deshecha Sanitary Landfill

The CC Alternatives would impact current landfill operations which occur primarily on the west side of La Pata Avenue. The alignment closely follows the planned alignment for La Pata Avenue through the Landfill, and would not preclude the existing operations at the Landfill. However, this alignment of the corridor through the Landfill would affect future landfill operations planned in this area. This potential impact of the CC Alternatives on landfill operations is discussed in detail in the Public Services and Utilities Technical Report.

5.11.2.2 Impacts of the CC-Initial and Ultimate Alternatives on Committed and Planned Development

Rancho Mission Viejo

The CC Alternatives would not adversely impact undeveloped land and would have no impacts on committed or planned development because there are no committed or planned land uses on the RMV. However, Segment 8 would impact areas in the proposed development plan for RMV (November 2001). These areas proposed to have residential, business park, commercial, golf resort, regional park and open space in planning areas 2, 10, 13 and 11. The RMV proposal does not specify the location of any land uses except residential, open space (opens space, regional park and O'Neill Ranch overlay). Therefore, it is not possible to identify which land uses would be affected by Segment 8 of the CC Alternatives.

La Pata Avenue MPAH Build-Out

Antonio Parkway/La Pata Avenue/Avenida La Pata in the City of San Clemente (hereinafter referred to as Antonio/La Pata in the County and La Pata Avenue in the City of San Clemente) is currently built to a four-lane facility.

Proposed Prima Deshecha Regional Park

The alignment of the CC Alternatives appears to impact some of the conceptually planned recreation uses for the Prima Deshecha Regional Park which is planned to be implemented after the closure of the Landfill in 2067. These potential impacts to these planned recreational uses are analyzed in the Recreational Resources Technical Report.

5.11.3 IMPACTS OF THE CC-INITIAL AND ULTIMATE ALTERNATIVES FROM THE SAN CLEMENTE CITY LIMIT TO CRISTIANITOS ROAD (SEGMENT 9)

The alignment of the CC Alternatives enters the City of San Clemente just southeast of the entrance to the Prima Deshecha Landfill. The CC alignment closely parallels Antonio Parkway/La Pata Avenue, which is west of the CC alignment, until it crosses the conceptual alignment for Avenida Vista Hermosa in the City of San Clemente. South of Avenida Vista Hermosa, the alignment swings west again and crosses Avenida La Pata. South of Avenida La Pata, the alignment parallels Avenida Pico, which is east of the CC alignment, until it crosses a local collector street called Calle Frontera. South of Calle Frontera, the alignment swings to the

east to merge with I-5. Improvements to I-5 for transition lanes and ramps continue south to the Cristianitos Road exit. Table 5.11-3 shows the total impacts of the CC Alternatives to land uses in the City of San Clemente and identifies which land use types are affected in each affected community.

TABLE 5.11-3
LAND USE IMPACTS OF THE CC –INITIAL AND ULTIMATE ALTERNATIVES FROM THE SAN CLEMENTE CITY LIMITS TO CRISTIANITOS ROAD

Jurisdiction	Land Use Type	CC-Initial Area Affected hectares/acres		CC-Ultimate Area Affected hectares/acres	
		Permanent ROW	Temporary Disturbance	Permanent ROW	Temporary Disturbance
City of San Clemente		191/472	200/495	205/507	215/530
Forster Ranch PC	Low and High Density Residential, Private Open Space, Mixed Use Commercial/Res., Civic Center, Community Commercial, Government(**)				
Rancho San Clemente PC	Mixed-Use Commercial/ Res.(Medium Density Residential) (*), Private Open Space				
Marblehead Inland PC	Private and Public Open Space				
Other	Regional, Community, Neighborhood and Mixed Use Commercial, Low, Medium Low, Medium and High Density Residential, Government, Transportation (I-5) (***)				

* The boundaries of the medium residential part of this mixed use is not reflected in the City's General Plan LUE.
** Government is a category "P" in the San Clemente General Plan that includes Governmental, Administrative, Utilities, Schools, Public and Private Parking.
*** This land use category reflects the right-of-way for I-5 as specified in all General Plans for cities that border I-5 in the SOCTIIP study area.
Sources: P&D Consultants (2002), San Clemente General Plan (1993) and Zoning Maps (1996).

Table 5.11-4 shows the acreage of area impacted for each land use category based on the maximum disturbance limits for the CC Alternatives.

TABLE 5.11-4
LAND USE IMPACTS OF THE CC-INITIAL AND ULTIMATE ALTERNATIVES
BY LAND USE CATEGORY
FROM THE SAN CLEMENTE CITY LIMITS TO CRISTIANITOS ROAD

Land Use Type	Initial		Ultimate	
	Hectares	Acres	Hectares	Acres
Community – Commercial2	2	5	2	5
Neighborhood - Commercial	6	14	6	14
Regional - Commercial	1	3	1	3
Government	9	23	10	25
Commercial - Mixed Use Residential	14	35	13	33
Open Space - Private	74	184	81	201
Open Space - Public	9	22	10	25
Residential - High	1	3	1	3
Residential - Low	18	44	20	49
Residential - Medium	2	4	2	4
Residential - Medium Low	7	17	8	19
Transportation (I-5) *	61	150	61	150
TOTAL	**204**	**505**	**214**	**530**

* This land use category reflects the right-of-way for I-5 as specified in all General Plans for cities that border I-5 in the SOCTIIP study area.
Sources: San Clemente General Plan LUE (1993) and P&D (2002).

5.11.3.1 Impacts of the CC-Initial and Ultimate Alternatives on Existing Land Uses

Talega

The lower part of the Talega PC is developed with residential, golf course and commercial uses. The CC Alternatives would directly affect these existing uses. This would be an adverse impact.

Rancho San Clemente PC (Plaza Pacifica)

South of Avenida La Pata and west of Avenida Pico, this segment would traverse the Plaza Pacifica Development (Planning Area 1 for the RSC PC) which has existing private open space, residential and commercial uses. The residential component of this area would be adversely impacted. The retail commercial component of this development would not be directly impacted. This segment, which would extend onto the west side of Avenida Pico, would not directly impact commercial, industrial and residential uses east of Avenida Pico in the RSC PC.

Marblehead Inland PC

Impacts to the Marblehead Inland PC are similar to impacts described for the FEC-TV Alternatives because the alignment of the CC Alternatives is very similar to the alignment of the FEC-TV Alternatives along this part of Segment 9.

Regional Commercial Site

Impacts of the CC Alternatives to the Regional Commercial site are similar to impacts described for the FEC-TV Alternatives because the alignment of the FEC-TV Alternatives is very similar to the alignment of the CC Alternatives along this part of Segment 9.

San Clemente High School and Ole Hanson Elementary School

Impacts to San Clemente High School and Ole Hanson Elementary of the CC Alternatives are similar to impacts described for the FEC-TV Alternatives because the alignment of the FEC-TV Alternatives is very similar to the alignment of the CC Alternatives along this part of Segment 9.

Impacts Along I-5

From 0.9 km (3,000 ft) north of the Avenida Pico interchange to the Cristianitos Road interchange along I-5, the CC Alternatives would require additional right-of-way for transition lanes and ramps connecting the corridor with I-5. The impacts along I-5 under the CC Alternatives are the same as described under the FEC-TV Alternatives.

5.11.3.2 Impacts of the CC-Initial and Ultimate Alternatives on Committed and Planned Land Uses

Proposed Prima Deshecha Regional Park

The alignment of the CC Alternatives could affect the current layout of park uses proposed for the Prima Deshecha Regional Park. However, the CC alignment would not preclude these planned uses. Therefore, this would not be an adverse impact of the CC Alternatives. Impacts of this segment on the proposed regional park at Prima Deshecha Landfill are discussed in detail in the Recreation Resources Technical Report.

Forster Ranch PC

This segment would affect the southeast corner of the planned Government parcel in Forster Ranch PC along the future extension of Avenida La Pata. A small part of the southeast corner of this site would be affected but development of the site would not be precluded by the CC Alternatives. Therefore, this would not be an adverse impact of the CC Alternatives.

Talega PC

This segment would proceed along the west part of the planned Talega PC, directly east and parallel of future Avenida La Pata. This area is planned for residential, open space and mixed uses that would be impacted by the CC Alternatives. The impacts to these planned land uses would be adverse.

Avenida La Pata Extension

The CC Alternatives have similar impacts to the Avenida La Pata extension as the FEC-TV Alternatives as described earlier.

Regional Commercial Site

The CC Alternatives have similar impacts on this proposed Regional Commercial site as the FEC-TV Alternatives as described earlier.

5.11.3.3 Other Plans and Policies of the City of San Clemente

This segment would have impacts to plans and policies similar to those described under the FEC-TV Alternatives.

5.11.4 COASTAL ACT COMPLIANCE FOR THE CC ALTERNATIVES

The California Coastal Zone in the SOCTIIP study area, with the alignments of the SOCTIIP build alternatives, is shown on Figure 5.5-2. Figure 5.10-2 shows the disturbance limits for the CC-Initial and Ultimate Alternatives in the Coastal Zone, which are the same as the FEC-TV Alternatives. A Coastal Development Permit (California) and a Coastal Program Consistency Finding (federal) may be required for the CC Alternatives because the part of the southern part of the I-5 improvements under the CC Alternatives is in the Coastal Zone.

5.12 CENTRAL CORRIDOR - AVENIDA LA PATA VARIATION-INITIAL AND ULTIMATE ALTERNATIVES

The alignment of the CC-ALPV Alternatives follows the same alignment as the CC Alternatives except it terminates at its intersection with Avenida Vista Hermosa in the City of San Clemente. The disturbance limits and profile for these Alternatives are similar to the CC Alternatives up to Avenida Vista Hermosa. The TSM improvements on Avenida Vista Hermosa, Avenida La Pata and on Avenida Pico to the I-5 would be within the existing right-of-way limits and, therefore, would not result in adverse impacts related to land use. Table 5.12-1 summarizes the impacts of the CC-ALPV Alternatives related to land use. The temporary disturbance area is often inclusive of or overlaps the permanent right-of-way. Figure 5.12-1 shows the alignment and segments of the CC-ALPV Alternatives. Appendix A shows the impacts of the CC-ALPV Alternatives on land uses in the County of Orange and the City of San Clemente.

TABLE 5.12-1
SUMMARY OF LAND USE IMPACTS OF THE CC-ALPV-INITIAL AND ULTIMATE ALTERNATIVES

Jurisdiction	Land Use Type	CC-ALPV-Initial Area Affected hectares/acres		CC-ALPV-Ultimate Area Affected hectares/acres	
		Permanent ROW	Temporary Disturbance	Permanent ROW	Temporary Disturbance
County of Orange					
Rancho Mission Viejo	Open Space (5)	181/448	260/643	227/560	282/697
Prima Deshecha Landfill	Public Facilities - Landfill Site (LS)	23/57	28/68	29/72	31/78
City of San Clemente					
Forster Ranch PC, Rancho San Clemente PC	Government (a)	2/5	2/6	3/7	3/7
	Commercial - Mixed Use Residential	0/0	5/11	4/9	5/11
	Open Space - Private	15/36	16/39	20/50	23/56
	Open Space - Public	7/16	8/19	8/20	9/22
	Residential - High	0.1/0.3	0.1/0.3	0.1/0.2	0.1/0.3
	Residential – Low	11/27	12/29	13/32	13/33
	Residential - Medium Low	3/8	3/8	6/15	6/15
Subtotal for San Clemente	--	38/93	41/101	54/132	58/144
Total Impact Area	--	244/597	329/813	310/764	371/919

Sources: P&D Consultants (2001), San Clemente General Plan (1993) and Zoning Maps (1996), and Prima Deshecha General Development Plan (2000).

(a) Government is a category "P" in the San Clemente General Plan that includes Governmental, Administrative, Utilities, Schools, Public and Private Parking.

5.12.1 LAND USE IMPACTS OF THE CC-ALPV-INITIAL AND ULTIMATE ALTERNATIVES FROM OSO PARKWAY TO THE SAN CLEMENTE CITY LIMIT (SEGMENT 8)

The impacts of the CC-ALPV Alternatives would be similar to those described earlier for the CC Alternatives between Oso Parkway and the San Clemente City limits as shown on Table 5.12-2.

TABLE 5.12-2
LAND USE IMPACTS OF THE CC-ALPV-INITIAL AND ULTIMATE ALTERNATIVES FROM OSO PARKWAY TO THE SAN CLEMENTE CITY LIMIT

Jurisdiction	Land Use Type	CC-ALPV-Initial Area Affected hectares/acres		CC-ALPV-Ultimate Area Affected hectares/acres	
		Permanent ROW	Temporary Disturbance	Permanent ROW	Temporary Disturbance
County of Orange					
Rancho Mission Viejo	Open Space (5)	181/448	260/643	227/560	282/697
Prima Deshecha Landfill	Public Facilities - Landfill Site (LS)	23/57	28/68	29/72	31/78
County of Orange Total		**204/504**	**288/712**	**256/632**	**313/775**

Sources: P&D Consultants (2001), San Clemente General Plan (1993) and Zoning Maps (1996), and Prima Deshecha General Development Plan (2000).

5.12.2 LAND USE IMPACTS OF THE CC-ALPV-INITIAL AND ULTIMATE ALTERNATIVES FROM THE SAN CLEMENTE CITY LIMIT TO AVENIDA LA PATA (SEGMENT 10)

This segment of the CC-ALPV alignment follows the CC alignment except it terminates at Avenida La Pata. From Avenida La Pata to I-5, TSM improvements would occur along Avenida Pico. This segment is entirely in the City of San Clemente. Table 5.12-3 shows the total impacts and identifies which communities would be affected. Table 5.12-4 shows impacts by land use types.

TABLE 5.12-3
LAND USE IMPACTS OF THE CC-ALPV-INITIAL AND ULTIMATE ALTERNATIVES FROM THE SAN CLEMENTE CITY LIMIT TO AVENIDA LA PATA

Jurisdiction	Land Use Type	CC-ALPV-Initial Area Affected hectares/acres		CC-ALPV-Ultimate Area Affected hectares/acres	
		Permanent ROW	Temporary Disturbance	Permanent ROW	Temporary Disturbance
City of San Clemente		38/93	41/101	54/132	58/144
Forster Ranch PC	Low and High Density Residential, Private Open Space, Mixed Use Commercial/Res., Civic Center, Community Commercial, Government(**)				
Rancho San Clemente PC	Mixed-Use Commercial/ Res.(Medium Density Residential) (*), Private Open Space				

* The boundaries of the medium residential part of this mixed use is not reflected in the City's General Plan LUE.
**Government is a category "P" in the San Clemente General Plan that includes Governmental, Administrative, Utilities, Schools, Public and Private Parking.
Source: P&D Consultants (2001), San Clemente General Plan (1993) and Zoning Maps (1996), and Prima Deshecha General Development Plan (2000).

Table 5.12-4 shows the acreage of area impacted for each specific San Clemente General Plan land use category based on the maximum disturbance limits for the CC-ALPV Alternatives.

TABLE 5.12-4
LAND USE IMPACTS OF THE CC-ALPV-INITIAL AND ULTIMATE ALTERNATIVES BY LAND USE CATEGORY FROM THE SAN CLEMENTE CITY LIMITS TO AVENIDA LA PATA

Land Use Type	CC-ALPV-Initial		CC-ALPV-Ultimate	
	Hectares	Acres	Hectares	Acres
Government2	2	6	3	7
Commercial - Mixed Use Residential	5	11	5	11
Open Space - Private	16	39	23	56
Open Space - Public	8	19	9	22
Residential - High	0.1	0.3	0.1	0.3
Residential - Low	12	29	13	33
Residential - Medium Low	3	8	6	15
TOTAL	**41**	**101**	**58**	**144**

Sources: San Clemente General Plan LUE (1993) and P&D (2002).

5.12.2.1 Impacts of the CC-ALPV-Initial and Ultimate Alternatives on Existing Land Uses

Talega PC

The west part of the Talega PC is partially developed with residential and business park uses. The CC-ALPV Alternatives would traverse these existing land uses. This would be an adverse impact of these Alternatives.

Rancho San Clemente PC (Plaza Pacifica)

South of Avenida La Pata and west of Avenida Pico, the CC-ALPV Alternatives would terminate at Avenida La Pata at the Plaza Pacifica development (Planning Area 1 for the RSC PC). This segment would not adversely impact existing land uses in Planning Area 1.

5.12.2.2 Impacts of the CC-ALPV-Initial and Ultimate on Committed and Planned Development

Forster Ranch PC

This segment would affect the southeast corner of the planned public facility in Forster Ranch PC on the future extension of Avenida La Pata. However, only a small part of this site would be affected. Therefore, this would not be an adverse impact of the CC-ALPV Alternatives.

Talega PC

This segment would proceed along the west part of the planned Talega PC. This area is directly east and parallel of future Avenida La Pata and is planned for residential, open space and mixed uses that would be traversed by CC-ALPV Alternatives. The impacts to these planned land uses would be adverse.

5.12.2.3 Other Plans and Policies of the City of San Clemente

This segment would have similar impacts to plans and policies as described of the FEC-TV Alternatives regarding impacts to the IDPA.

5.12.3 COASTAL ACT COMPLIANCE FOR THE CC-ALPV ALTERNATIVES

The California Coastal Zone in the SOCTIIP study area, with the alignments of the SOCTIIP build alternatives, is shown on Figure 5.5-2. A Coastal Development Permit (California) and a Coastal Program Consistency Finding (federal) will not be required for the CC-ALPV Alternatives because the alignment of these Alternatives is not in the Coastal Zone.

5.13 CENTRAL CORRIDOR-ORTEGA HIGHWAY VARIATION-INITIAL AND ULTIMATE ALTERNATIVES

5.13.1 LAND USE IMPACTS OF THE CC-OHV-INITIAL AND ULTIMATE ALTERNATIVES (SEGMENT 11)

Under these Alternatives, the impacts to land use would be similar to those described for Segment 8 under the CC and CC-ALPV Alternatives. The CC-OHV Alternatives only impact RMV as described under the CC Alternatives. TSM improvements would occur along Ortega Highway within the planned right-of-way from the intersection with Ortega Highway to I-5 under these Alternatives. Table 5.13-1 shows the impacts of the CC-OHV Alternatives. The temporary disturbance area is often inclusive of or overlaps the permanent right-of-way. Figure 5.13-1 shows the segment, area disturbance and land use designations along the CC-OHV Alternatives.

TABLE 5.13-1
SUMMARY OF LAND USE IMPACTS OF THE CC-OHV-INITIAL AND ULTIMATE ALTERNATIVES

Jurisdiction	Land Use Type	CC-OHV-Initial Area Affected hectares/acres		CC-OHV-Ultimate Area Affected hectares/acres	
		Permanent ROW	Temporary Disturbance	Permanent ROW	Temporary Disturbance
County Of Orange					
Rancho Mission Viejo	Open Space (5)	118/291	175/432	169/418	531/1,313
Source: P&D Consultants (2001) and County of Orange LUE (2000).					

5.13.2 COASTAL ACT COMPLIANCE FOR THE CC-OHV-INITIAL AND ULTIMATE ALTERNATIVES

The California Coastal Zone in the SOCTIIP study area, with the alignments of the SOCTIIP build alternatives, is shown on Figure 5.4-3. A Coastal Development Permit (California) and a Coastal Program Consistency Finding (federal) will not be required for the CC-OHV Alternatives because the alignment of these Alternatives is not in the Coastal Zone.

5.14 ALIGNMENT 7 CORRIDOR – COMPLETE-INITIAL AND ULTIMATE ALTERNATIVES

The A7C Alternatives extend south from the existing FTC-N terminus at Oso Parkway, between the alignments of the CC and FEC Alternatives. It generally parallels the CC Alternatives and then would have the same alignment as the CC Alternatives south of Avenida La Pata in the City of San Clemente. Figure 5.14-1 shows the segments of the A7C Alternatives. Table 5.14-1 summarizes the impacts of the A7C Alternatives related to land use. The temporary disturbance area is often inclusive of or overlaps the permanent right-of-way.

TABLE 5.14-1
SUMMARY OF LAND USE IMPACTS OF THE A7C-INITIAL AND ULTIMATE ALTERNATIVES

Jurisdiction	Land Use Type	A7C-Initial Area Affected hectares/acres		A7C-Ultimate Area Affected hectares/acres	
		Permanent ROW	Temporary Disturbance	Permanent ROW	Temporary Disturbance
County of Orange					
Rancho Mission Viejo	Open Space (5)	268/663	282/698	293/725	317/785
Prima Deshecha Landfill	Public Facilities - Landfill Site (LS)	30/74	33/81	35/87	38/94
CWRP	Public Facilities	3/8	3/8	3/8	3/8
City of San Clemente					
Talega PC, Rancho San Clemente PC, Marblehead Inland PC, Other	Community – Commercial	2/5	2/5	2/5	2/5
	Neighborhood – Commercial	6/14	6/14	6/14	6/14
	Regional – Commercial	1/3	1/3	1/3	1/3
	Government (a)	4/10	5/11	5/11	5/13
	Commercial - Mixed Use Residential	24/59	26/65	26/65	28/70
	Open Space – Golf	14/34	14/34	15/37	15/38
	Open Space – Private	57/141	64/158	68/169	71/174
	Open Space – Public	2/5	2/5	0/0	0/0
	Residential – High	1/2	1/2	1/2	1/2
	Residential – Low	26/65	27/67	28/70	30/73
	Residential – Medium	6/16	7/16	7/17	7/17
	Residential - Medium Low	11/27	11/27	10/24	12/30
	Transportation (I-5) (b)	61/150	61/150	61/150	61/150
Subtotal for San Clemente	--	215/530	226.3/559	229/567	240/590
Total Impact Area (c)	--	516/1,274	544/1,346	562/1,387	598/1,477

Source: P&D Consultants (2001), County of Orange LUE (2000), Prima Deshecha General Development Plan (2000) and San Clemente Land Use Element (1993).

(a) Government is a category "P" in the San Clemente General Plan that includes Governmental, Administrative, Utilities, Schools, Public and Private Parking.
(b) This land use category reflects the right-of-way for I-5 as specified in all General Plans for cities that border I-5 in the SOCTIIP study area.
(c) This includes a 0.1 km (300 ft) segment of I-5 that occurs in San Diego County with the existing I-5 right-of-way.

5.14.1 OVERVIEW OF THE A7C-INITIAL AND ULTIMATE ALTERNATIVES

The alignment of the A7C Alternatives proceeds south from the existing terminus of the FTC at Oso Parkway approximately 1.5 km (0.9 mi) east of the Ladera PC. The alignment jogs southeast and then proceeds south in a curvilinear fashion on RMV along the upper eastern edge of Chiquita Ridge to Ortega Highway. Just north of Ortega Highway, the exit/entrance ramps connect to existing Antonio Parkway approximately 1.6 km (one mi) west of the A7C alignment. It continues south through the eastern part of Prima Deshecha Sanitary Landfill to the north boundary of the City of San Clemente. The alignment would extend through the City of San

Clemente, through the Talega PC and then would match the alignment for the FEC-TV and CC Alternatives on south for the rest of the alignment through Plaza Pacifica and Marblehead Inland PC converging with the I-5 just south of the intersection of Avenida Pico and I-5. Merging lanes and accommodations for ramps would occur along I-5 from approximately 0.9 km (3,000 ft) north of the Avenida Pico interchange to the Cristianitos Road interchange at SOSB as described for the FEC-TV and CC Alternatives. Appendix A shows the impacts of the A7C-Initial and Ultimate Alternatives on land uses in the study area.

5.14.2 LAND USE IMPACTS OF THE A7C-INITIAL AND ULTIMATE ALTERNATIVES FROM OSO PARKWAY TO THE SAN CLEMENTE CITY LIMIT (SEGMENT 12)

This segment of the A7C alignment proceeds south from the existing FTC-N terminus at Oso Parkway approximately 1.5 km (0.9 mile) east of the Ladera PC. The alignment jogs southeast and then proceeds directly south on RMV to Ortega Highway through the existing cattle grazing area west of the main agricultural operations immediately north of Ortega Highway. It continues south through Prima Deshecha Landfill. This area is entirely in the County of Orange. Table 5.14-2 summarizes the land use impacts of this segment.

TABLE 5.14-2
LAND USE IMPACTS OF THE A7C-INITIAL AND ULTIMATE ALTERNATIVES
OSO PARKWAY TO THE SAN CLEMENTE CITY LIMIT

Jurisdiction	Land Use Type	A7C-Initial Area Affected hectares/acres		A7C-Ultimate Area Affected hectares/acres	
		Permanent ROW	Temporary Disturbance	Permanent ROW	Temporary Disturbance
County of Orange					
Rancho Mission Viejo	Open Space (5)	268/663	282/698	293/725	317/785
Prima Deshecha Landfill	Public Facilities - Landfill Site (LS)	30/74	33/81	35/87	38/94
CWRP	Public Facilities	3/8	3/8	3/8	3/8
County of Orange Total		**301/744**	**318/787**	**332/820**	**359/887**
Sources: P&D Consultants (2001) and County of Orange LUE (2000).					

5.14.2.1 Impacts of the A7C-Initial and Ultimate Alternatives on Existing Land Uses

Tesoro High School

The A7C alignment would be adjacent to Tesoro High School and would not have direct or indirect adverse impacts on this land use. The Final EIR for Tesoro High School (formerly Chiquita Canyon High School) included measures to mitigate potential indirect noise impacts associated with a transportation facility in the area of the SOCTIIP corridor alternatives. Although that EIR specifically considered the alignment of the FEC Alternative, the A7C Alternatives share a common alignment in this area. Therefore, the A7C Alternatives would not result in adverse land use impacts at Tesoro High School.

Rancho Mission Viejo

The A7C Alternatives would not affect cattle grazing on RMV. In addition, there are no leases on RMV that would be affected by these Alternatives. However, the alignment would impact the northeast edge of the existing CWRP in Chiquita Canyon. This would not be considered an adverse impact of these Alternatives, because the Alternatives would impact only the northeast edge of the site and would not preclude the operation of this Plant. The potential impacts of the A7C Alternatives on public utilities are discussed in detail in Public Services and Utilities Technical Report.

Prima Deshecha Sanitary Landfill

There are no existing land uses in the part of the Landfill traversed by the A7C Alternatives.

5.14.2.2 Impacts of the A7C-Initial and Ultimate Alternatives on Committed and Planned Development

Rancho Mission Viejo

There is no committed development for RMV. However, according to the proposed development plans for development of RMV (November 2001), Planning Areas 2, 13, 11 and 5 would be affected by the A7C Alternatives. These areas are proposed to have residential, business park, commercial, urban activity center (mixed use), regional park and open space. The RMV proposal does not specify the location of any land uses except residential and open space (open space, regional park and O'Neill Ranch overlay). Therefore, exact acreage figures by the proposed land use category that could be affected by this segment of the A7C Alternatives cannot be determined.

Prima Deshecha Sanitary Landfill

The A7C Alternatives would disrupt some of the planned use areas specified in the Prima Deshecha Sanitary Landfill GDP 2000. This would be considered an adverse impact. These impacts are addressed in the Public Services and Utilities Technical Report.

Proposed Prima Deshecha Regional Park

The potential impacts of the A7C Alternatives on this proposed regional park are discussed in detail in the Recreation Resources Technical Report.

5.14.3 LAND USE IMPACTS OF THE A7C-INITIAL AND ULTIMATE ALTERNATIVES FROM THE SAN CLEMENTE CITY LIMIT TO CRISTIANITOS ROAD (SEGMENT 13)

The alignment of the A7C Alternatives continues south from the Prima Deshecha Landfill into the Talega PC in the City of San Clemente. The segment proceeds southeast and then veers southwest toward Avenida La Pata. It then follows the same alignment as the FEC-TV and CC

Alternatives to Cristianitos Road. Table 5.14-3 below shows the impacts to the City of San Clemente and lists impacted land uses by community.

Table 5.14-4 shows the acreage of area impacted for each land use category based on the maximum disturbance limits for the A7C Alternatives.

5.14.3.1 Impacts of the A7C-Initial and Ultimate Alternatives on Existing Land Uses

Talega PC

The lower part of the Talega PC is partially developed with residential, golf course and commercial uses. The A7C Alternatives would directly affect these existing uses, and would divide the existing community as well as the planned part of the community. This would be an adverse impact. These direct impacts to land uses under the A7C Alternatives would be adverse.

TABLE 5.14-3
LAND USE IMPACTS OF THE A7C-INITIAL AND ULTIMATE ALTERNATIVES FROM THE SAN CLEMENTE CITY LIMIT TO CRISTIANITOS ROAD

Jurisdiction	Land Use Type	A7C-Initial Area Affected hectares/acres		A7C-Ultimate Area Affected hectares/acres	
		Permanent ROW	Temporary Disturbance	Permanent ROW	Temporary Disturbance
City of San Clemente		215/530	226/559	239/590	230/567
Talega PC	Talega Reserve, Low, Medium-Low, and Medium Density Residential, Private Open Space, Golf, Mixed Use Commercial/Res., Civic Center, Neighborhood Commercial				
Rancho San Clemente PC	Mixed-Use Commercial/ Res.(Medium Density Residential) (*), Private Open Space				
Marblehead Inland PC	Private and Public Open Space				
Other	Regional, Community, Neighborhood and Mixed Use Commercial, Low, Medium Low, Medium and High Density Residential, Government, Transportation (I-5) (***)				

* The boundaries of the medium residential part of this mixed use is not reflected in the City's General Plan LUE.
** Government is a category "P" in the San Clemente General Plan that includes Governmental, Administrative, Utilities, Schools, Public and Private Parking.
*** This land use category reflects the right-of-way for I-5 as specified in all General Plans for cities that border I-5 in the SOCTIIP study area.
Sources: City of San Clemente LUE (1993) and P&D Consultants (2002).

TABLE 5.14-4
LAND USE IMPACTS OF THE A7C-INITIAL AND ULTIMATE ALTERNATIVES BY LAND USE CATEGORY FROM THE SAN CLEMENTE CITY LIMIT TO CRISTIANITOS ROAD

Land Use Type	A7C-Initial		A7C-Ultimate	
	Hectares	Acres	Hectares	Acres
Community – Commercial	2	5	2	5
Neighborhood - Commercial	6	14	6	14
Regional - Commercial	1	3	1	3
Government	5	11	5	13
Commercial - Mixed Use Residential	26	65	28	70
Open Space - Golf	14	34	15	38
Open Space - Private	64	158	71	174
Open Space - Public	2	5	0	0
Residential - High	1	2	1	2
Residential - Low	27	67	30	73
Residential - Medium	7	16	7	17
Residential - Medium Low	11	27	12	29
Transportation (I-5) (*)	61	150	61	150
TOTAL	**226**	**559**	**239**	**590**

* This land use category reflects the right-of-way for I-5 as specified in all General Plans for cities that border I-5 in the SOCTIIP study area.
Sources: San Clemente General Plan LUE (1993) and P&D (2002).

Rancho San Clemente PC (Plaza Pacifica)

South of Avenida La Pata and west of Avenida Pico, this segment would traverse the Plaza Pacifica Development (Planning Area 1 for the RSC PC) which has existing residential and commercial uses. The residential component of this area would be adversely impacted which would be considered adverse. The retail commercial component of this development would not be directly impacted. This segment, which would extend onto the west side of Avenida Pico, would not directly impact commercial, industrial and residential uses east of Avenida Pico in the RSC PC.

Marblehead Inland PC

The location of the Marblehead Inland PC is shown in Figure 3.4-2. The loss of private open space would be an adverse impact as this loss would be inconsistent with the City's General Plan policies related to the preservation of open space. These Alternatives would result in the displacement of the east part (slope area) of the St. Andrews by the Sea property. The existing church would not be displaced. This would not be considered an adverse impact.

Regional Commercial Site

Directly west of San Clemente High School is a commercial zone with two restaurants and a gas station. This area is part of the General Planned Regional Commercial center that also includes San Clemente High School. According to the San Clemente General Plan, this area is an overlay for the future reuse of San Clemente High School into a major retail shopping center, which is reflected in its current land use designation of Regional Commercial. The A7C Alternatives

would displace these three uses. Because these are commercial uses that could relocate in the area, this is not considered an adverse impact to land use.

San Clemente High School and Ole Hanson Elementary School

The northbound connectors for the A7C Alternatives from I-5 would result in direct adverse impacts to San Clemente High School and Ole Hansen Elementary School. Discussion of the impacts to the athletic fields at these facilities is provided in the Recreation Resources Technical Report. Impacts related to other aspects of the schools are discussed in the Utilities and Public Services Technical Report.

5.14.3.2 Impacts of the A7C-Initial and Ultimate Alternatives on Committed and Planned Development

Forster Ranch PC

The alignment of the A7C Alternatives would affect the southeast corner of the planned public facility in Forster Ranch Planned Community on the future extension of Avenida La Pata. However, only a small part of this site would be affected. Therefore, this would not be an adverse impact of the A7C Alternatives.

Talega PC

The alignment of the A7C Alternatives would proceed through the middle of the Talega PC in an area planned for residential, golf course, open space and mixed uses. This Segment would also substantially affect the conceptual circulation plan for this area. These impacts to these planned land uses would be adverse.

5.14.3.3 Other Plans and Policies of the City of San Clemente

The A7C Alternatives would have similar impacts to plans and policies as previously described for the FEC-TV and CC Alternatives.

5.14.4 COASTAL ACT COMPLIANCE OF THE A7C-INITIAL AND ULTIMATE ALTERNATIVES

The California Coastal Zone in the SOCTIIP study area, with the alignments of the SOCTIIP build alternatives, is shown on Figure 5.5-2. Figure 5.10-2 shows the disturbance limits for the A7C-Initial and Ultimate Alternatives in the Coastal Zone, which are the same as the FEC-TV Alternatives. A Coastal Development Permit (California) and a Coastal Program Consistency Finding (federal) may be required for the A7C Alternatives because the I-5 improvements for these Alternatives occur in the Coastal Zone in south San Clemente and north San Diego County.

5.15 ALIGNMENT 7 CORRIDOR-ORTEGA HIGHWAY VARIATION-INITIAL AND ULTIMATE ALTERNATIVES

Under these Alternatives, the impacts related to land use would be similar to those for Segment 12 under the A7C Alternatives. Table 5.15-1 shows the impacts of the A7-OHV Alternatives related to land use. The temporary disturbance area is often inclusive of or overlaps the permanent right-of-way. Figures illustrating specific impacts on land uses of the initial and ultimate configuration of the A7C-OHV Alternatives are included in Appendix A.

TABLE 5.15-1
SUMMARY OF LAND USE IMPACTS OF THE A7C-OHV-INITIAL AND ULTIMATE ALTERNATIVES

Jurisdiction	Land Use Type	A7C-OHV-Initial Area Affected hectares/acres		A7C-OHV-Ultimate Area Affected hectares/acres	
		Permanent ROW	Temporary Disturbance	Permanent ROW	Temporary Disturbance
County Of Orange					
Rancho Mission Viejo	Open Space (5)	144/357	155/384	175/432	206/510
CWRP	Public Facilities (4)	2/5	2/5	2/6	2/6
Total Impact Area	--	147/363	158/390	178/439	209/516
Source: P&D Consultants (2001) and County of Orange LUE (2000).					

5.15.1 LAND USE IMPACTS OF THE A7C-OHV-INITIAL AND ULTIMATE ALTERNATIVES (SEGMENT 14)

5.15.1.1 Impacts of the A7C-OHV-Initial and Ultimate Alternatives on Existing Land Uses

Tesoro High School

The alignment of the A7C-OHV Alternatives would be adjacent to Tesoro High School and would not have direct or indirect adverse impacts on this land use. The Final EIR for Tesoro High School (formerly Chiquita Canyon High School) included measures to mitigate potential indirect noise impacts associated with a transportation facility in the area of the SOCTIIP corridor alternatives. Although that EIR specifically considered the alignment of the FEC Alternative, the A7C-OHV Alternatives share a common alignment in this area. Therefore, the A7C Alternatives would not result in adverse land use impacts at Tesoro High School.

Rancho Mission Viejo

The A7C-OHV Alternatives would not affect cattle grazing on RMV. In addition, there are no leases on RMV that would be affected by this alignment. However, the alignment would impact the northeast edge of the existing CWRP in Chiquita Canyon. This would not be considered an adverse impact of these Alternatives, because these Alternatives would impact only the northeast edge of the site and would not preclude the operation of this Plant. The potential impacts of the A7C-OHV Alternatives on public utilities are discussed in detail in Public Services and Utilities Technical Report.

5.15.1.2 Impacts of the A7C-OHV-Initial and Ultimate Alternatives on Committed and Planned Land Uses

Rancho Mission Viejo

There is no committed development for RMV. However, according to the proposed development plans for development of RMV (November 2001), Planning Areas 2 and 13 would be affected by the A7C-OHV alignment. These areas are proposed to have residential, business park, commercial and regional park and open space. The RMV proposal does not specify the location of any land uses except residential and open space (open space, regional park and O'Neill Ranch overlay). Therefore, exact acreage figures by the proposed land use category that could be affected by this segment of the A7C-OHV Alternatives cannot be determined.

5.15.2 COASTAL ACT COMPLIANCE FOR THE A7C-OHV-INITIAL AND ULTIMATE ALTERNATIVES

The California Coastal Zone in the SOCTIIP Study Area, with the alignments of the SOCTIIP build alternatives, is shown on Figure 5.5-2. A Coastal Development Permit (California) and a Coastal Program Consistency Finding (Federal) will not be required for the A7C-OHV Alternatives because the alignment of these Alternatives is not in the Coastal Zone.

5.16 ALIGNMENT 7 CORRIDOR AVENIDA LA PATA VARIATION-INITIAL AND ULTIMATE ALTERNATIVES

The alignment of the A7C-ALPV Alternatives follows the same alignment as the A7C Alternatives except it terminates at its intersection at Avenida Vista Hermosa in the City of San Clemente. In addition, disturbance limits and the profile for this segment may vary slightly from the A7C Alternatives because the cut and fill quantities may balance differently. The TSM improvements on Avenida Vista Hermosa, Avenida La Pata and on Avenida Pico to I-5 under these Alternatives would be in the existing right-of-way. Therefore, the TSM improvements would not result in impacts related to land use. Table 5.16-1 summarizes the land use impacts of the A7C-ALPV Alternatives. The temporary disturbance area is often inclusive of or overlaps the permanent right-of-way. Figure 5.16-1 shows the alignment and segments of the A7C-ALPV Alternatives. Figures illustrating specific impacts on land uses of the initial and ultimate configuration of the A7C-ALPV Alternatives are provided in Appendix A.

5.16.1 LAND USE IMPACTS OF THE A7C-ALPV-INITIAL AND ULTIMATE ALTERNATIVES FROM OSO PARKWAY TO THE SAN CLEMENTE CITY LIMIT (SEGMENT 12)

The impacts of this segment related to land use would be the same as those discussed previously for the same segment under the A7C Alternatives, except the profile may vary slightly and the hectares (acres) may differ slightly. The A7C-ALPV Alternatives follow the same alignment as the A7C Alternatives until it reaches Avenida La Pata. Refer to the A7C Alternatives for the

discussion on impacts to existing and planned land uses for this segment. Table 5.16-2 shows the impacts of the A7C-ALPV-Initial and Ultimate Alternatives related to land use.

TABLE 5.16-1
SUMMARY OF LAND USE IMPACTS OF THE A7C-ALPV-INITIAL AND ULTIMATE ALTERNATIVES

Jurisdiction	Land Use Type	A7C-ALPV-Initial Area Affected hectares/acres		A7C-ALPV-Ultimate Area Affected hectares/acres	
		Permanent ROW	Temporary Disturbance	Permanent ROW	Temporary Disturbance
County of Orange					
Rancho Mission Viejo	Open Space (5)	268/663	282/698	293/725	317/785
Prima Deshecha Landfill	Public Facilities - Landfill Site (LS)	30/74	33/82	35/87	38/94
CWRP	Public Facilities (4)	3/8	3/8	3/8	3/9
City of San Clemente					
Talega PC	Government (a)	0.1/0.2	0.1/0.1	0.3/1	0.3/1
	Commercial - Mixed Use Residential	0.1/0.2	0.1/0.3	7/18	8/20
	Open Space - Golf	12/29	13/32	14/34	14/20
	Open Space - Private	9/21	9/22	11/28	13/31
	Open Space - Public	1/2	1/2	1/3	1/3
	Residential - High	0/0	0/0	0.1/0.2	0.1/0.3
	Residential - Low	19/47	20/50	21/52	23/56
	Residential - Medium	5/11	5/12	5/12	5/13
	Residential - Medium Low	5/12	8/12	6/15	6/15
Subtotal for San Clemente	--	50/123	56/131	66/162	70/173
Total Impact Area	--	351/867	374/918	398/983	429/1,061

Sources: P&D Consultants (2001), San Clemente General Plan (1993) and Zoning Maps (1996), and Prima Deshecha General Development Plan (2000).

(a) Government is a category "P" in the San Clemente General Plan that includes Governmental, Administrative, Utilities, Schools, Public and Private Parking.

TABLE 5.16-2
LAND USE IMPACTS OF THE A7C-ALPV-INITIAL AND ULTIMATE ALTERNATIVES FROM OSO PARKWAY TO THE SAN CLEMENTE CITY LIMIT

Jurisdiction	Land Use Type	A7C-ALPV-Initial Area Affected hectares/acres		A7C-ALPV-Ultimate Area Affected hectares/acres	
		Permanent ROW	Temporary Disturbance	Permanent ROW	Temporary Disturbance
County of Orange					
Rancho Mission Viejo	Open Space (5)	268/663	282/698	293/725	317/785
Prima Deshecha Landfill	Public Facilities - Landfill Site (LS)	30/74	33/82	35/87	38/94
Other	Public Facilities (4)	3/8	3/9	3/8	3/9
County of Orange Total		**301/744**	**318/787**	**332/821**	**359/888**

Sources: P&D Consultants (2001) and County of Orange LUE (2000).

5.16.2 LAND USE IMPACTS OF THE A7C-ALPV-INITIAL AND ULTIMATE ALTERNATIVES FROM THE SAN CLEMENTE CITY LIMIT TO AVENIDA LA PATA (SEGMENT 16)

The A7C-ALPV Alternatives impact smaller areas in the City of San Clemente because the alignment terminates at Avenida La Pata. The A7C-ALPV Alternatives include TSM improvements to Avenida Pico to connect this alignment to I-5. Table 5.16-3 shows the impacts to the City of San Clemente and lists impacted land uses by community.

TABLE 5.16-3
LAND USE IMPACTS OF THE A7C-ALPV-INITIAL AND ULTIMATE ALTERNATIVES FROM THE SAN CLEMENTE CITY LIMIT TO AVENIDA LA PATA

Jurisdiction	Land Use Type	A7C-ALPV-Initial Area Affected hectares/acres		A7C-ALPV-Ultimate Area Affected hectares/acres	
		Permanent ROW	Temporary Disturbance	Permanent ROW	Temporary Disturbance
City of San Clemente		50/123	56/131	66/162	70/173
Talega PC	Talega Reserve, Low, Medium-Low, and Medium Density Residential, Private Open Space, Golf, Mixed Use Commercial/Res., Civic Center, Neighborhood Commercial				

* The boundaries of the medium residential part of this mixed use is not reflected in the City's General Plan LUE.
**Government is a category "P" in the San Clemente General Plan that includes Governmental, Administrative, Utilities, Schools, Public and Private Parking.
Sources: City of San Clemente LUE (1993) and P&D Consultants (2002).

Table 5.16-4 shows the acreage of area impacted for each San Clemente General Plan land use category based on the maximum disturbance limits for the A7C-ALPV Alternatives.

TABLE 5.16-4
LAND USE IMPACTS OF THE A7C-ALPV-INITIAL AND ULTIMATE ALTERNATIVES BY LAND USE CATEGORY FROM THE SAN CLEMENTE CITY LIMIT TO AVENIDA LA PATA

	A7C-ALPV-Initial		A7C-ALPV-Ultimate	
	Hectares	Acres	Hectares	Acres
Government	0.1	0.1	0.3	1
Commercial - Mixed Use Residential	0.1	0.3	8	20
Open Space - Golf	13	32	14	20
Open Space - Private	9	22	13	31
Open Space - Public	1	2	1	3
Residential - High	0	0.1	0.1	0.3
Residential - Low	20	50	23	56
Residential - Medium	5	12	5	12
Residential - Medium Low	8	12	6	15
TOTAL	**56**	**131**	**70**	**173**

Sources: San Clemente General Plan LUE (1993) and P&D (2002).

5.16.2.1 Impacts of the A7C-ALPV-Initial and Ultimate Alternatives on Existing Land Uses

Talega PC

The west part of the Talega PC is developed with residential and business park uses which would be traversed by the A7C-ALPV Alternatives. This would physically divide the community and would be an adverse impact.

Rancho San Clemente PC (Plaza Pacifica)

The A7C-ALPV Alternatives would terminate at Avenida La Pata at the Plaza Pacifica Development (Planning Area 1 for Rancho San Clemente) and would not adversely impact land uses in this Planning Area.

5.16.2.2 Impacts of the A7C-ALPV-Initial and Ultimate Alternatives on Committed and Planned Development

Talega PC

The A7C-ALPV Alternatives would traverse the middle of the Talega PC in an area planned for residential, golf course, open space and mixed uses. This segment would also substantially affect the conceptual circulation plan for this part of the Talega PC. These impacts to these planned land uses would be adverse.

5.16.2.3 Other Plans and Policies of the City of San Clemente

The A7C-ALPV Alternatives would result in similar impacts to the City of San Clemente IDPA as described earlier for the A7C Alternatives.

5.16.3 COASTAL ACT COMPLIANCE FOR THE A7C-ALPV-INITIAL AND ULTIMATE ALTERNATIVES

The California Coastal Zone in the SOCTIIP Study Area, with the alignments of the SOCTIIP build alternatives, is shown on Figure 5.5-2. A Coastal Development Permit (California) and a Coastal Program Consistency Finding (Federal) will not be required for the A7C-ALPV Alternative because these Alternatives are not in the Coastal Zone.

5.17 ALIGNMENT 7 CORRIDOR-7 SWING VARIATION-INITIAL AND ULTIMATE ALTERNATIVES

The alignment of the A7C-7SV Alternatives follows the same alignment as the A7C Alternatives until just north of the Prima Deshecha Sanitary Landfill. It then jogs west and would follow the same alignment as the CC Alternatives from approximately 0.4 km (0.3 mi) north of the future extension of Avenida Vista Hermosa to Cristianitos Road. Figure 5.17-1 shows the alignment of the A7C-7SV Alternatives. Table 5.17-1 summarizes the land use impacts of the A7C-7SV Alternatives. The temporary disturbance area is often inclusive of or overlaps the permanent right-of-way. Appendix A shows the impacts of the A7C-7SV-Initial and Ultimate Alternatives

on land uses in the study area.

TABLE 5.17-1
SUMMARY OF LAND USE IMPACTS OF THE A7C-7SV-INITIAL AND ULTIMATE ALTERNATIVES

Jurisdiction	Land Use Type	A7C-7SV-Initial Area Affected hectares/acres		A7C-7SV-Ultimate Area Affected hectares/acres	
		Permanent ROW	Temporary Disturbance	Permanent ROW	Temporary Disturbance
County of Orange					
Rancho Mission Viejo	Open Space (5)	269/664	281/694	294/726	317/783
Prima Deshecha Landfill	Public Facilities - Landfill Site (LS)	29/71	31/75	34/83	35/87
CWRP	Public Facilities (4)	3/8	3/8	3/8	3/8
City of San Clemente					
Talega PC, Rancho San Clemente PC, Marblehead Inland PC, Other	Community – Commercial	2/5	2/5	2/5	2/5
	Neighborhood – Commercial	6/14	6/14	6/14	6/14
	Regional – Commercial	1/3	1/3	1/3	1/3
	Government (a)	9/21	9/23	9/23	10/25
	Institutional	0.1/0.3	0.1/0.3	0.1/0.3	0.1/0.3
	Commercial - Mixed Use Residential	12/30	14/35	12/30	13/33
	Open Space – Private	66/163	73/181	75/184	79/196
	Open Space – Public	8/18	8/19	8/21	9/21
	Residential – High	1/3	0.2/1	1/3	1/3
	Residential – Low	18/44	18/44	19/48	19/48
	Residential – Medium	2/4	2/4	2/4	2/4
	Residential - Medium Low	7/17	7/17	8/19	8/19
	Transportation (I-5) (b)	61/150	61/150	61/150	61/150
Subtotal for San Clemente	--	191/471	201/496	203/502	203/521
Total Impact Area (c)	--	491/1,218	515/1,273	534/1,320	567/1,400

Source: P&D Consultants (2001), County of Orange LUE (2000) and San Clemente Land Use Element (1993).
(a) Government is a category "P" in the San Clemente General Plan that includes Governmental, Administrative, Utilities, Schools, Public and Private Parking.
(b) This land use category reflects the right-of-way for I-5 as specified in all General Plans for cities that border I-5 in the SOCTIIP study area.
(c) This includes a 0.1 km (300 ft) segment of I-5 that occurs in San Diego County with the existing I-5 right-of-way.

5.17.1 OVERVIEW OF THE A7C-7SV-INITIAL AND ULTIMATE ALTERNATIVES

The alignment of the A7C-7SV Alternatives follows the alignment of the A7C Alternatives until just inside the Prima Deshecha Landfill. It then jogs southwest which impacts the Landfill more than the A7C Alternatives but avoids more of the existing and planned development in the Talega PC. The alignment then swings south and follows the alignment of the CC Alternatives to Cristianitos Road.

5.17.2 LAND USE IMPACTS OF THE A7C-7SV-INITIAL AND ULTIMATE ALTERNATIVES FROM OSO PARKWAY TO THE SAN CLEMENTE CITY LIMITS (SEGMENT 17)

The impacts of the A7C-7SV Alternatives related to land use are similar to those for the A7C Alternatives, except the alignment jogs diagonally to the southwest on the Prima Deshecha Landfill, connecting with the general alignment of the CC Alternatives. Table 5.17-2 shows the impacts of Segment 17 of the A7C-7SV Alternatives related to land use.

TABLE 5.17-2
LAND USE IMPACTS OF THE A7C-7SV-INITIAL AND ULTIMATE ALTERNATIVES FROM OSO PARKWAY TO THE SAN CLEMENTE CITY LIMIT

Jurisdiction	Land Use Type	A7C-7SV-Initial Area Affected hectares/acres		A7C-7SV-Ultimate Area Affected hectares/acres	
		Permanent ROW	Temporary Disturbance	Permanent ROW	Temporary Disturbance
County of Orange					
Rancho Mission Viejo	Open Space (5)	269/664	281/694	294/726	317/783
Prima Deshecha Landfill	Public Facilities - Landfill Site (LS)	29/71	31/75	34/83	35/87
Other	Public Facilities (4)	3/8	3/8	3/8	3/8
County of Orange Total		**300/742**	**314/777**	**331/818**	**356/879**
Source: P&D Consultants (2001) and County of Orange LUE (2000).					

5.17.2.1 Impacts of the A7C-7SV-Initial and Ultimate Alternatives on Existing Land Uses

Rancho Mission Viejo

The A7C-7SV Alternatives would follow the same alignment as the A7C Alternatives across RMV. Refer to the A7C Alternatives for the discussion on land use impacts.

Prima Deshecha Sanitary Landfill

There are no existing uses in the part of the Landfill traversed by the alignment of the A7C-7SV Alternatives.

5.17.2.2 Impacts of the A7C-7SV-Initial and Ultimate Alternatives on Committed and Planned Development

Rancho Mission Viejo

There is no committed development for RMV. However, according to the proposed development plans for RMV (November 2001), Planning Areas 2, 13, 11 and 5 would be affected by the A7C-7SV alignment. These areas are proposed to have a residential, business park, commercial, urban activity center (mixed use), regional park and open space. The RMV proposal does not specify the location of any land uses except residential and open space (open

space, regional park and O'Neill Ranch overlay). Therefore, exact acreage figures by the proposed land use category that could be affected by this segment of the A7C-7SV Alternatives cannot be determined.

Prima Deshecha Sanitary Landfill

The A7C-7SV Alternatives would disrupt some of the planned use areas specified in the Prima Deshecha Sanitary Landfill GDP 2000, especially those planned for later phases. Because the alignment of the A7C-7SV Alternatives goes through the middle of a planned refuse disposal area, it would substantially reduce the planned capacity of this Landfill. This would be an adverse impact to a planned land use. Impacts of the A7C-7SV Alternatives related to the Prima Deshecha Landfill are addressed detail in the Public Services and Utilities Technical Report.

Proposed Prima Deshecha Regional Park

The alignment of the A7C-7SV Alternatives would affect the current layout of park uses proposed for the Prima Deshecha Regional Park. The A7C-7SV alignment would cut through the middle of the planned regional park. This would be an adverse impact of the A7C-7SV Alternatives. Impacts of this segment on the proposed regional park are discussed in detail in the Recreation Resources Technical Report.

5.17.3 LAND USE IMPACTS OF THE A7C-7SV-INITIAL AND ULTIMATE ALTERNATIVES FROM SAN CLEMENTE CITY LIMIT TO CRISTIANITOS ROAD (SEGMENT 18)

The alignment of the A7C-7SV Alternatives continues south from the Prima Deshecha Landfill into the Talega and Forster Ranch PCs in the City of San Clemente. The segment proceeds south and then veers southwest toward Avenida La Pata. It then follows the same alignment as the FEC-TV and CC Alternatives to Cristianitos Road. Table 5.17-3 shows the impacts to City of San Clemente PCs under these Alternatives.

Table 5.17-4 shows the acreage of area impacted for each land use category based on the maximum disturbance limits for the A7C-7SV Alternatives.

5.17.3.1 Impacts of the A7C-7SV-Initial and Ultimate Alternatives on Existing Land Uses

Talega PC

The lower part of the Talega PC is partially developed with residential, golf course and commercial uses. The A7C-7SV Alternatives would directly affect these existing uses. This would be an adverse impact.

TABLE 5.17-3
LAND USE IMPACTS OF THE A7C-7SV-INITIAL AND ULTIMATE ALTERNATIVES FROM THE SAN CLEMENTE CITY LIMIT TO CRISTIANITOS ROAD

Jurisdiction	Land Use Type	A7C-7SV-Initial Area Affected hectares/acres		A7C-7SV-Ultimate Area Affected hectares/acres	
		Permanent ROW	Temporary Disturbance	Permanent ROW	Temporary Disturbance
City of San Clemente		191/471	201/496	203/502	203/521
Talega PC	Low and High Density Residential, Private Open Space, Mixed Use Commercial/Res., Civic Center, Community Commercial, Government(**)				
Rancho San Clemente PC Marblehead Inland PC Other	Mixed-Use Commercial/ Res.(Medium Density Residential) (*), Private Open Space Private and Public Open Space Regional, Community, Neighborhood and Mixed Use Commercial, Low, Medium Low, Medium and High Density Residential, Government, Transportation (I-5)				

* The boundaries of the medium density residential part of this mixed use is not reflected in the City's General Plan LUE.
** Government is a category "P" in the San Clemente General Plan that includes Governmental, Administrative, Utilities, Schools, Public and Private Parking.
*** This land use category reflects the right-of-way for I-5 as specified in all General Plans for cities that border I-5 in the SOCTIIP study area.
Sources: City of San Clemente LUE (1993) and P&D Consultants (2002).

TABLE 5.17-4
LAND USE IMPACTS OF THE A7C-7SV-INITIAL AND ULTIMATE ALTERNATIVES BY LAND USE CATEGORY FROM THE SAN CLEMENTE CITY LIMIT TO CRISTIANITOS ROAD

Land Use Type	A7C-7SV-Initial		A7C-7SV-Ultimate	
	Hectares	Acres	Hectares	Acres
Community – Commercial	2	5	2	5
Neighborhood - Commercial	6	14	6	14
Regional - Commercial	1	3	1	3
Government	9	23	10	25
Commercial - Mixed Use Residential	14	35	13	33
Open Space – Private	73	181	79	196
Open Space – Public	8	19	1	21
Residential – High	0.2	1	1	3
Residential – Low	18	44	19	48
Residential – Medium	2	4	2	4
Residential – Medium Low	70	17	8	19
Transportation (I-5) *	61	150	61	150
TOTAL	**201**	**496**	**203**	**521**

* This land use category reflects the right-of-way for I-5 as specified in all General Plans for cities that border I-5 in the SOCTIIP study area.
Sources: San Clemente General Plan LUE (1993) and P&D (2002).

Rancho San Clemente PC (Plaza Pacifica)

South of Avenida La Pata and west of Avenida Pico, this segment would traverse the Plaza Pacifica Development (Planning Area 1 for the RSC PC) which has existing private open space, residential and commercial uses. The residential component of this area would be impacted which would be an adverse impact. The retail commercial component of this development would not be directly impacted. This segment, which would extend onto the west side of Avenida Pico, would not directly impact commercial, industrial and residential uses east of Avenida Pico in the RSC PC.

Marblehead Inland PC

Impacts of the A7C-7SV Alternatives to the Marblehead Inland PC are similar to the impacts described for the FEC-TV Alternatives because the alignment of the A7C-7SV Alternatives is very similar to the alignment of the FEC-TV Alternatives along this segment.

Regional Commercial Site

Impacts of the A7C-7SV Alternatives to the Regional Commercial site are similar to impacts described for the FEC-TV Alternatives because the alignment of the A7C-7SV Alternatives is very similar to the alignment of the FEC-TV Alternatives along this segment.

San Clemente High School and Ole Hanson Elementary School

Impacts to San Clemente High School and Ole Hanson Elementary of the A7C-7SV Alternatives are similar to impacts described for the FEC-TV Alternatives because the alignment of the FEC-TV Alternatives is very similar to the alignment of the A7C-7SV Alternatives along this Segment 18.

Impacts Along I-5

From 0.9 km (3,000 ft) north of the Avenida Pico interchange to the Cristianitos Road interchange along I-5, the A7C-7SV Alternatives would require additional right-of-way for transition lanes and ramps connecting the corridor with I-5. Impacts along I-5 under the A7C-7SV Alternatives would be the same as described for the FEC-TV Alternatives.

5.17.3.2 Impacts of the A7C-7SV-Initial and Ultimate Alternatives on Committed and Planned Land Uses

Forster Ranch PC

This segment would affect the southeast corner of the planned Government parcel in Forster Ranch PC along the future extension of Avenida La Pata. A small part of the southeast corner of the site would be affected although the development of the site would not be precluded by the A7C-7SV Alternatives. Therefore, this would not be an adverse impact of the A7C-7SV Alternatives.

Talega PC

This segment would proceed along the west part of the planned Talega PC, directly east and parallel of future Avenida La Pata. This area is planned for residential, open space and mixed uses that would be impacted by the A7C-7SV Alternatives. The impacts to these planned land uses would be adverse.

Avenida La Pata Extension

The A7C-7SV Alternatives have similar impacts related to the Avenida La Pata extension as the FEC-TV Alternatives.

Regional Commercial Site

The A7C-7SV Alternatives have similar impacts related to the regional commercial site as the FEC-TV Alternatives.

5.17.3.3 Other Plans and Policies of the City of San Clemente

This segment would have impacts to City of San Clemente plans and policies similar to those described under the FEC-TV Alternatives.

5.17.4 COASTAL ACT COMPLIANCE FOR THE A7C-7SV-INITIAL AND ULTIMATE ALTERNATIVES

The California Coastal Zone in the SOCTIIP study area, with the alignments of the SOCTIIP build alternatives, is shown on Figure 5.5-2. Figure 5.10-2 shows the disturbance limits for the A7C-7SV-Initial and Ultimate Alternatives in the Coastal Zone, which are the same as the FEC-TV Alternatives. A Coastal Development Permit (California) and a Coastal Program Consistency Finding (federal) may be required for the A7C-7SV Alternatives because the southern segment of I-5 improvements under the A7C-7SV Alternatives is in the Coastal Zone.

5.18 ALIGNMENT 7 CORRIDOR - FAR EAST CROSSOVER-INITIAL AND ULTIMATE ALTERNATIVES

The alignment of the A7C-FECV Alternatives consists of segments of the alignments of other alternatives. The alignment proceeds south from Oso Parkway along the A7C alignment, then swings southeast on the east border of the Prima Deshecha Landfill and enters the Rolling Hills PC in an undeveloped area. It enters the City of San Clemente in the middle of planning areas in various stages of development. It then follows the alignment of the FEC Alternatives from Avenida Pico to the end of the alignment on I-5 south of Basilone Road.

5.18.1 OVERVIEW OF THE A7C-FECV-INITIAL AND ULTIMATE ALTERNATIVES

The alignment of the A7C-FECV Alternatives follows the same alignment as the A7C Alternative until just north of the Prima Deshecha Sanitary Landfill. It then jogs southeast along the east border of the Landfill toward the RMV Land Conservancy, through the Talega PC extending south toward SOSB. It then follows the alignment of the FEC Alternatives through SOSB to the confluence with I-5. Figure 5.18-1 shows the alignment and segments for the A7C-FECV Alternatives. Table 5.18-1 summarizes the impacts of the A7C-FECV Alternatives related to land use. The temporary disturbance area is often inclusive of or overlaps the permanent right-of-way. Figures illustrating specific impacts on land uses of the A7C-FECV-Initial and Ultimate Alternatives are provided in Appendix A.

TABLE 5-18-1
SUMMARY LAND USE IMPACTS OF THE A7C-FECV-INITIAL AND ULTIMATE ALTERNATIVES

Jurisdiction	Land Use Type	A7C-FECV-Initial Area Affected hectares/acres		A7C-FECV-Ultimate Area Affected hectares/acres	
		Permanent ROW	Temporary Disturbance	Permanent ROW	Temporary Disturbance
County of Orange					
Rancho Mission Viejo Rolling Hills PC	Open Space (5)	242/598	264/652	276/682	324/800
Prima Deshecha Landfill	Public Facilities - Landfill Site (LS)	28/70	31/76	36/88	52/129
RMV Conservancy	Open Space Reserve	12/31	13/31	16/39	16/39
Rolling Hills PC	Community Commercial (2A)	6/15	6/15	6/15	6/15
	Suburban Residential (1B)	12/30	12/31	15/37	17/43
	Urban Residential (1C)	4/9	4/9	4/10	8/21
CWRP	Public Facilities (4)	3/7	3/7	3/7	3/7
MCB Camp Pendleton (c)	Public Facilities (4)	2/5	2/5	2/5	2/5
Subtotal Orange County	--	307/758	332/820	355/878	427/1,055
City of San Clemente					
Talega PC	Coastal – Commercial	0.1/0.2	0.1/0.3	0.4/1	2/5
	Neighborhood - Commercial	2/5	2/5	2/5	2/6
	Government (a)	2/6	2/6	3/7	3/7
	Open Space - Golf	8/19	8/20	10/24	12/29
	Community Commercial	0/0	0/0	0/0	0/0
	Open Space - Private	25/63	26/65	32/78	34/85
	Open Space - Public	2/5	2/5	0/0	0/0
	Open Space - Talega Reserve	0/0	0/0	0.1/0.2	0.1/0.2
	Residential - Low	7/17	7/18	10/24	14/35
	Residential - Medium	5/12	5/12	5/12	6/15
	Residential - Medium Low	3/8	3/8	4/9	4/10
	Residential - Urban	0.4/1	0.4/1	1/2	5/12
Subtotal for San Clemente	--	55/136	57/142	66/164	83/205

TABLE 5-18-1
SUMMARY LAND USE IMPACTS OF THE A7C-FECV-INITIAL AND ULTIMATE ALTERNATIVES

Jurisdiction	Land Use Type	A7C-FECV-Initial Area Affected hectares/acres		A7C-FECV-Ultimate Area Affected hectares/acres	
		Permanent ROW	Temporary Disturbance	Permanent ROW	Temporary Disturbance
MCB Camp Pendleton (b)	Military	49/122	52/128	50/123	55/136
San Onofre State Beach	Public Recreation	118/291	123/304	155/383	166/410
Total Impact Area	--	529/1,306	567/1,395	626/1,548	731/1,806

Sources: P&D Consultants (2001), San Clemente General Plan (1993) and Zoning Maps (1996), Prima Deshecha General Development Plan (2000), San Onofre State Beach General Plan (1984) and MCB Camp Pendleton Integrated Natural Resources Management Plan (October 2001).

(a) Government is a category "P" in the San Clemente General Plan that includes Governmental, Administrative, Utilities, Schools, Public and Private Parking.
(b) The area shown includes the existing I-5 right-of-way area, which results in an overstatement of land use impacts on MCB Camp Pendleton.
(c) A small segment of MCB Camp Pendleton is in Orange County at the northern border of SOSB.

5.18.2 LAND USE IMPACTS OF THE A7C-FECV-INITIAL AND ULTIMATE ALTERNATIVES FROM OSO PARKWAY TO THE SAN CLEMENTE CITY LIMIT (SEGMENT 19)

This segment of the A7C-FECV alignment proceeds south from the existing FTC-N terminus at Oso Parkway approximately 1.5 km (0.9 mile) east of the Ladera Ranch PC. The alignment jogs southeast and then proceeds directly south on RMV to Ortega Highway through the existing cattle grazing area west of the main agricultural operations immediately north of Ortega Highway. It continues south through Prima Deshecha Landfill. This area is entirely in the County of Orange. Table 5.18-2 summarizes the land use impacts of this segment.

TABLE 5.18-2
LAND USE IMPACTS OF THE A7C-FECV-INITIAL AND ULTIMATE ALTERNATIVES FROM OSO PARKWAY TO THE SAN CLEMENTE CITY LIMIT

Jurisdiction	Land Use Type	A7C-FECV-Initial Area Affected hectares/acres		A7C-FECV-Ultimate Area Affected hectares/acres	
		Permanent ROW	Temporary Disturbance	Permanent ROW	Temporary Disturbance
County of Orange					
Rancho Mission Viejo	Open Space (5)	242/597	264/652	276/682	324/800
Prima Deshecha Landfill	Public Facilities - Landfill Site (LS)	28/70	31/76	36/88	52/129
Other	Public Facilities (4)	3/7	3/7	3/7	3/7
County of Orange Subtotal		**273/674**	**298/735**	**315/775**	**379/936**

Source: P&D Consultants (2001) and County of Orange LUE (2000).

5.18.2.1 Impacts of the A7C-FECV-Initial and Ultimate Alternatives on Existing Land Uses

Tesoro High School

The A7C-FECV alignment would be adjacent to Tesoro High School and would not have direct or indirect adverse impacts on this land use. The Final EIR for Tesoro High School (formerly Chiquita Canyon High School) included measures to mitigate potential indirect noise impacts associated with a transportation facility in the area of the SOCTIIP corridor alternatives. Although that EIR specifically considered the alignment of the FEC Alternative, the A7C-FECV Alternatives share a common alignment in this area. Therefore, the A7C-FECV Alternatives would not result in adverse land use impacts at Tesoro High School.

Rancho Mission Viejo

The A7C-FECV Alternatives would not adversely impact cattle grazing on RMV. In addition, there are no leases on RMV that would be affected by this alignment. However, the alignment would impact the northeast edge of the existing CWRP in Chiquita Canyon. This would not be considered an adverse impact of these alternatives because the Alternatives would impact only the northeast edge of the site and would not preclude the operation of the CWRP. The potential impacts of the A7C-FECV Alternatives on public utilities are discussed in detail in Public Services and Utilities Technical Report.

Prima Deshecha Sanitary Landfill

There are no existing land uses in the part of the Landfill traversed by the A7C-FECV Alternatives.

5.18.2.2 Impacts of the A7C-FECV-Initial and Ultimate Alternatives on Committed and Planned Development

Rancho Mission Viejo

There is no committed development for RMV. However, according to the proposed development plans for RMV (November 2001), Planning Areas 2, 13, 11 and 5 would be affected by the A7C-FECV alignment. These areas are proposed to have residential, business park, commercial, urban activity center (mixed use), regional park and open space. The RMV proposal does not specify the location of any land uses except residential and open space (open space, regional park and O'Neill Ranch overlay). Therefore, exact acreage figures by the proposed land use category that could be affected by this segment of the A7C-FECV Alternatives cannot be determined.

Prima Deshecha Sanitary Landfill

The A7C-FECV alignment would traverse the eastern edge and would not disrupt the planned uses specified in the Prima Deshecha Sanitary Landfill GDP 2000. Therefore, there would be no adverse impacts to planned uses at the Landfill.

Proposed Prima Deshecha Regional Park

Because the alignment of the A7C-FECV Alternatives skirts the eastern edge of the property, it will not preclude the future recreational use of the property. Therefore, there would be no adverse impacts to this planned land use. The potential impacts of the A7C-FECV Alternatives on this proposed regional park are discussed in detail in the Recreation Resources Technical Report.

Rolling Hills PC

This segment would impact planned low density residential development in the Rolling Hills PC, north of the San Clemente City boundary in Planning Areas 65, 66 and 67, and would also impact the planned access road to these Planning Areas. The A7C-FECV alignment would also impact planned open space uses in Planning Area 100, which serves as a buffer for the residential uses. This would be an adverse impact to the planned development in this PC.

5.18.3 LAND USE IMPACTS OF THE A7C-FECV-INITIAL AND ULTIMATE ALTERNATIVES FROM THE SAN CLEMENTE CITY LIMIT TO SAN DIEGO COUNTY (SEGMENT 20)

This segment of the A7C-FECV Alternatives traverses an undeveloped area of the Talega PC in north San Clemente. The alignment then proceeds south through several unincorporated parcels of the Rolling Hills PC. It also traverses the lower west edge of the RMV Conservancy. Table 5.18-3 summarizes the impacts of the A7C-FECV Alternatives related to land use.

TABLE 5.18-3
LAND USE IMPACTS OF THE A7C-FECV-INITIAL AND ULTIMATE ALTERNATIVES FROM THE SAN CLEMENTE CITY LIMIT TO SAN DIEGO COUNTY LINE

Jurisdiction	Land Use Type	A7C-FECV-Initial Area Affected hectares/acres (a)		A7C-FECV-Ultimate Area Affected hectares/acres (a	
		Permanent ROW	Temporary Disturbance	Permanent ROW	Temporary Disturbance
City of San Clemente					
Talega	See Table 5.18-4	55/136	57/142	66/164	83/205
County of Orange					
RMV Conservancy	Open Space Reserve	12/31	13/31	16/39	16/39
Rolling Hills	Community Commercial, Suburban Residential, Urban Residential	22/54	22/54	25/62	32/79
Total Area Affected		**89/221**	**92/227**	**107/265**	**131/323**
Sources: P&D Consultants (2001) and San Clemente General Plan (1993).					

Table 5.18-4 shows the acreage of area impacted for each land use category based on the maximum disturbance limits for the A7C Alternatives.

TABLE 5.18-4
LAND USE IMPACTS OF THE A7C-FECV-INITIAL AND ULTIMATE ALTERNATIVES BY LAND USE CATEGORY FROM THE SAN CLEMENTE CITY LIMIT TO SAN DIEGO COUNTY LINE

City of San Clemente – Talega PC	Initial		Ultimate	
	Hectares	Acres	Hectares	Acres
Coastal – Commercial	0.1	0.3	2	5
Neighborhood - Commercial	2	5	2	6
Government	2	6	3	7
Open Space - Golf	8	20	12	29
Community	0	0	0	0
Open Space - Private	26	65	34	85
Open Space - Public	2	5	0	0
Open Space - Talega Reserve	0	0	0.1	0.2
Residential - Low	7	18	14	35
Residential - Medium	5	12	6	15
Residential - Medium Low	3	8	4	10
Residential - Urban	0.4	1	5	12
TOTAL	**57**	**142**	**83**	**205**
Sources: San Clemente General Plan LUE (1993) and P&D (2002).				

5.18.3.1 Impacts of the A7C-FECV-Initial and Ultimate Alternatives on Existing Land Uses

Talega PC

Existing uses in this PC affected by the A7C-FECV Alternatives include an existing golf course and two residential areas under construction. The alignment would divide the Talega PC and create a physical barrier between the western and eastern halves of the PC. This would be an adverse impact of the A7C-FECV Alternatives.

Rolling Hills PC

Open space uses on the RMV Conservancy would be impacted by the A7C-FECV Alternatives. Residential Planning Areas 76, 83, 84, 78, 79 and 82 in this PC, which include Low Medium, Medium and Medium High density residential, would be directly impacted. This would also impact the affordable housing plans for this PC. Commercial uses in Planning Area 88 would be directly impacted. Finally, a local public park in Planning Area 98 along with the planned loop access road would also be directly impacted. These impacts associated with the A7C-FECV Alternatives on these existing land uses would be adverse. These adverse impacts include the physical division of the community and the removal of uses that provide a range of residential products and local commercial uses. The potential impacts of the A7C-FECV Alternatives on open space and parks in Rolling Hills PC are analyzed in the Recreation Resources Technical Report.

5.18.3.2 Impacts of the A7C-FECV-Initial and Ultimate Alternatives on Committed and Planned Development

Talega PC

The entire north part of the Talega PC from the existing golf course and residential area is planned for residential and open space uses. The A7C-FECV Alternatives would adversely impact these planned land uses. The A7C-FECV alignment would also impact the lower part of the open space uses on the RMV Land Conservancy, which would physically divide this community. This would be an adverse impact on planned land uses.

Rolling Hills PC

The A7C-FECV Alternatives would affect planned commercial uses on the south side of Avenida Pico in Planning Area 88. This would be an adverse impact related to the provision of local commercial uses in the Rolling Hills PC.

5.18.4 LAND USE IMPACTS OF THE A7C-FECV-INITIAL AND ULTIMATE ALTERNATIVES FROM THE SAN DIEGO COUNTY LINE TO BASILONE ROAD (SEGMENT 2)

The alignment of the A7C-FECV Alternatives through San Diego County is very similar to the alignment of the FEC Alternatives. Therefore, land use impacts along this segment of the A7C-FECV Alternatives are similar to those of the same segment under the FEC Alternatives except the hectares (acres) differ slightly. Table 5.18-5 shows the impacts of the A7C-FECV Alternatives. Please refer to the discussion of the FEC Alternatives earlier in Section 5.5.

TABLE 5.18-5
LAND USE IMPACTS OF THE A7C-FECV-INITIAL AND ULTIMATE ALTERNATIVES FROM THE SAN DIEGO COUNTY LINE TO BASILONE ROAD

Jurisdiction	Land Use Type	A7C-FECV-Initial Area Affected hectares/acres		A7C-FECV-Ultimate Area Affected hectares/acres	
		Permanent ROW	Temporary Disturbance	Permanent ROW	Temporary Disturbance
MCB Camp Pendleton *	Military	49/122	55/129	50/123	55/136
San Onofre State Beach	Public Recreation	118/291	123/304	155/383	166/410
Total Impact Area	**--**	**167/413**	**178/433**	**205/506**	**221/546**

* The area shown includes the existing I-5 right-of-way area, which results in an overstatement of land use impacts on MCB Camp Pendleton.
Sources: P&D Consultants (2001), San Onofre State Beach General Plan (1984) and MCB Camp Pendleton Integrated Natural Resources Management Plan (October 2001).

5.18.5 COASTAL ACT COMPLIANCE FOR THE A7C-FECV-INITIAL AND ULTIMATE ALTERNATIVES

The California Coastal Zone in the SOCTIIP study area, with the alignments of the SOCTIIP build alternatives, is shown on Figure 5.5-2. Figure 5.5-3 and Figure 5.5-4 show the disturbance limits for the A7C-FECV-Initial and Ultimate Alternatives in the Coastal Zone, respectively, which are the same as the disturbance limits for the FEC Alternatives. Improvements to I-5 and the San Mateo Creek overpass will likely require a Coastal Development Permit (California) and a Coastal Program Consistency Finding (federal) as described in Section 3.18 (Coastal Zone). This Permit and Finding will be required under the A7C-FECV Alternatives because the alignment of these Alternatives is in the Coastal Zone.

5.19 ALIGNMENT 7 CORRIDOR - FAR EAST CROSSOVER - (CRISTIANITOS) VARIATION-INITIAL AND ULTIMATE ALTERNATIVES

The alignment of the A7C-FECV-C Alternatives follows the same alignment as the A7C-FECV Alternative until the southern reach in SOSB. It then follows the same general alignment as Segment 3 of the FEC-CV Alternatives except the hectares (acres) differ due to cut and fill differences. Figure 5.19-1 shows the segments for the A7C-FECV-C Alternatives. Table 5.16-1 summarizes the impacts of the A7C-FECV-C Alternatives related to land use. The temporary disturbance area is often inclusive of or overlaps the permanent right-of-way. Figures illustrating specific impacts on land uses of the A7C-FECV-C Initial and Ultimate Alternatives are provided in Appendix A.

5.19.1 LAND USE IMPACTS OF THE A7C-FECV-C-INITIAL AND ULTIMATE ALTERNATIVES FROM OSO PARKWAY TO THE SAN CLEMENTE CITY LIMIT (SEGMENT 19)

This segment of the A7C-FECV-C Alternatives proceeds south from the existing FTC-N terminus at Oso Parkway approximately 1.5 km (0.9 mile) east of the Ladera PC. The alignment jogs southeast and then proceeds directly south on RMV to Ortega Highway through the existing cattle grazing area west of the main agricultural operations immediately north of Ortega Highway. It continues south through Prima Deshecha Landfill. This area is entirely in the County of Orange. Table 5.19-2 summarizes the land use impacts of this segment.

TABLE 5.19-1
SUMMARY LAND USE IMPACTS OF THE A7C-FECV-C-INITIAL AND ULTIMATE ALTERNATIVES

Jurisdiction	Land Use Type	A7C-FECV-C-Initial Area Affected hectares/acres		A7C-FECV-C-Ultimate Area Affected hectares/acres	
		Permanent ROW	Temporary Disturbance	Permanent ROW	Temporary Disturbance
County of Orange					
Rancho Mission Viejo Rolling Hills PC	Open Space (5)	242/598	264/652	276/682	324/801
Prima Deshecha Landfill	Public Facilities - Landfill Site (LS)	28/70	31/76	36/88	52/129
RMV Conservancy	Open Space Reserve	12/31	13/31	16/39	16/39
Rolling Hills PC	Community Commercial (2A)	6/15	6/15	6/15	6/15
	Suburban Residential (1B)	12/30	12/31	15/37	17/43
	Urban Residential (1C)	4/9	4/9	4/10	8/20.8
CWRP	Public Facilities (4)	3/7	3/7	3/7	3/7
MCB Camp Pendleton (d)	Public Facilities (4)	2/5	2/5	2/5	2/5
Subtotal Orange County	--	309/765	335/826	358/883	428/1,060
City of San Clemente					
Talega PC	Coastal - Commercial	0.1/0.2	0.1/0.3	0.4/1.0	2/5
	Neighborhood – Commercial	2/5	2/5	2/5	2/6
	Government (a)	2/6	2/6	3/7	3/7
	Community Commercial	0/0	0/0	0/0	0/0
	Open Space - Golf	8/19	8/20	10/24	12/29
	Open Space - Private	25/63	26/65	30/73	34/84
	Open Space - Public	2/5	2/5	2/4	2/4
	Open Space - Talega Reserve	0/0	0/0	0.1/0.2	0.1/0.2
	Residential - Low (c)	9/22	9/22	12/29	16/40
	Residential - Medium	5/12	6/12	5/12	6/15
	Residential - Medium Low	3/8	3/8	4/9	4/10
	Residential - Urban	0.4/1	3/8	1/2	3/8
Subtotal for San Clemente	--	57/140	63/153	68/167	84/208
MCB Camp Pendleton (b)	Military	32/78	33/80	31/77	37/91
San Onofre State Beach	Public Recreation	73/179	77/190	79/196	127/313
Total Impact Area	--	471/1,162	508/1,249	535/1,323	676/1,672

Sources: P&D Consultants (2001), San Clemente General Plan (1993) and Zoning Maps (1996), Prima Deshecha General Development Plan (2000), San Onofre State Beach General Plan (1984) and MCB Camp Pendleton Integrated Natural Resources Management Plan (October 2001).

(a) Government is a category "P" in the San Clemente General Plan that includes Governmental, Administrative, Utilities, Schools, Public and Private Parking.
(b) The area shown includes the existing I-5 right-of-way area, which results in an overstatement of land use impacts on MCB Camp Pendleton.
(c) This includes a 2 ha (4 ac) area of area that is designated Residential - Low in the southeast section of the City along I-5 to accommodate ramps.
(d) A small segment of MCB Camp Pendleton is in Orange County at the northern border of SOSB.

TABLE 5.19-2
LAND USE IMPACTS OF THE A7C-FECV-C-INITIAL AND ULTIMATE ALTERNATIVES FROM OSO PARKWAY TO THE SAN CLEMENTE CITY LIMIT

Jurisdiction	Land Use Type	A7C-FECV-C-Initial Area Affected hectares/acres		A7C-FECV-C-Ultimate Area Affected hectares/acres	
		Permanent ROW	Temporary Disturbance	Permanent ROW	Temporary Disturbance
County of Orange					
Rancho Mission Viejo	Open Space (5)	242/597	264/652	276/682	324/800
Prima Deshecha Landfill	Public Facilities - Landfill Site (LS)	28/70	31/76	36/88	52/129
Other	Public Facilities (4)	3/7	3/7	3/7	3/7
County of Orange Total		**273/674**	**298/735**	**315/775**	**379/936**
Source: P&D Consultants (2001) and County of Orange LUE (2000).					

The impacts of Segment 19 related to land use would be very similar to those discussed previously for the A7C-FECV Alternatives.

5.19.2 LAND USE IMPACTS OF THE A7C-FECV-C-INITIAL AND ULTIMATE ALTERNATIVES FROM THE SAN CLEMENTE CITY LIMIT TO THE SAN DIEGO COUNTY LINE (SEGMENT 20)

This segment of the A7C-FECV-C Alternatives traverses an undeveloped area of the Talega PC in north San Clemente. The alignment then proceeds south through several unincorporated parcels of the Rolling Hills PC. It also traverses the lower western edge of the RMV Conservancy. Table 5.19-3 summarizes the impacts of the A7C-FECV Alternatives related to land use. The alignment is similar to Segment 20 described under the A7C-FECV Alternatives, except hectares (acres) differ slightly.

TABLE 5.19-3
LAND USE IMPACTS OF THE A7C-FECV-C-INITIAL AND ULTIMATE ALTERNATIVES FROM THE SAN CLEMENTE CITY LIMIT TO THE SAN DIEGO COUNTY LINE

Jurisdiction	Land Use Type	A7C-FECV-C-Initial Area Affected hectares/acres		A7C-FECV-C-Ultimate Area Affected hectares/acres	
		Permanent ROW	Temporary Disturbance	Permanent ROW	Temporary Disturbance
City of San Clemente					
Talega PC	See Table 5.19-4.	55/136	57/142	66/164	83/205
County of Orange					
RMV Conservancy	Open Space Reserve	12/31	13/31	16/39	16/39
Rolling Hills	Community Commercial, Suburban Residential, Urban Residential	22/54	22/54	25/62	32/79
Total Area Affected		**89/221**	**92/227**	**107/265**	**131/323**
Sources: P&D Consultants (2001) and San Clemente General Plan (1993).					

Table 5.18-4 shows the acreage of area impacted for each land use category based on the maximum disturbance limits for the A7C Alternatives.

TABLE 5.19-4
LAND USE IMPACTS OF THE A7C-FECV-C-INITIAL AND ULTIMATE ALTERNATIVES BY LAND USE CATEGORY FROM THE SAN CLEMENTE CITY LIMIT TO THE SAN DIEGO COUNTY LINE

City of San Clemente – Talega PC	A7C-FECV-C-Initial		A7C-FECV-C-Ultimate	
	Hectares	Acres	Hectares	Acres
Coastal – Commercial	0.1	0.3	2	5
Neighborhood - Commercial	2	5	2	6
Government	2	6	3	7
Community Commercial	0	0	0	0
Open Space - Golf	8	20	12	29
Open Space - Private	26	65	34	84
Open Space - Public	2	5	2	4
Open Space - Talega Reserve	0	0	0.1	0.2
Residential - Low	9	22	16	40
Residential - Medium	6	12	6	15
Residential - Medium Low	3	8	4	10
Residential - Urban	3	8	3	8
TOTAL	**63**	**153**	**84**	**208**
Sources: San Clemente General Plan LUE (1993) and P&D (2002).				

The impacts of this Segment of the A7C-FECV-C Alternatives related to land use would be the same as those discussed previously for Segment 20 of the A7C-FECV Alternatives, except the profile may vary slightly and the hectares (acres) differ slightly.

5.19.3 LAND USE IMPACTS OF THE A7C-FECV-C-INITIAL AND ULTIMATE ALTERNATIVES FROM THE SAN DIEGO COUNTY LINE TO I-5 (SEGMENT 3)

The alignment of the A7C-FECV-C Alternatives through San Diego County is very similar to the alignment of the FEC-CV Alternatives. Therefore, land use impacts along this segment of the A7C-FECV-C Alternatives are similar to those of the same segment under the FEC-CV Alternatives except the hectares (acres) differ slightly. Table 5.19-5 shows the impacts of the A7C-FECV-C Alternatives

TABLE 5.19-5
LAND USE IMPACTS OF THE A7C-FECV-C-INITIAL AND ULTIMATE ALTERNATIVES FROM THE SAN DIEGO COUNTY LINE TO I-5

Jurisdiction	Land Use Type	A7C-FECV-C-Initial Area Affected hectares/acres		A7C-FECV-C-Ultimate Area Affected hectares/acres	
		Permanent ROW	Temporary Disturbance	Permanent ROW	Temporary Disturbance
MCB Camp Pendleton (a)	Military	32/78	33/80	31/77	37/91
San Onofre State Beach	Public Recreation	73/179	77/190	79/196	127/313
San Clemente	Residential - Low	60/148	63/154	71/175	89/221
Total Impact Area	**--**	**167/510**	**175/429**	**183/453**	**255/625**

(a) The area shown includes the existing I-5 right-of-way area, which results in an overstatement of land use impacts on MCB Camp Pendleton.
Sources: P&D Consultants (2001), San Onofre State Beach General Plan (1984) and MCB Camp Pendleton Integrated Natural Resources Management Plan (October 2001).

5.19.4 COASTAL ACT COMPLIANCE FOR THE A7C-FECV-C-INITIAL AND ULTIMATE ALTERNATIVES

The California Coastal Zone in the SOCTIIP Study Area, with the alignments of the SOCTIIP build alternatives, is shown on Figure 5.5-2. Figure 5.6-2 and Figure 5.6-3 show the disturbance limits for the A7C-FECV-C-Initial and Ultimate Alternatives in the Coastal Zone, respectively, which are the same as the disturbance limits for the FEC-CV Alternatives. Improvements to I-5 and the San Mateo Creek overpass will likely require a Coastal Development Permit (California) and a Coastal Program Consistency Finding (Federal) as described in Section 3.18 (Coastal Zone). This Permit and Finding will be required under the A7C-FECV-C Alternatives because the alignment of these Alternatives is in the Coastal Zone.

5.20 ALIGNMENT 7 CORRIDOR-FAR EAST CROSSOVER (AGRICULTURAL FIELDS) VARIATION-INITIAL AND ULTIMATE ALTERNATIVES

The alignment of the A7C-FECV-AF Alternatives follows the same alignment as the A7C-FECV Alternatives until the southern reach in SOSB. It then follows the same general alignment as Segment 4 of the FEC-AFV Alternatives except the hectares (acres) differ due to cut and fill differences. Figure 5.20-1 shows the segments of the A7C-FECV-AF Alternatives. The segments correspond with jurisdictional boundaries and generally follow the same format as the A7C-FECV Alternatives discussed earlier. Table 5.20-1 summarizes the impacts of the A7C-FECV-AF Alternatives related to land use. The temporary disturbance area is often inclusive of or overlaps the permanent right-of-way. Figures illustrating specific impacts on land uses of the A7C-FECV-AF Initial and Ultimate Alternatives are provided in Appendix A.

TABLE 5.20-1
SUMMARY LAND USE IMPACTS OF THE A7C-FECV-AF INITIAL AND ULTIMATE ALTERNATIVES

Jurisdiction	Land Use Type	A7C-FECV-AF-Initial Area Affected hectares/acres		A7C-FECV-AF-Ultimate Area Affected hectares/acres	
		Permanent ROW	Temporary Disturbance	Permanent ROW	Temporary Disturbance
County of Orange					
Rancho Mission Viejo Rolling Hills PC	Open Space (5)	242/598	264/652	276/682	324/800
Prima Deshecha Landfill	Public Facilities - Landfill Site (LS)	28/70	31/76	36/88	52/129
RMV Conservancy	Open Space Reserve	12/31	13/31	16/39	16/39
Rolling Hills PC	Community Commercial (2A)	6/15	6/15	6/15	6/15
	Suburban Residential (1B)	12/30	12/31	15/37	17/43
	Urban Residential (1C)	4/9	4/9	4/10.3	8/21
CWRP	Public Facilities (4)	3/7	3/7	3/7	3/7
MCB Camp Pendleton (c)	Public Facilities (4)	2/5	2/5	2/5	2/5
Subtotal Orange County	--	309/765	335/826	358/883	428/1,058
City of San Clemente					
Talega PC	Coastal – Commercial	0.1/0.2	0.1/0.3	0.4/1.0	2/5
	Neighborhood - Commercial	2/5	2/5	2/5	2/6
	Government (a)	2/6	2/6	3/7	3/7
	Open Space - Golf	8/19	8/20	10/24	10/24
	Community Commercial	0/0	0/0	0/0	0/0
	Open Space - Private	25/63	26/65	30/73	34/84
	Open Space - Public	2/5	2/5	2/4	2/4
	Open Space - Talega Reserve	0/0	0/0	0.1/0.2	0.1/0.2
	Residential - Low	7/17	7/18	10/24	14/35
	Residential - Medium	5/12	5/12	5/12	6/15
	Residential - Medium Low	3/8	3/8	4/9	4/10
	Residential - Urban	0.4/1	0.4/1	1/2	5/12
Subtotal for San Clemente	--	55/136	57/142	66/163	83/204
MCB Camp Pendleton (b)	Military	86/213	92/226	93/229	109/270
San Onofre State Beach	Public Recreation	54/132	56/138	64/151	102/252
Total Impact Area	--	504/1,246	537/1323	581/1,426	721/1,784

Sources: P&D Consultants (2001), San Clemente General Plan (1993) and Zoning Maps (1996), Prima Deshecha General Development Plan (2000), San Onofre State Beach General Plan (1984) and MCB Camp Pendleton Integrated Natural Resources Management Plan (October 2001).

(a) Government is a category "P" in the San Clemente General Plan that includes Governmental, Administrative, Utilities, Schools, Public and Private Parking.

(b) The area shown includes the existing I-5 right-of-way area, which results in an overstatement of land use impacts on MCB Camp Pendleton.

(c) A small segment of MCB Camp Pendleton is in Orange County at the northern border of SOSB.

5.20.1 LAND USE IMPACTS OF THE A7C-FECV-AF-INITIAL AND ULTIMATE ALTERNATIVES FROM OSO PARKWAY TO THE SAN CLEMENTE CITY LIMIT (SEGMENT 19)

This segment of the A7C-FECV-C Alternatives proceeds south from the existing FTC-N terminus at Oso Parkway approximately 1.5 km (0.9 mile) east of the Ladera Ranch PC. The alignment jogs southeast and then proceeds directly south on RMV to Ortega Highway through the existing cattle grazing area west of the main agricultural operations immediately north of Ortega Highway. It continues south through Prima Deshecha Landfill. This area is entirely in the County of Orange. Table 5.20-2 summarizes the land use impacts of this segment.

TABLE 5.20-2
LAND USE IMPACTS OF THE A7C-FECV-AF-INITIAL AND ULTIMATE ALTERNATIVES FROM OSO PARKWAY TO THE SAN CLEMENTE CITY LIMIT

Jurisdiction	Land Use Type	A7C-FECV-AF-Initial Area Affected hectares/acres		A7C-FECV-AF-Ultimate Area Affected hectares/acres	
		Permanent ROW	Temporary Disturbance	Permanent ROW	Temporary Disturbance
County of Orange					
Rancho Mission Viejo	Open Space (5)	242/598	264/652	276/682	324/800
Prima Deshecha Landfill	Public Facilities - Landfill Site (LS)	28/70	31/76	36/88	52/129
Other	Public Facilities (4)	3/7	3/7	3/7	3/7
County of Orange Total		**273/674**	**298/735**	**315/775**	**379/936**
Source: P&D Consultants (2001) and County of Orange LUE (2000).					

The impacts of this segment related to land use would be identical to those discussed previously under the A7C-FECV Alternative.

5.20.2 LAND USE IMPACTS OF THE A7C-FECV-AF-INITIAL AND ULTIMATE ALTERNATIVES FROM THE SAN CLEMENTE CITY LIMIT TO THE SAN DIEGO COUNTY LINE (SEGMENT 20)

This segment of the A7C-FECV-AF Alternatives traverses an undeveloped area of the Talega PC in north San Clemente. The alignment then proceeds south through several unincorporated parcels of the Rolling Hills PC. It also traverses the lower west edge of the RMV Conservancy. Table 5.20-3 summarizes the impacts of the A7C-FECV-AF Alternatives related to land use. The alignment is similar to Segment 20 described under the A7C-FECV Alternatives, except the hectares (acres) differ slightly.

TABLE 5.20-3
LAND USE IMPACTS OF THE A7C-FECV-AF-INITIAL AND ULTIMATE ALTERNATIVES FROM THE SAN CLEMENTE CITY LIMIT TO THE SAN DIEGO COUNTY LINE

Jurisdiction	Land Use Type	A7C-FECV-AF-Initial Area Affected hectares/acres (a)		A7C-FECV-AF-Ultimate Area Affected hectares/acres (a	
		Permanent ROW	Temporary Disturbance	Permanent ROW	Temporary Disturbance
City of San Clemente					
Talega PC	See Table 5.20-4.	55/136	54/137	66/163	83/204
County of Orange					
RMV Conservancy	Open Space Reserve	12/31	13/31	16/39	16/39
Rolling Hills PC	Community Commercial, Suburban Residential, Urban Residential	22/54	22/54	25/62	32/89
Total Area Affected		**89/221**	**92/227**	**107/265**	**131/332**
Sources: P&D Consultants (2001) and San Clemente General Plan (1993).					

Table 5.20-4 shows the acreage of area impacted for each San Clemente General Plan land use category based on the maximum disturbance limits for the A7C-FECV-AF Alternatives.

TABLE 5.20-4
LAND USE IMPACTS OF THE A7C-FECV-AF-INITIAL AND ULTIMATE ALTERNATIVES BY LAND USE CATEGORY FROM THE SAN CLEMENTE CITY LIMIT TO SAN DIEGO COUNTY LINE

City of San Clemente – Talega PC	A7C-FECV-AF-Initial		A7C-FECV-AF-Ultimate	
	Hectares	Acres	Hectares	Acres
Coastal – Commercial	0.1	0.3	2	5
Neighborhood - Commercial	2	5	2	6
Government	2	6	3	7
Community Commercial	0	0	0	0
Open Space - Golf	8	20	10	24
Open Space - Private	26	65	34	84
Open Space - Public	2	5	2	4
Open Space - Talega Reserve	0	0	0.1	0.2
Residential - Low	7	18	14	35
Residential - Medium	5	12	6	15
Residential - Medium Low	3	8	4	10
Residential - Urban	0.4	1	5	12
TOTAL	**57**	**142**	**83**	**204**
Sources: San Clemente General Plan LUE (1993) and P&D (2002).				

The impacts of this Segment of the A7C-FECV-AF Alternatives related to land use would be similar for Segment 20 of the A7C-FECV Alternatives, except the profile may vary slightly and the hectares (acres) differ slightly.

5.20.3 LAND USE IMPACTS OF THE A7C-FECV-AF-INITIAL AND ULTIMATE ALTERNATIVES FROM THE SAN DIEGO COUNTY LINE TO I-5 (SEGMENT 4)

The alignment of the A7C-FECV-AF Alternatives through San Diego County is very similar to the alignment of the FEC-AFV Alternatives. Therefore, land use impacts along this segment of the A7C-FECV-AF Alternatives are similar to those of the same segment under the FEC-AFV Alternatives except the hectares (acres) differ slightly. Table 5.20-5 shows the impacts of the A7C-FECV-AF Alternatives

TABLE 5.20-5
LAND USE IMPACTS OF THE A7C-FECV-AF-INITIAL AND ULTIMATE ALTERNATIVES FROM THE SAN DIEGO COUNTY LINE TO I-5

Jurisdiction	Land Use Type	A7C-FECV-AF-Initial Area Affected hectares/acres		A7C-FECV-AF-Ultimate Area Affected hectares/acres	
		Permanent ROW	Temporary Disturbance	Permanent ROW	Temporary Disturbance
MCB Camp Pendleton (a)	Military	34/83	35/85	33/82	39/96
San Onofre State Beach	Public Recreation	73/179	77/190	79/196	127/313
Total Impact Area	**--**	**107/262**	**112/275**	**112/278**	**166/409**

(a) The area shown includes the existing I-5 right-of-way area, which results in an overstatement of land use impacts on MCB Camp Pendleton.
Source: P&D Consultants (2001), San Onofre State Beach General Plan (1984) and MCB Camp Pendleton Integrated Natural Resources Management Plan (2001).

5.20.4 COASTAL ACT COMPLIANCE FOR THE A7C-FECV-AF-INITIAL AND ULTIMATE ALTERNATIVES

The California Coastal Zone in the SOCTIIP Study Area, with the alignments of the SOCTIIP build alternatives, is shown on Figure 5.5-2. Figure 5.7-2 and Figure 5.7-3 show the disturbance limits for the A7C-FECV-AF-Initial and Ultimate Alternatives in the Coastal Zone, respectively, which are the same as the disturbance limits for the FEC-AFV Alternatives. Improvements to I-5 and the San Mateo Creek overpass will likely require a Coastal Development Permit (California) and a Coastal Program Consistency Finding (Federal) as described in Section 3.18 (Coastal Zone). This Permit and Finding will be required under the A7C-FECV-AF Alternatives because the alignment of these Alternatives is in the Coastal Zone.

5.20A ALIGNMENT 7 CORRIDOR - FAR EAST CROSSOVER - MODIFIED - INITIAL AND ULTIMATE ALTERNATIVES

The alignment of the A7C-FEC-M Alternatives consists of segments of the alignments of the A7C and the FEC-W Alternatives. The new segment is the crossover segment from the A7C to the FEC-W alignment which splits off the A7C alignment and picks up the FEC-W alignment north of Ortega Highway and San Juan Creek on the RMV Land Conservancy. Once the A7C-FEC-M alignment joins the FEC-W alignment, it stays on the FEC-W alignment to its terminus.

5.20A.1 OVERVIEW OF THE A7C-FEC-M-INITIAL AND ULTIMATE ALTERNATIVES

The alignment of the A7C-FEC-M Alternatives follows the same alignment as the A7C Alternative until south of Tesoro High School. It then curves east staying of the Chiquita Canyon Water Reclamation Plant then curves south crossing Ortega Highway and San Juan Creek. It again curves southeast staying north and east of Las Trampas Dam on RMV. Finally it curves south through the RMV Conservancy and picks up the FEC-W alignment to its terminus through SOSB to the confluence with I-5. Figure 5.20A-1 shows the alignment and segments for the A7C-FEC-M Alternatives. Table 5.20A-1 summarizes the impacts of the A7C-FEC-M Alternatives related to land use. The temporary disturbance area is often inclusive of or overlaps the permanent right-of-way. Figures illustrating specific impacts on land uses of the A7C-FEC-M-Initial and Ultimate Alternatives are provided in Appendix A.

TABLE 5.20A-1
SUMMARY OF LAND USE IMPACTS OF THE A7C-FEC-M-INITIAL AND ULTIMATE ALTERNATIVES

Jurisdiction	Land Use Type	A7C-FEC-M-Initial Area Affected hectares/acres		A7C-FEC-M-Ultimate Area Affected hectares/acres	
		Permanent ROW	Temporary Disturbance	Permanent ROW	Temporary Disturbance
County of Orange					
Rancho Mission Viejo	Open Space (5)	207/512	260/642	256/632	270/667
Rolling Hills (b)	Community Commercial (2A)	2/5	2/6	2/5	2/6
RMV Conservancy	Open Space Reserve	40/98	40/101	41/102	41/103
MCB Camp Pendleton (d)	Public Facilities (4)	3/7	3/8	4/11	5/12
City of San Clemente (c)	Open Space Public	2/4	2/4	2/4	2/4
RMV Conservancy	Open Space Private	22/55	25/61	22/56	25/62
MCB Camp Pendleton (a)	Military	36/89	41/101	36/90	41/102
San Onofre State Beach	Public Recreation	119/295	135/334	125/309	144/357
Total Impact Area	--	432/1,067	511/1,263	487/1,207	531/1,314

Source: County of Orange Land Use Element (2000) P&D Consultants (2001), San Clemente Land Use Element (1993), San Onofre State Beach General Plan (1984) and MCB Camp Pendleton Final Integrated Natural Resources Management Plan (October 2001).

(a) The area shown includes the existing I-5 right-of-way area, which results in an overstatement of land use impacts on MCB Camp Pendleton.
(b) This includes the Rolling Hills PC Specific Plan which assumed implementation of a transportation corridor generally following the previous CP Alignment (now referred to as the FEC Alternative). The City of San Clemente is in the process of annexing all the Rolling Hills PC by the end of 2003.
(c) Impacts in San Clemente occur in Talega PC along Avenida Pico in open space to accommodate the interchange.
(d) A small segment of MCB Camp Pendleton is in Orange County at the northern border of SOSB.

5.20A.2 LAND USE IMPACTS OF THE A7C-FEC-M-INITIAL AND ULTIMATE ALTERNATIVES FROM OSO PARKWAY TO THE SAN DIEGO COUNTY LINE (SEGMENT 23)

This segment of the A7C-FEC-M alignment proceeds south from the existing FTC-N terminus at Oso Parkway approximately 1.5 km (0.9 mile) east of the Ladera Ranch PC. The alignment jogs southeast and then proceeds directly south on RMV to Ortega Highway through the existing cattle grazing area west of the main agricultural operations immediately north of Ortega Highway. It then jogs southeast staying north and east of Las Trampas Dam. Finally, it joins the

FEC-W alignment as it crosses into the RMV Conservancy. This area is entirely in the County of Orange. Table 5.20A-2 summarizes the land use impacts of this segment.

TABLE 5.20A-2
LAND USE IMPACTS OF THE A7C-FEC-M-INITIAL AND ULTIMATE ALTERNATIVES FROM OSO PARKWAY TO THE SAN DIEGO COUNTY LINE

Jurisdiction	Land Use Type	A7C-FEC-M-Initial Area Affected hectares/acres		A7C-FEC-M-Ultimate Area Affected hectares/acres	
		Permanent ROW	Temporary Disturbance	Permanent ROW	Temporary Disturbance
County of Orange					
Rancho Mission Viejo	Open Space (5)	207/512	260/642	256/632	270/667
Rolling Hills	Community Commercial (2A)	2/5	2/6	2/5	2/6
RMV Conservancy	Open Space Reserve	40/98	40/101	41/102	41/103
MCB Camp Pendleton	Public Facilities (4)	3/7	3/8	4/11	5/12
County of Orange Subtotal	--	253/624	308/763	302/749	319/789
City of San Clemente	Open Space Public	2/4	2/4	2/4	2/4
RMV Conservancy	Open Space Private	22/55	25/61	22/56	25/62
City of San Clemente Subtotal	--	24/59	26/65	24/59	27/66
Total for Orange County	--	277/683	334/828	326/808	346/856
Source: P&D Consultants (2003) and County of Orange LUE (2000).					

5.20A.2.1 Impacts of the A7C-FEC-M-Initial and Ultimate Alternatives on Existing Land Uses

Tesoro High School

The A7C-FEC-M alignment would be adjacent to Tesoro High School and would not have direct or indirect adverse impacts on this land use. The Final EIR for Tesoro High School (formerly Chiquita Canyon High School) included measures to mitigate potential indirect noise impacts associated with a transportation facility in the area of the SOCTIIP corridor alternatives. Although that EIR specifically considered the alignment of the FEC Alternative, the A7C-FEC-M Alternatives share a common alignment in this area. Therefore, the A7C-FEC-M Alternatives would not result in adverse land use impacts at Tesoro High School.

Rancho Mission Viejo

The A7C-FEC-M Alternatives would not adversely impact cattle grazing on RMV. There are no active agricultural areas and outleases on RMV that would be affected by this alignment. The A7C-FEC-M also traverses the access road to the last Roundup and Amantes Camp, which is a special event area. These areas will not be directly impacted these Alternatives.

Chiquita Water Reclamation Plant

The alignment would not impact the existing CWRP in Chiquita Canyon. The potential impacts of the A7C-FEC-M Alternatives on public utilities are discussed in detail in Public Services and Utilities Technical Report.

Prima Deshecha Sanitary Landfill

The A7C-FEC-M Alternatives are approximately 2.3 km (1.4 miles) east of the Prima Deshecha Landfill and would not impact any existing operations.

5.20A.2.2 Impacts of the A7C-FEC-M-Initial and Ultimate Alternatives on Committed and Planned Development

Rancho Mission Viejo

There is no committed development for RMV. However, according to the proposed development plans for RMV (November 2001), Planning Areas 12A, 2A, 2B and 13 would be affected by the A7C-FEC-M alignment north of Ortega Highway. Planning Areas 13, 5, and 9E would be affected by the A7C-FEC-M alignment south of Ortega Highway. The alignments of all the build alternatives as they relate to the proposed RMV development plan are shown on Figure 5.5.1A. These areas are proposed to have residential, business park, commercial, urban activity center (mixed use), regional park and open space. The RMV proposal does not specify the location of any land uses except residential and open space (open space, regional park and O'Neill Ranch overlay). Therefore, exact acreage figures by the proposed land use category that could be affected by this segment of the A7C-FEC-M Alternatives cannot be determined.

Rolling Hills/Talega PC

This segment would impact the RMV Conservancy and planned open space uses in Planning Area 100, which serves as a buffer for the residential uses. This would not be an adverse impact to the planned development in this PC. The alignment would also traverse the RMV Land Conservancy for approximately 3.9 km (2.4 mi). This is not consistent with plans for the Rolling Hills/Talega PC.

5.20A.3 LAND USE IMPACTS OF THE A7C-FEC-M-INITIAL AND ULTIMATE ALTERNATIVES FROM THE SAN DIEGO COUNTY LINE TO BASILONE ROAD (SEGMENT 2)

The alignment of the A7C-FEC-M Alternatives through San Diego County is very similar to the alignment of the FEC Alternatives. Therefore, land use impacts along this segment of the A7C-FEC-M Alternatives are similar to those of the same segment under the FEC Alternatives except the hectares (acres) differ slightly. Table 5.20A-3 shows the impacts of the A7C-FEC-M Alternatives. Please refer to the discussion of the FEC Alternatives earlier in Section 5.5.

TABLE 5.20A-3
LAND USE IMPACTS OF THE A7C-FEC-M-INITIAL AND ULTIMATE ALTERNATIVES FROM THE SAN DIEGO COUNTY LINE TO BASILONE ROAD

Jurisdiction	Land Use Type	A7C-FEC-M-Initial Area Affected hectares/acres		A7C-FEC-M-Ultimate Area Affected hectares/acres	
		Permanent ROW	Temporary Disturbance	Permanent ROW	Temporary Disturbance
MCB Camp Pendleton *	Military	36/89	41/101	36/90	41/102
San Onofre State Beach	Public Recreation	119/295	135/334	125/309	144/357
Total Impact Area	**--**	**155/384**	**176/434**	**161/399**	**185/959**

* The area shown includes the existing I-5 right-of-way area, which results in an overstatement of land use impacts on MCB Camp Pendleton.
Sources: P&D Consultants (2001), San Onofre State Beach General Plan (1984) and MCB Camp Pendleton Integrated Natural Resources Management Plan (October 2001).

5.20A.4 COASTAL ACT COMPLIANCE FOR THE A7C-FEC-M-INITIAL AND ULTIMATE ALTERNATIVES

The California Coastal Zone in the SOCTIIP study area, with the alignments of the SOCTIIP build alternatives, is shown on Figure 5.5-2. Figures 5.5-3 and 5.5-4 show the area in the Coastal Zone of the A7C-FEC-M-Initial and Ultimate Alternatives, respectively, which are the same as the FEC Alternatives. Improvements to I-5 and the San Mateo Creek overpass will likely require a Coastal Development Permit (California) and a Coastal Program Consistency Finding (federal) as described in Section 3.18 (Coastal Zone). This Permit and Finding will be required under the A7C-FEC-M Alternatives because the alignment of these Alternatives is in the Coastal Zone.

5.21 ARTERIAL IMPROVEMENTS ONLY ALTERNATIVE

5.21.1 AIO ALTERNATIVE COMPONENTS

As discussed in Section 2.0 (Description of the Alternatives), the AIO Alternative proposes widening Antonio Parkway/La Pata Avenue (Antonio/La Pata) beyond its MPAH designation and Smart Street improvements in the existing or planned right-of-way for Ortega Highway, Camino Las Ramblas and Avenida Pico between Antonio/La Pata and I-5. Smart Street technologies typically involve a combination of advanced traffic management strategies (traffic signal coordination, intensive monitoring and surveillance, and traveler information) and modest physical improvements (turn lanes at intersection and channelization improvements) applied to an arterial. In addition, grade separations are proposed at the intersections of Antonio/La Pata with Oso Parkway, Crown Valley Parkway, Ortega Highway and Avenida Pico. These improvements are exactly the same under the AIP Alternative except the AIP Alternative also includes capacity improvements on I-5. Therefore, the analysis in this Section related to land use impacts along Antonio/La Pata is the analysis for arterial related impacts for both the AIO and AIP Alternatives. Figures illustrating specific impacts on land uses of the AIO Alternative are provided in Appendix A.

Because the primary improvement associated with the AIO Alternative is the widening of Antonio/La Pata, this Section focuses on the impacts associated with the widened arterial cross

sections under this Alternative. All the arterial widening on Antonio/La Pata would occur in unincorporated County of Orange in Ladera Ranch and RMV, as follows:

- Segment from Oso Parkway to Ortega Highway - two lane widening from a six lane to an eight lane facility.
- Segment from Ortega Highway to San Juan Creek Road - four lane widening from a four lane to an eight lane facility.
- Segment from San Juan Creek Road to the Prima Deshecha Sanitary Landfill property line – two-lane widening from a four to a six lane facility.

The remainder of Avenida La Pata is an MPAH facility shown as a six lane facility through the City of San Clemente. This segment of Avenida La Pata has not been constructed. The grade-separated crossings are analyzed separately later in this Section. Table 5.21-1 summarizes the impacts of the AIO and AIP Alternatives related to land use impacts. The temporary disturbance area is often inclusive of or overlaps the permanent right-of-way.

TABLE 5.21-1
SUMMARY OF IMPACTS ALONG ARTERIALS UNDER THE AIO AND AIP ALTERNATIVES

Jurisdiction	Land Use Types	Permanent Right of Way hectares/acres	Temporary Disturbance hectares/acres
County of Orange			
	Residential-Suburban	39/96	53/130
	Open Space	66/164	109/269
	Urban Activity Center	5/13	7/16
	Public Facilities-Landfill Site	18/44	24/60
Subtotal	--	128/317	192/475
San Clemente			
	Community-Commercial	2/4	2/5
	Neighborhood-Commercial	2/4	2/5
	Government	4/9	4/9
	Industrial	1/3	3/8
	Commercial-Mixed	2/4	3/6
	Open Space-Private	25/63	31/76
	Open Space-Public	6/15	8/19
	Residential-High	1/3	2/4
	Residential-Low	6/14	8/19
Subtotal	--	48/119	61/151
San Juan Capistrano			
	Open Space-Regional Park*	0.2/1	1/4
TOTAL IMPACTS	--	177/436	255/630

* The area of AIO Alternative occurs along La Pata Avenue on the Prima Deshecha Landfill where the disturbance limits cross the City boundary in an area designated Regional Park.
Source: P&D Consultants (2001).

5.21.2 ARTERIAL IMPROVEMENT SEGMENTS

As discussed earlier, the Antonio/La Pata improvements would occur in unincorporated Orange County. This area includes the Las Flores and Ladera Ranch PCs, the private land holdings of RMV and Prima Deshecha Sanitary Landfill. Antonio Parkway changes names south of Ortega Highway and is called La Pata Avenue. When La Pata Avenue enters the City of San Clemente, it is called Avenida La Pata.

5.21.2.1 Antonio Parkway (Oso Parkway to Ortega Highway)

Antonio Parkway is an existing four lane facility on this segment and a planned six lane facility on the MPAH. This segment would affect the already dedicated right-of-way in the Las Flores and Ladera Ranch PCs. It would also affect existing and planned commercial uses in Las Flores PC. This segment would affect residential parcels in Ladera Ranch PC that are in various stages of development. It would also affect planned residential and open space uses in Ladera Ranch PC. This would be an adverse impact on these PCs.

5.21.2.2 Antonio Parkway (Ortega Highway to San Juan Creek Road)

Antonio Parkway is an existing three lane facility on this segment and is used exclusively for access to RMV and Prima Deshecha Sanitary Landfill. Three existing lease areas on RMV, Creekside Equestrian Center, DM Color Express and Sea Tree Nursery, would be impacted by the widened right-of-way. However, these uses could be moved to accommodate the widened arterial. Therefore, these impacts would not be considered adverse. The Sea Tree Nursery would no longer be in operation when construction is initiated; therefore, no impacts would result on this lease.

5.21.2.3 La Pata Avenue (Antonio Parkway) (San Juan Creek Road to the Prima Deshecha Sanitary Landfill Property Line)

La Pata Avenue is a dirt access road to Prima Deshecha Sanitary Landfill on this segment. It terminates at the entrance gate to the Landfill. This area has a land use designation of Open Space (5). The widening of this segment to a six lane facility would not be inconsistent with the existing land uses in the area. However, this segment of La Pata Avenue was downgraded on the MPAH from a six lane to a four lane facility to address concerns voiced by the developers of Ladera PC and the City of San Clemente regarding the traffic impacts to the facility by the already approved Champion Hills (Talega)/Rolling Hills PCs. This is explicitly stated in the Talega Development Agreement with both the County of Orange and City of San Clemente.

In addition, the proposed development plan for RMV (November 2001) does not indicate that there would be any inconsistency with the already planned road network. Therefore, the arterial improvements associated with the AIO Alternative would not have an adverse impact on the proposed RMV development plans.

5.21.2.4 Antonio Parkway/Oso Parkway Grade Separation

The disturbance limits for this grade separation would adversely impact the Las Flores PC because it would require right-of-way acquisition where existing housing is located on both sides of Antonio Parkway and Oso Parkway. Because this intersection is at the center of the Las Flores PC, the grade separation could create a barrier which could physically divide the community.

5.21.2.5 Antonio Parkway/Crown Valley Parkway Grade Separation

The disturbance limits for this grade separation would adversely impact the Ladera Ranch PC because it would require right-of-way acquisition where existing housing is located on both sides of Antonio Parkway and Crown Valley Parkway. It will also impact some of the Urban Activity Center (UAC) area located on the east side of Antonio Parkway. The site is graded and uses are planned, but the site does not have existing UAC uses. The UAC site could accommodate the grade separation and therefore this would not be an adverse impact.

5.21.2.6 Antonio Parkway/Ortega Highway Grade Separation

The disturbance limits for this grade separation would impact existing leases on RMV on both sides of Antonio Parkway and Ortega Highway. However, these impacts would mostly be temporary and would not preclude the agricultural leases that currently exist at this location.

5.21.2.7 Avenida La Pata/Avenida Pico Grade Separation

The disturbance limits for this grade separation would impact existing business park uses on the south side of Avenida Pico. However, these uses could be moved into other areas that accommodate business parks uses in the Talega/Forster Ranch area of San Clemente and therefore is not an adverse impact. The existing uses at Plaza Pacifica would not be directly impacted by this grade separation.

5.21.3 CITY OF SAN JUAN CAPISTRANO

The City of San Juan Capistrano will not be affected by the AIO and AIP Alternatives as only a 0.2 ha (0.5 ac) area of improvements to La Pata Avenue on the Prima Deshecha Landfill would occur in the City. This would not impacts existing or planned land uses in the City.

5.21.4 OTHER CITIES

No other cities that would be affected by AIO and AIP Alternatives as none of the facility improvements occur in any other cities.

5.21.5 COASTAL ACT COMPLIANCE OF THE AIO ALTERNATIVE

The California Coastal Zone in the SOCTIIP Study Area, with the alignments of the SOCTIIP build alternatives, is shown on Figure 5.5-2. A Coastal Development Permit (California) and a

Coastal Program Consistency Finding (Federal) will not be required for the AIO Alternative because this Alternative does not occur in the Coastal Zone.

5.22 ARTERIAL IMPROVEMENTS PLUS HOV AND SPOT MIXED FLOW LANES ON I-5 ALTERNATIVE

The AIP Alternative includes the improvements to arterials as described under the AIO and limited improvements to I-5. Table 5.22-1 summarizes the combined impacts of the arterial improvements part and I-5 Widening part of the AIP Alternative by jurisdiction.

TABLE 5.22-1
SUMMARY OF LAND USE IMPACTS OF THE AIP ALTERNATIVE

Jurisdiction	**ROW (hectares/acres)**		**Area Disturbed (hectares/acres)**	
ARTERIAL IMPROVEMENT COMPONENT				
County of Orange	128	317	192	475
San Clemente	48	119	61	151
San Juan Capistrano	0.2	1	1	4
Subtotal Arterial Improvements	177	436	255	630
I-5 HOV SPOT MIXED FLOW LANES COMPONENT				
Laguna Hills	32	80	32	81
Mission Viejo	85	211	85	213
Laguna Niguel	19	46	16	41
San Juan Capistrano	117	288	115	283
Dana Point	26	63	26	63
San Clemente	135	333	132	326
County of Orange	7	18	5	13
MCB Camp Pendleton	7	18	7	18
Subtotal I-5 HOV Spot Mixed Flow Lanes	428	1,056	418	1,037
TOTAL IMPACTS	604	1,492	673	1,667
Sources: SCAG Land Use Data (2000) and P&D Consultants (2002).				

The impacts of the AIP Alternative on land uses associated with the Antonio/La Pata improvements and grade separated arterial intersections would be the same as described earlier for the AIO Alternative and as shown on Table 5.22-1.

The I-5 improvement part of the AIP Alternative extends for 30.5 km (19 miles along I-5), traversing nine jurisdictions (seven Cities, MCB Camp Pendleton and the County of Orange). Figures illustrating specific impacts on land uses of the AIP Alternative are provided in Appendix A. As discussed in Section 2.0 (Description of the Alternatives), the AIP Alternative will involve widening both sides of I-5 and reconstruction of most of the existing on and off ramps, overcrossings and undercrossings. The summary of areas affected by the I-5 Widening under AIP Alternative by city are shown on Table 5.22-1. The temporary disturbance area is often inclusive of or overlaps the permanent right-of-way. Figures illustrating specific impacts on land uses of the AIP Alternative are provided in Appendix A.

TABLE 5.22-2
SUMMARY OF IMPACTS OF THE I-5 WIDENING COMPONENT OF THE AIP ALTERNATIVE BY JURISDICTION

Jurisdiction	Permanent ROW (hectares/acres)	Area Disturbed (hectares/acres)
Lake Forest	0.2/1	0.2/0.4
Laguna Hills	32/80	32/81
Mission Viejo	86/214	87/214
Laguna Niguel	19/46	16/41
Unincorporated Orange County	7/18	4/12
San Juan Capistrano	113/301	116/286
Dana Point	26/64	26/63
San Clemente	135/333	132/326
MCB Camp Pendleton	7/17	3/8
Total all jurisdictions	**425/1,073**	**416/1,032**
Sources: SCAG Land Use Data ((2000) and P&D Consultants (2002).		

5.22.1 LAND USE DESIGNATIONS OF AFFECTED JURISDICTIONS

Land Use Elements (LUEs) and maps have been prepared by each of the cities along I-5 pursuant to the requirements of Section 65302(a) of the California Government Code, which establishes the LUE as a mandated element of each General Plan. Land use maps delineate the types and locations of land use designations in each jurisdiction which serve as a framework for future land use planning and decision making.

All jurisdictions have categories of land uses in their General Plan LUEs. Generally, land uses fall into five main categories: Residential, Commercial, Industrial/Business Park/Office, Public/Institutional and Open Space/Recreation/Park. In some cases, hybrid or specialized land use categories are provided in LUEs, usually for special districts or uses. The nine jurisdictions affected by the arterial improvements and along I-5 under the AIP Alternative have a wide variety of land use designations and categories in their LUEs although most of these fall within these five primary categories. This is illustrated in Table 5.22-3, which lists by land use categories the area affected by the arterial improvements and the I-5 widening under the AIP Alternative. Along the I-5 segment, the majority of these designated land uses are existing land uses and there are very few designated but unbuilt land uses.

5.22.2 GENERALIZED LAND USE TYPES

For ease of understanding the potential land use impacts of the AIP Alternative, the following general categories of land uses were used to typify most of land use designations along I-5:

Residential
- Low – Medium Density (RML) 0 – 10 units/acre
- Medium – High Density (RMH) >10 units/acre

Non-Residential
- Commercial
- Industrial/Business Park/Office

Public/Institutional
Open Space
Other/Miscellaneous

Table 5.22-4 shows the total area of land use impact of the AIP Alternative on I-5, based on these generalized land use types.

Table 5.22-5 summarizes the land use impacts of the I-5 widening under AIP Alternative, for these generalized land use types, for each jurisdiction in the study area.

TABLE 5.22-3
SUMMARY OF LAND USE IMPACTS OF THE AIP ALTERNATIVE

Jurisdiction	Land Use Types	ROW (hectares/acres)		Area Disturbed (hectares/acres)	
ARTERIAL IMPROVEMENT COMPONENT					
County of Orange					
	Residential-Suburban	39	96	53	130
	Open Space	66	164	109	269
	Urban Activity Center	5	13	7	16
	Public Facilities-Landfill Site	18	44	24	60
Subtotal	--	128	317	192	475
San Clemente					
	Community-Commercial	2	4	2	5
	Neighborhood-Commercial	2	4	2	5
	Government	4	9	4	9
	Industrial	1	3	3	8
	Commercial-Mixed	2	4	3	6
	Open Space-Private	25	63	31	76
	Open Space-Public	6	15	8	19
	Residential-High	1	3	2	4
	Residential-Low	6	14	8	19
Subtotal	--	48	119	61	151
San Juan Capistrano					
	Open Space-Regional Park	0.2	1	1	4
Subtotal Arterial Improvements		177	436	255	630
I-5 HOV SPOT MIXED FLOW LANES COMPONENT					
Laguna Hills					
	Commercial Community	7	17	7	17
	Commercial Freeway	7	17	7	18
	Commercial Village	10	25	10	25
	Mixed Use	0.4	1	1	1
	Open Space	3	9	3	8
	Residential Low	4	11	4	11
	Residential Medium Low	0.2	1	0.2	1
	Transportation (I-5)	0.3	1	0.3	1
Subtotal	--	32	80	32	81
Mission Viejo					
	CIOA Office	1	3	1	3
	CIOA Com Highway/Office	1	3	1	3
	CIOA Com Highway	0.4	1	0.4	1
	CIOA Com Regional	1	3	1	3

TABLE 5.22-3
SUMMARY OF LAND USE IMPACTS OF THE AIP ALTERNATIVE

Jurisdiction	Land Use Types	ROW (hectares/acres)		Area Disturbed (hectares/acres)	
	Commercial Bus Park	1	2	1	1
	Commercial Community	1	2	1	3
	Commercial Highway	16	39	16	39
	Commercial Office	0.1	0.3	0.1	0.3
	Open Space Recreation	8	19	8	19
	Public Community Facility	4	11	4	11
	Residential Medium	5	11	5	11
	Residential Medium Low	1	1	1	1
	Transportation (I-5)	47	115	47	115
Subtotal	--	85	211	85	213
Laguna Niguel					
	Commercial Comm./Office	4	11	4	11
	Commercial Community	1	4	1	4
	Comm. Indust Bus Pk	5	13	5	13
	Open Space	2	5	2	5
	Public/Institutional	1	2	0.3	2
	Residential Attached	0.1	0.2	0	0
	Residential Detached	0.1	0.3	0	0
	Transportation (I-5)	5	12	3	8
Subtotal	--	19	46	16	41
San Juan Capistrano					
	Commercial General	5	13	5	13
	Commercial Neighborhood	1	3	1	3
	Industrial Light	1	2	1	2
	Industrial Park	3	7	3	7
	Industrial Quasi	4	10	1	4
	Office Research	4	9	4	9
	Open Space Community Pk	1	4	1	4
	Open Space General	10	24	10	25
	Open Space Neigh. Pk	0.4	1	0.4	1
	Open Space Recreation	1	3	1	3
	Public Schools	0.2	1	0.2	1
	Planned Community	18	44	18	44
	Public and Institutional	3	7	3	7
	Residential High	2	5	2	4
	Residential Low	0.1	0.2	0.1	0.2
	Residential Medium	1	1	1	1
	Residential Medium High	5	12	5	13
	Transportation (I-5)	58	144	58	144
Subtotal	--	117	288	115	283
Dana Point					
	Open Space	6	15	6	15
	Public Facility	1	2	1	2
	Residential Multifamily	4	9	4	9
	Residential Single Family	5	11	5	11
	Transportation (I-5)	11	27	11	27
Subtotal	--	26	63	26	63
San Clemente					

TABLE 5.22-3
SUMMARY OF LAND USE IMPACTS OF THE AIP ALTERNATIVE

Jurisdiction	Land Use Types	ROW (hectares/acres)		Area Disturbed (hectares/acres)	
	Commercial Community	5	12	5	12
	Commercial Neighborhood	10	25	10	24
	Commercial Regional	1	3	1	3
	Government	2	4	1	3
	Industrial Heavy	0.4	1	0.3	1
	Industrial Light	0	0	0	0
	Institutional	0.1	0.3	0.1	0.3
	Commercial Mixed-Res	6	15	6	14
	Open Space Golf	0.2	1	0.2	1
	Open Space Private	3	7	1	3
	Open Space Public	0	0	0	0
	Residential High	0	0	0	0
	Residential Low	5	13	5	13
	Residential Medium	3	7	3	7
	Residential Medium Low	1	3	1	3
	Transportation (I-5)	98	243	98	243
Subtotal	--	135	333	132	326
County of Orange					
	Open Space	7	17	5	13
	Residential Suburban	1	1	0	0
Subtotal	--	7	18	5	13
MCB Camp Pendleton					
	I-5 Right-of-Way Corridor	7	18	7	18
Subtotal I-5 HOV Spot Mixed Flow Lanes		428	1,056	418	1,037
TOTAL IMPACTS		604	1,492	673	1,667
Sources: SCAG Land Use Data (2000) and P&D Consultants (2002).					

TABLE 5.22-4
SUMMARY OF GENERALIZED LAND USE TYPES IMPACTED BY THE I-5 WIDENING UNDER THE AIP ALTERNATIVE (hectares/acres)

Generalized Land Use Category	ROW		Area Disturbed	
	ha	ac	ha	ac
Low-Medium Density Residential	25	61	24	59
Medium-High Density Residential	11	26	11	26
Total Residential Uses	35	87	35	86
Commercial	73	181	73	180
Industrial/ Business Park	23	58	21	50
Public/Institutional	10	25	10	24
Open Space	42	104	39	96
Other/Miscellaneous	244	602	238	587
Total Non-Residential Uses	388	981	380	938
TOTAL ALL USES	427	1,057	414	1,024
Sources: SCAG Land Use Data ((2000) and P&D Consultants (2002).				

5.22.3 IMPACTS ANALYSIS OF THE AIP ALTERNATIVE

The AIP Alternative would impact mostly existing land uses along I-5. These direct impacts would affect the nine jurisdictions in the generalized land use categories shown in Table 5.22-5. Most jurisdictions along I-5 have planned uses compatible with the freeway or have required buffering or mitigation to protect more sensitive uses such as residential uses. The addition of a lane in each direction on I-5 under this Alternative would substantially affect these existing uses. This is especially true of the older communities along I-5 in the southern part of the study area. This Alternative may result in incompatible uses adjacent to the new edge of the right-of-way. This would be an adverse land use impact of this Alternative.

5.22.4 COASTAL ACT COMPLIANCE FOR THE AIP ALTERNATIVE

The California Coastal Zone in the SOCTIIP Study Area, with the alignments of the SOCTIIP build alternatives, is shown on Figure 5.5-2. Figure 5.22-1 shows the disturbance limits for the AIP Alternative in the Coastal Zone. Improvements to I-5 and the San Mateo Creek overpass will likely require a Coastal Development Permit (California) and a Coastal Program Consistency Finding (Federal) as described in Section 3.18 (Coastal Zone). This Permit and Finding will be required under the AIP Alternative because the alignment of this Alternative is in the Coastal Zone.

5.23 I-5 WIDENING ALTERNATIVE

The I-5 Alternative extends along I-5 for 33.2 km (20.6 miles), traversing ten jurisdictions. As discussed in detail in Section 2.0, the I-5 Alternative involves widening both sides of I-5 and reconstruction of most of the on and off ramps, overcrossings and undercrossings. Figures illustrating specific impacts on land uses of the I-5 Alternative are provided in Appendix A. The summary of areas affected by the I-5 Alternative by jurisdiction is shown on Table 5.23-1. The temporary disturbance area is often inclusive of or overlaps the permanent right-of-way.

5.23.1 LAND USE DESIGNATIONS OF AFFECTED JURISDICTIONS

Table 5.23-2 lists by jurisdictional land use categories the areas affected by the I-5 Alternative. The majority of these designated land uses are existing land uses and there are very few designated but unbuilt land uses along this segment of I-5. Refer to sections 5.22.1 for a complete discussion of General Plan land use designations as they relate to the AIP and I-5 Alternatives.

5.23.2 GENERALIZED LAND USE TYPES

Refer to section 5.22.2 for a complete discussion on generalized land use types as they relate to the AIP and I-5 Alternatives. Table 5.23-3 shows the total area of impact of the I-5 Alternative on generalized land use types.

TABLE 5.22-5
ROW IMPACTS ON GENERALIZED LAND USE CATEGORIES BY JURISDICTION FOR THE I-5 WIDENING UNDER THE AIP ALTERNATIVE
(hectares/acres)

Jurisdiction	Land Use Designation															
	Low-Medium Density Residential		Medium-High Density Residential		Commercial		Industrial/ Business Park/Office		Public/ Institutional		Open Space/ Recreation		Other/ Misc.		Total	
	ha	ac	ha	ac	ha	ac	ha	ac	ha	ac	ha	ac	ha	ac	ha	ac
Irvine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lake Forest	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4	0.1	0.4
Laguna Hills	4	11	0	0	24	59	0	0	0	0	3	9	0.3	1	32	79
Laguna Woods	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mission Viejo	5	12	0	0	20	48	2	5	4	11	8	19	47	115	85	211
Laguna Niguel	0	0	0	0	1	4	10	24	1	2	2	5	5	12	19	46
San Juan Capistrano	1	1	7	17	6	16	12	28	3	7	13	32	58	144	117	289
Dana Point	5	11	4	9	0	0	0	0	1	2	6	15	11	27	26	63
San Clemente	10	24	0	0	22	54	0.4	1	2	4	3	7	7	17	135	333
MCB Camp Pendleton	0	0	0	0	0	0	0	0	0	0	0	0	7	17	7	17
County of Orange	1	1	0	0	0	0	0	0	0	0	7	17	0	0	7	18
Total	**25**	**61**	**11**	**26**	**73**	**181**	**23**	**58**	**10**	**25**	**42**	**104**	**244**	**602**	**427**	**1,057**

Sources: SCAG Land Use Data ((2000) and P&D Consultants (2002).

TABLE 5.23-1
SUMMARY OF IMPACTS OF THE I-5 ALTERNATIVE BY JURISDICTION

Jurisdiction	Permanent ROW (hectares/acres)	Area Disturbed (hectares/acres)
Irvine	10/25	10/25
Lake Forest	32/79	32/79
Laguna Hills	48/119	48/120
Laguna Woods	1/3	1/3
Mission Viejo	85/210	92/227
Laguna Niguel	19/46	16/39
Unincorporated Orange County	5/12	5/12
San Juan Capistrano	133/328	131/325
Dana Point	29/72	27/66
San Clemente	142/348	141/349
MCB Camp Pendleton	2/5	2/5
Total all jurisdictions	**506/1,247**	**506/1,250**
Sources: SCAG Land Use Data ((2000) and P&D Consultants (2002).		

TABLE 5.23-2
SUMMARY OF LAND USE IMPACTS OF THE I-5 WIDENING ALTERNATIVE

Jurisdiction	Land Use Types	ROW (hectares/acres)		Area Disturbed (hectares/acres)	
Irvine					
	Community Commercial	2	5	2	5
	Research and Industrial	1	2	1	2
	Transportation (I-5)	7	18	7	18
Subtotal	--	10	25	10	25
Lake Forest					
	Commercial	5	12	5	12
	Office Professional	1	2	1	2
	Open Space	3	8	3	8
	Public Facility	1	1	1	1
	Residential Low	2	5	2	5
	Residential Medium	1	1	1	1
	Transportation (I-5)	20	48	20	48
Subtotal	--	32	79	32	79
Laguna Hills					
	Commercial Community	7	17	7	18
	Commercial Freeway	13	31	13	31
	Commercial Village	18	43	18	43
	Mixed Use	3	6	3	6
	Office Professional	0.2	0.4	0.2	0.4
	Open Space	4	9	4	9
	Residential Low	4	11	4	11
	Residential Medium Low	0.2	1	0.2	1
	Transportation (I-5)	0.2	1	0.2	1
Subtotal	--	48	119	49	120
Laguna Woods					
	Residential(6)	1	3	1	3

TABLE 5.23-2
SUMMARY OF LAND USE IMPACTS OF THE I-5 WIDENING ALTERNATIVE

Jurisdiction	Land Use Types	ROW (hectares/acres)		Area Disturbed (hectares/acres)	
Mission Viejo					
	CIOA Office	1	3	1	3
	CIOA Com Highway/Office	1	3	1	3
	CIOA Com Highway	0.4	1	0.4	1
	CIOA Com Regional	1	3	1	3
	Commercial Bus Park	1	1	1	1
	Commercial Community	1	2	2	5
	Commercial Highway	16	39	14	34
	Commercial Office	0.1	0.3		
	Open Space Recreation	8	19	8	19
	Public Community Facility	4	11	5	13
	Residential Medium	5	11	6	16
	Residential Medium Low	1	1	1	1
	Transportation (I-5)	47	115	52	128
Subtotal	--	85	210	93	227
Laguna Niguel					
	Commercial Comm./Office	4	11	4	11
	Commercial Community	1	4	1	3
	Comm. Industrial Bus Pk	5	13	5	13
	Open Space	2	5	2	5
	Public/Institutional	1	2	1	2
	Residential Attached	0.1	0.2	0	0
	Residential Detached	0.1	0.3	0	0
	Transportation (I-5)	5	12	3	6
Subtotal	--	19	46	16	39
San Juan Capistrano					
	Commercial General	5	13	5	13
	Commercial Neighborhood	1	3	1	3
	Industrial Light	1	2	1	2
	Industrial Park	3	8	3	8
	Industrial Quasi	4	11	3	8
	Office Research	5	13	5	13
	Open Space Community Pk	2	5	2	5
	Open Space General	11	27	11	27
	Open Space Neigh. Pk	1	1	0	1
	Open Space Recreation	1	3	1	3
	Planned Community	20	49	20	49
	Public and Institutional	3	8	3	8
	Residential High	2	4	2	4
	Residential Low	3	7	3	7
	Residential Medium	2	4	2	4
	Residential Medium High	7	17	7	17
	Residential Medium Low	0.1	0.2	0.1	0.2
	Residential Very Low	0.3	1	0.3	1
	Specific Plan	2	5	2	5
	Transportation (I-5)	60	148	60	148
Subtotal	--	133	328	132	325
Dana Point					

TABLE 5.23-2
SUMMARY OF LAND USE IMPACTS OF THE I-5 WIDENING ALTERNATIVE

Jurisdiction	Land Use Types	ROW (hectares/acres)		Area Disturbed (hectares/acres)	
	Open Space	6	15	4	10
	Public Facility	1	3	1	3
	Residential Multifamily	4	9	4	9
	Residential Single Family	7	17	7	17
	Transportation (I-5)	11	27	11	27
Subtotal	--	29	72	27	66
San Clemente					
	Commercial Community	5	12	5	13
	Commercial Neighborhood	11	28	11	28
	Commercial Regional	1	3	1	3
	Government	2	4	2	4
	Industrial Heavy	0.3	1	0.3	1
	Institutional	0.1	0.3	0.1	0.3
	Commercial Mixed-Res	9	21	9	21
	Open Space Golf	0.3	1	0.3	1
	Open Space Private	1	3	1	3
	Open Space Public	1	0.3	0.1	0.3
	Residential Low	8	19	8	19
	Residential Medium	3	8	3	8
	Residential Medium Low	2	4	2	4
	Transportation (I-5)	99	245	99	245
Subtotal	--	142	348	140	348
County of Orange					
	Open Space	5	12	5	12
MCB Camp Pendleton					
	I-5 Right-of-Way Corridor	7	18	7	18
TOTAL IMPACTS		511	1,258	514	1,263
Sources: SCAG Land Use Data ((2000) and P&D Consultants (2002).					

TABLE 5.23-3
SUMMARY OF GENERALIZED LAND USE TYPES IMPACTED BY THE I-5 ALTERNATIVE
(hectares/acres)

Generalized Land Use Category	ROW		Area Disturbed	
	ha	ac	ha	ac
Low-Medium Density Residential	36	90	38	95
Medium-High Density Residential	13	31	13	31
Total Residential Uses	50	124	52	126
Commercial	100	246	99	246
Industrial/ Business Park	31	76	29	72
Public/Institutional	12	28	12	30
Open Space	42	100	38	94
Other/Miscellaneous	272	672	275	680
Total Non-Residential Uses	456	1,123	454	1,122

TABLE 5.23-3
SUMMARY OF GENERALIZED LAND USE TYPES IMPACTED BY THE I-5 ALTERNATIVE
(hectares/acres)

Generalized Land Use Category	ROW		Area Disturbed	
TOTAL ALL USES	**506**	**1,247**	**506**	**1,250**
Sources: SCAG Land Use Data ((2000) and P&D Consultants (2002).				

Table 5.23-4 summarizes land use types, as described above, affected by the I-5 Alternative by jurisdiction.

5.23.3 IMPACT ANALYSIS OF THE I-5 ALTERNATIVE

The I-5 Alternative would impact mostly existing land uses. These direct impacts would affect the ten jurisdictions in the generalized land use categories shown in Table 5.23-4. Most jurisdictions along I-5 have planned uses compatible with the freeway or have required buffering or mitigation to protect more sensitive uses such as residential uses. The addition of the two lanes in each direction on I-5 under this Alternative would substantially affect these existing uses. This is especially true of the older communities along I-5 in the south part of the study area. This Alternative may result in incompatible uses adjacent to the new edge of the right-of-way. This would be an adverse land use impact of this Alternative.

5.23.4 COASTAL ACT COMPLIANCE OF THE I-5 ALTERNATIVE

The California Coastal Zone in the SOCTIIP study area, with the alignments of the SOCTIIP build alternatives, is shown on Figure 5.5-2. Figure 5.23-1 shows the disturbance limits for the I-5 Alternative in the Coastal Zone. Improvements to I-5 and the San Mateo Creek overpass will likely require a Coastal Development Permit (California) and a Coastal Program Consistency Finding (Federal) as described in Section 3.18 (Coastal Zone). This Permit and Finding will be required under the I-5 Alternative because the alignment of this Alternative is in the Coastal Zone.

5.24 NO ACTION ALTERNATIVES

The two No Action Alternatives would not result in direct or indirect land use impacts because they would not result in the construction of any transportation improvements in the SOCTIIP study area. The No Action Alternatives are not anticipated to affect planned land uses because the applicable local jurisdictions have required or will require those uses to include sufficient transportation facilities to meet their needs, independent of the SOCTIIP alternatives.

TABLE 5.23-4
ROW IMPACTS ON GENERALIZED LAND USE CATEGORIES BY JURISDICTION FOR THE I-5 ALTERNATIVE
(hectares/acres)

Jurisdiction	Land Use Designation															
	Low-Medium Density Residential		Medium-High Density Residential		Commercial		Industrial/ Business Park/Office		Public/ Institutional		Open Space/ Recreation		Other/ Misc.		Total	
	ha	ac	ha	ac	ha	ac	ha	ac	ha	ac	ha	ac	ha	ac	ha	ac
Irvine	0	0	0	0	2	5	1	2	0	0	0	0	7	18	10	25
Lake Forest	3	7	0	0	5	12	4	10	1	1	0	0	20	48	32	79
Laguna Hills	5	12	0	0	40	98	0.2	0.4	0	0	4	9	0.2	1	48	119
Laguna Woods	1	3	0	0	0	0	0	0	0	0	0	0	0	0	1	3
Mission Viejo	5	12	0	0	20	48	2	4	4	11	8	19	47	115	85	210
Laguna Niguel	0.2	1	0	0	1	4	10	24	1	2	2	5	5	12	19	46
San Juan Capistrano	5	12	9	21	6	16	14	34	3	8	15	36	81	201	133	328
Dana Point	7	17	4	9	0	0	0	0	1	3	6	15	11	27	29	72
San Clemente	12	30	0	0	26	64	0.3	1	2	4	3	4	99	245	142	348
County of Orange	0	0	0	0	0	0	0	0	0	0	5	12	0	0	5	12
MCB Camp Pendleton	0	0	0	0	0	0	0	0	0	0	0	0	2	5	2	5
Total	**38**	**93**	**13**	**31**	**100**	**246**	**31**	**76**	**12**	**28**	**42**	**100**	**272**	**672**	**506**	**1,247**

Sources: SCAG Land Use Data ((2000) and P&D Consultants (2002).

5.24.1 COUNTY OF ORANGE (RANCHO MISSION VIEJO)

It is expected that RMV will develop with or without the SOCTIIP build alternatives. Any development plan for the RMV is assumed to include sufficient transportation facilities to meet the circulation needs of the plan based on preliminary plans and information published in February 2003 Notice of Preparation (sources: RMV Planning Application, November 2002, RMV Notice of Preparation, February 2003). Therefore, no impacts to future planned land uses on RMV would occur under the two SOCTIIP No Action Alternatives.

5.24.2 CITY OF SAN CLEMENTE

Improvements consistent with the MPAH and the buildout of the Champion Hills, Rolling Hills and Forster Ranch PC would occur in this City under the No Action Alternatives. The No Action Alternatives will not adversely affect the ability of these projects to continue to develop, consistent with applicable local approvals.

5.24.3 CITY OF SAN JUAN CAPISTRANO

Improvements consistent with the MPAH and the buildout of Forster Canyon PC/Pacific Point and the Prima Deshecha Sanitary Landfill GDP would occur in this City under the No Action Alternatives. The No Action Alternatives would not adversely affect the ability of these projects to develop, consistent with applicable local approvals.

5.24.4 OTHER CITIES

Improvements consistent with the MPAH and other planned development in the other cities in the SOCTIIP study area would continue to occur in these jurisdictions under the No Action Alternatives. The No Action Alternatives would not adversely affect the ability of these projects to develop, consistent with applicable local approvals.

5.24.5 MCB CAMP PENDLETON

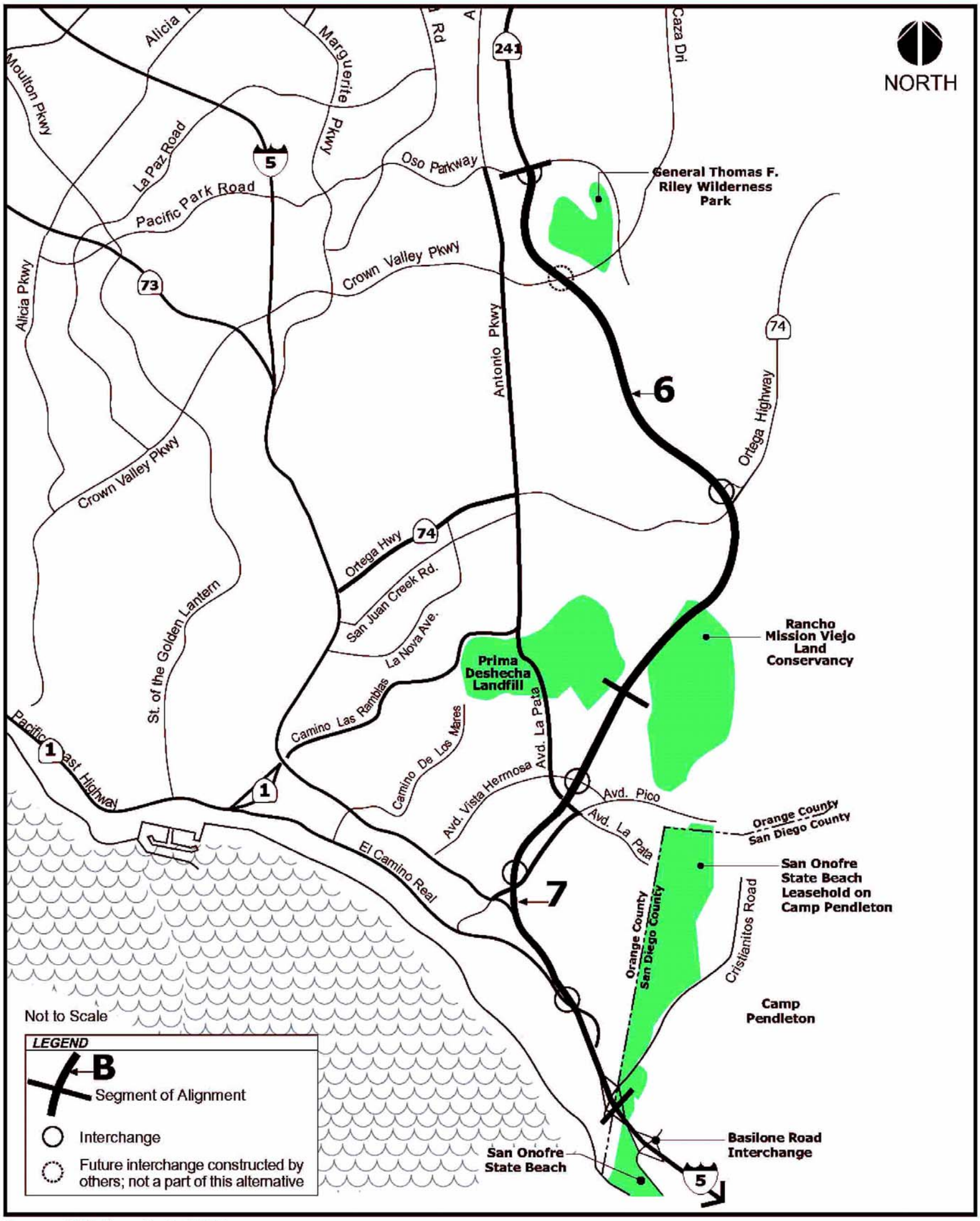
Improvements on MCB Camp Pendleton in the SOCTIIP study area would continue to occur under the No Action Alternatives. The No Action Alternatives would not adversely affect the ability of the DON to continue to implement land use on the Base, consistent with the Master Plan and the mission of Camp Pendleton, as discussed in detail in the Military Impacts Technical Report.

5.24.6 SAN ONOFRE STATE BEACH

Improvements to SOSB in the SOCTIIP study area would continue to occur under the No Action Alternatives. The No Action Alternatives would not adversely affect the ability of the California Department of Parks and Recreation to continue to implement land uses in the Park, consistent with the Master Plan and the Department's lease with the United States of America.

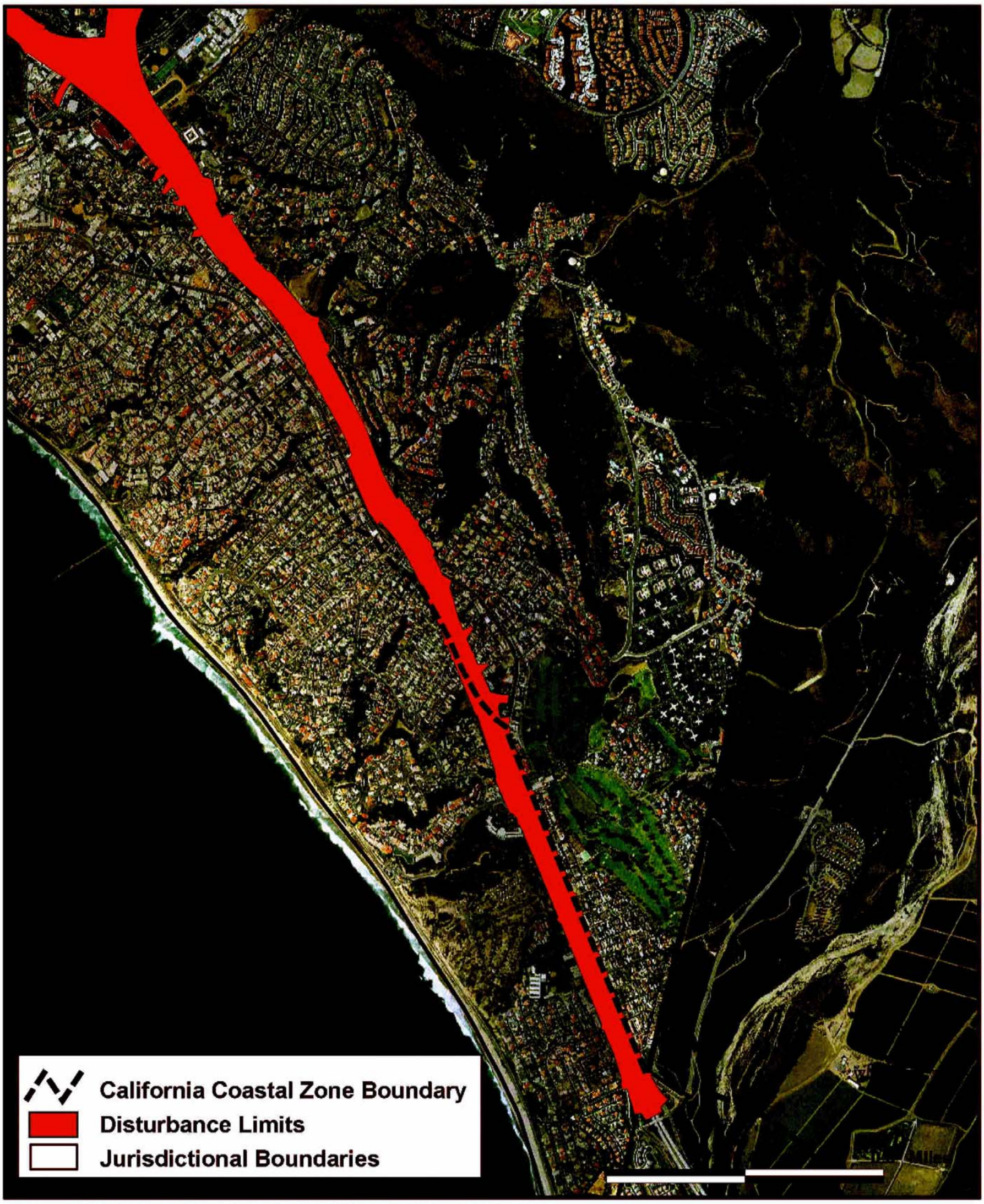
5.24.7 COASTAL ACT COMPLIANCE FOR THE NO ACTION ALTERNATIVES

The California Coastal Zone in the SOCTIIP study area is shown on Figure 5.5-2. The No Action Alternatives will not result in the construction of any SOCTIIP Transportation improvements in the Coastal Zone. Therefore, the No Action Alternatives will not require a Coastal Development Permit (California) or a Coastal Program Consistency Finding (Federal).



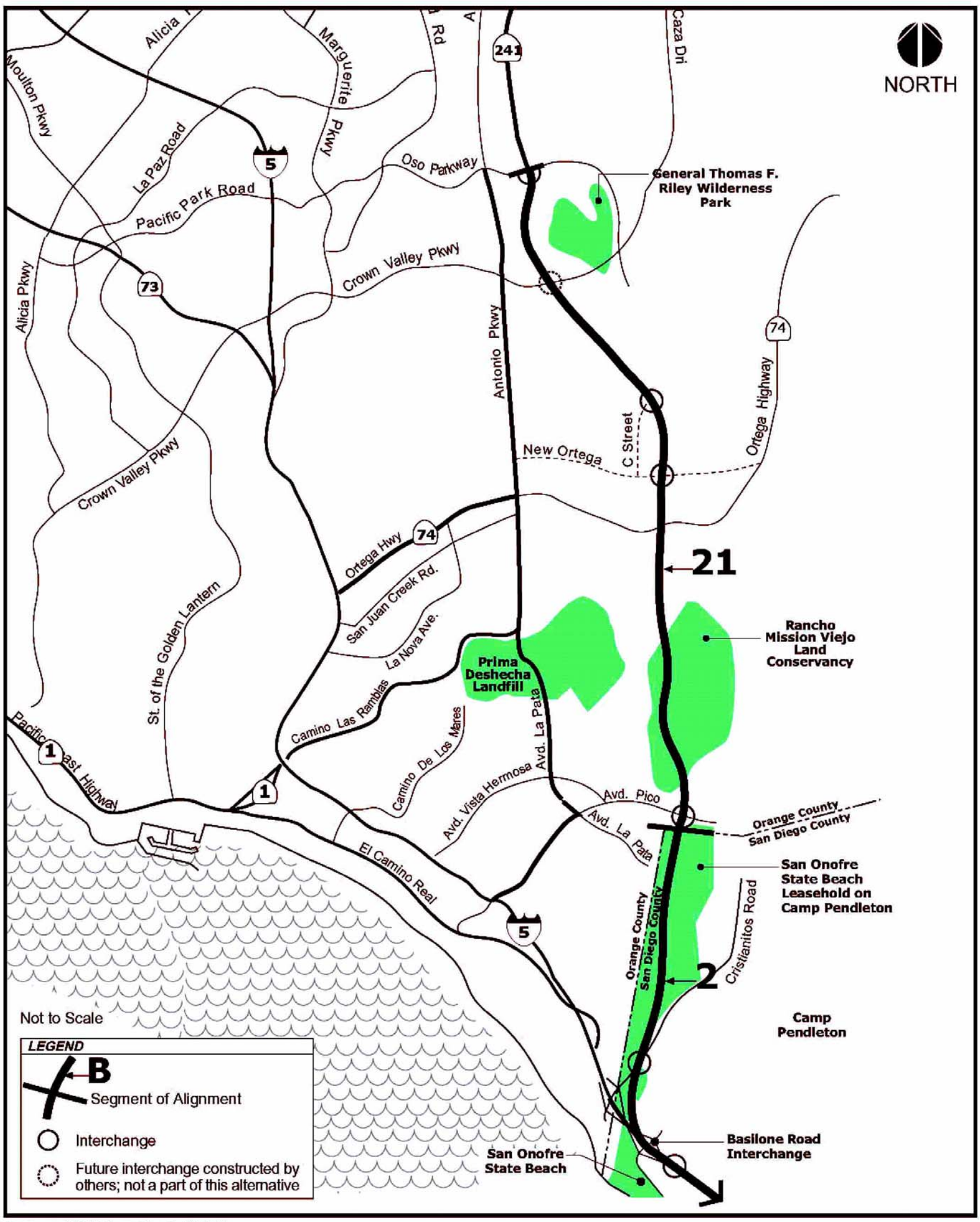
Source: P&D Consultants (2001).

Alignment of the Far East Corridor - Talega Variation Alternatives



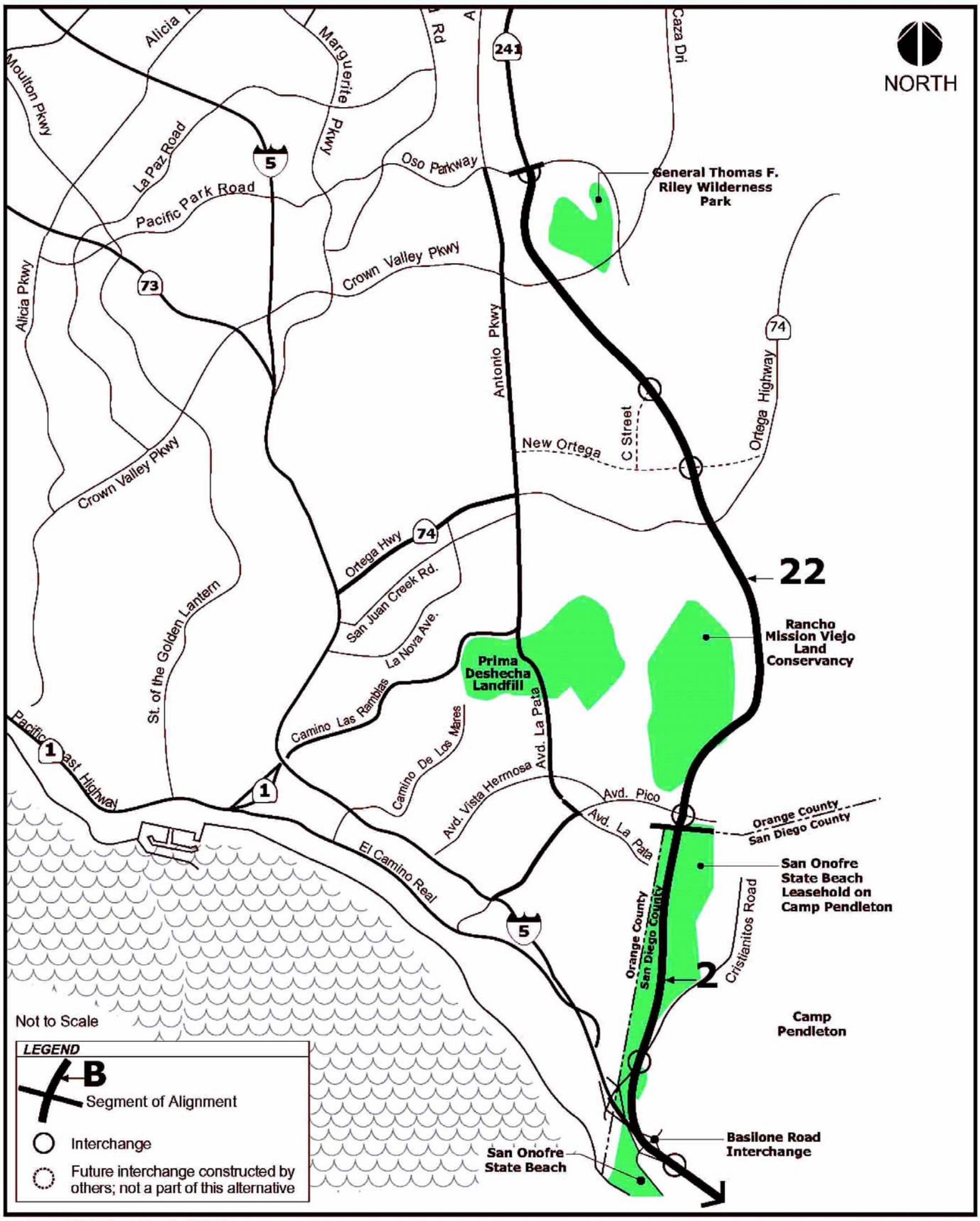
Source: California Coastal Commission Staff (2001) and P&D Consultants (2002)

Area in Coastal Zone for FEC-TV, CC, A7C and A7C-7SV - Initial and Ultimate Alternatives



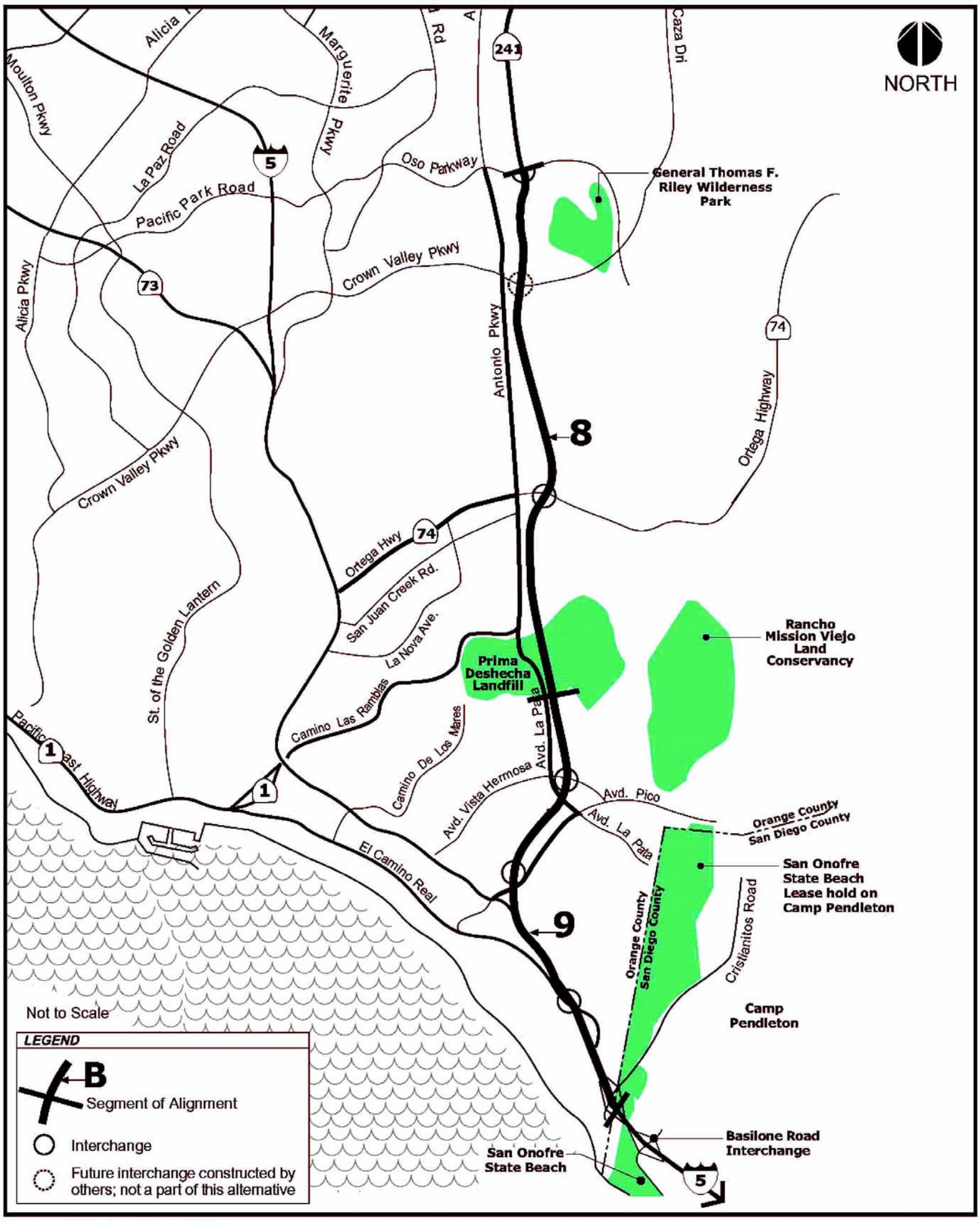
Source: P&D Consultants (2003).

Alignment of the Far East Corridor-West Alternatives



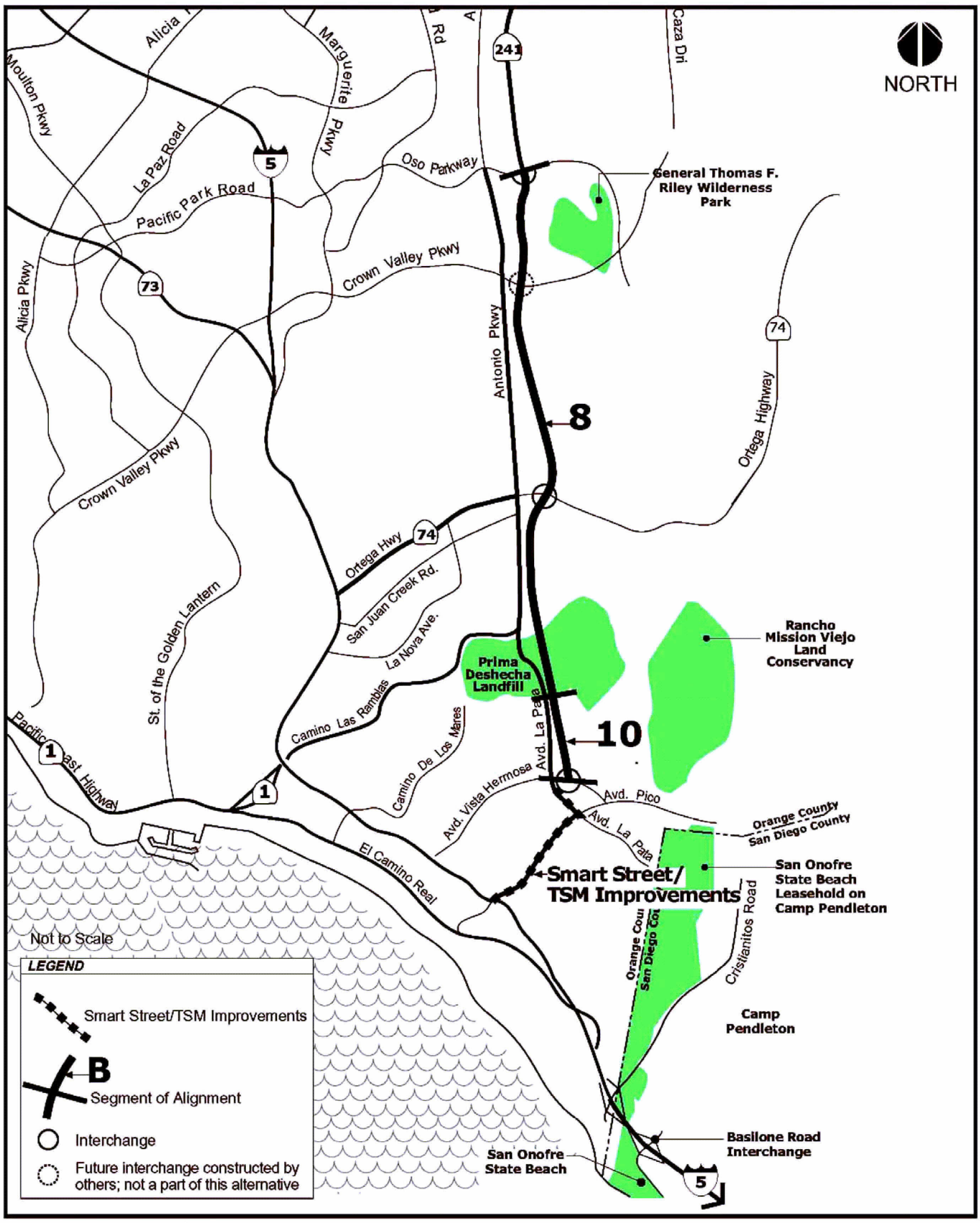
Source: P&D Consultants (2003).

Alignment of the Far East Corridor-Modified Alternatives



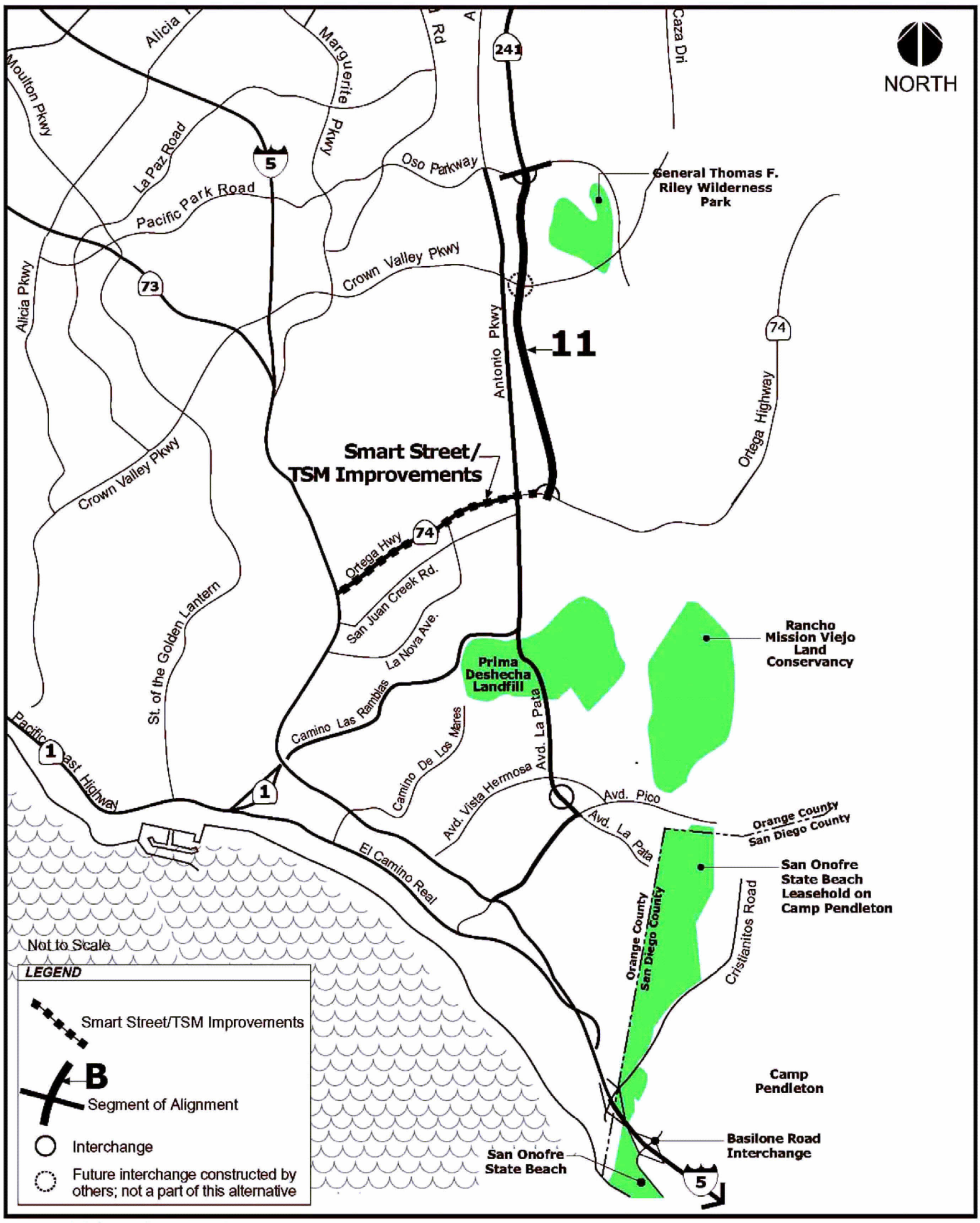
Source: P&D Consultants (2001).

Alignment of the Central Corridor - Complete Alternatives



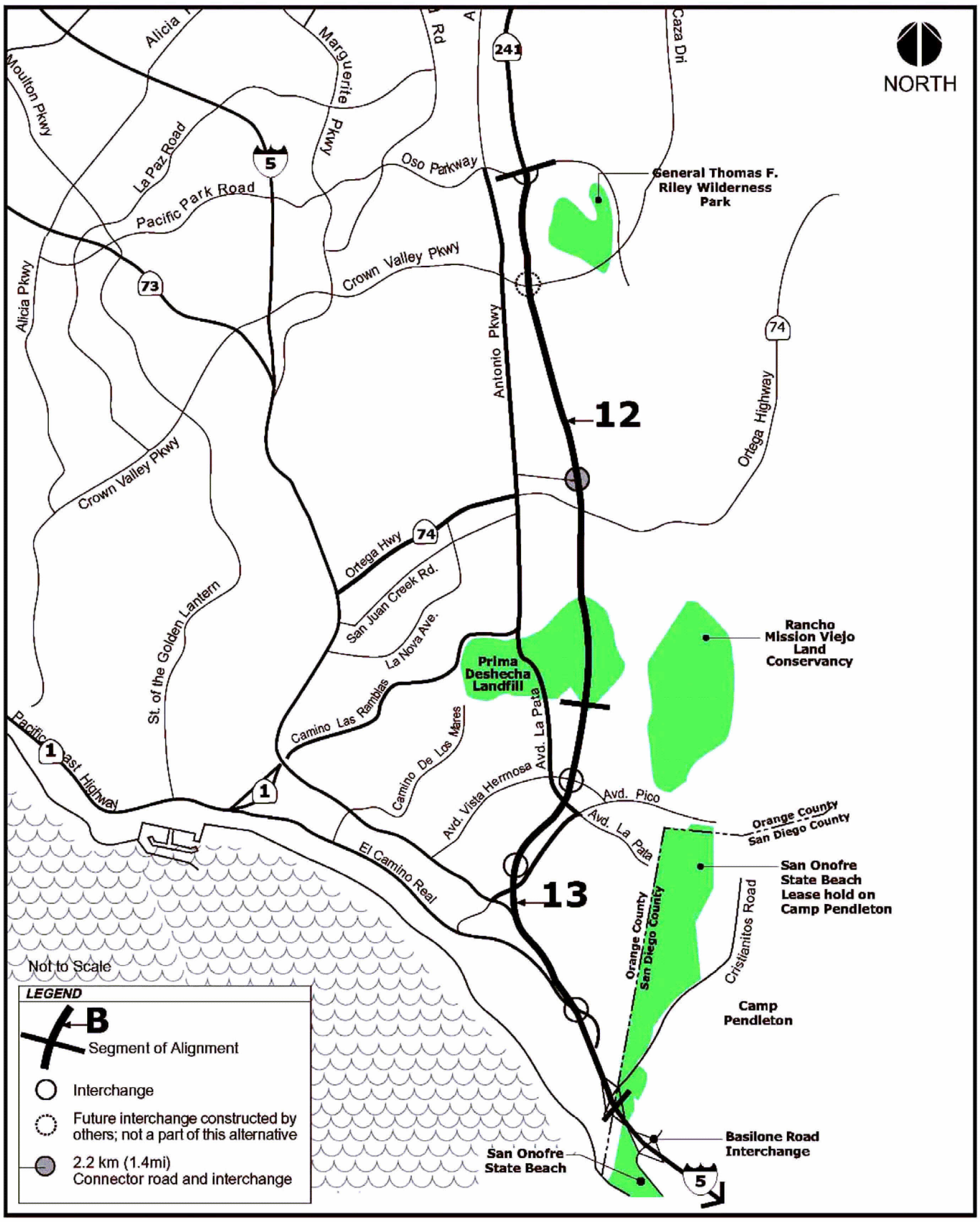
Source: P&D Consultants (2001).

Alignment of the Central Corridor - Avenida La Pata Variation Alternatives



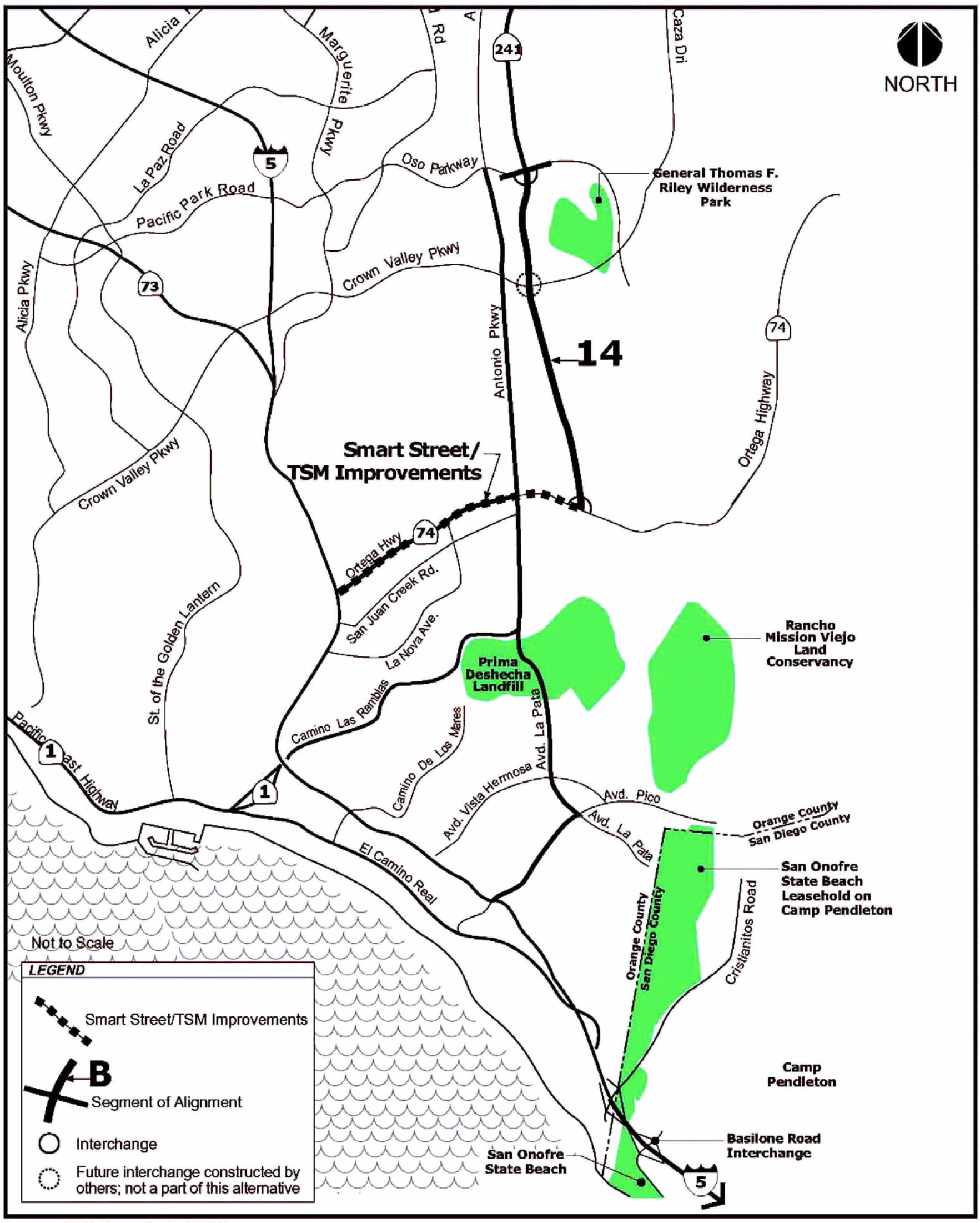
Source: P&D Consultants (2001).

Alignment of the Central Corridor - Ortega Highway Variation Alternatives



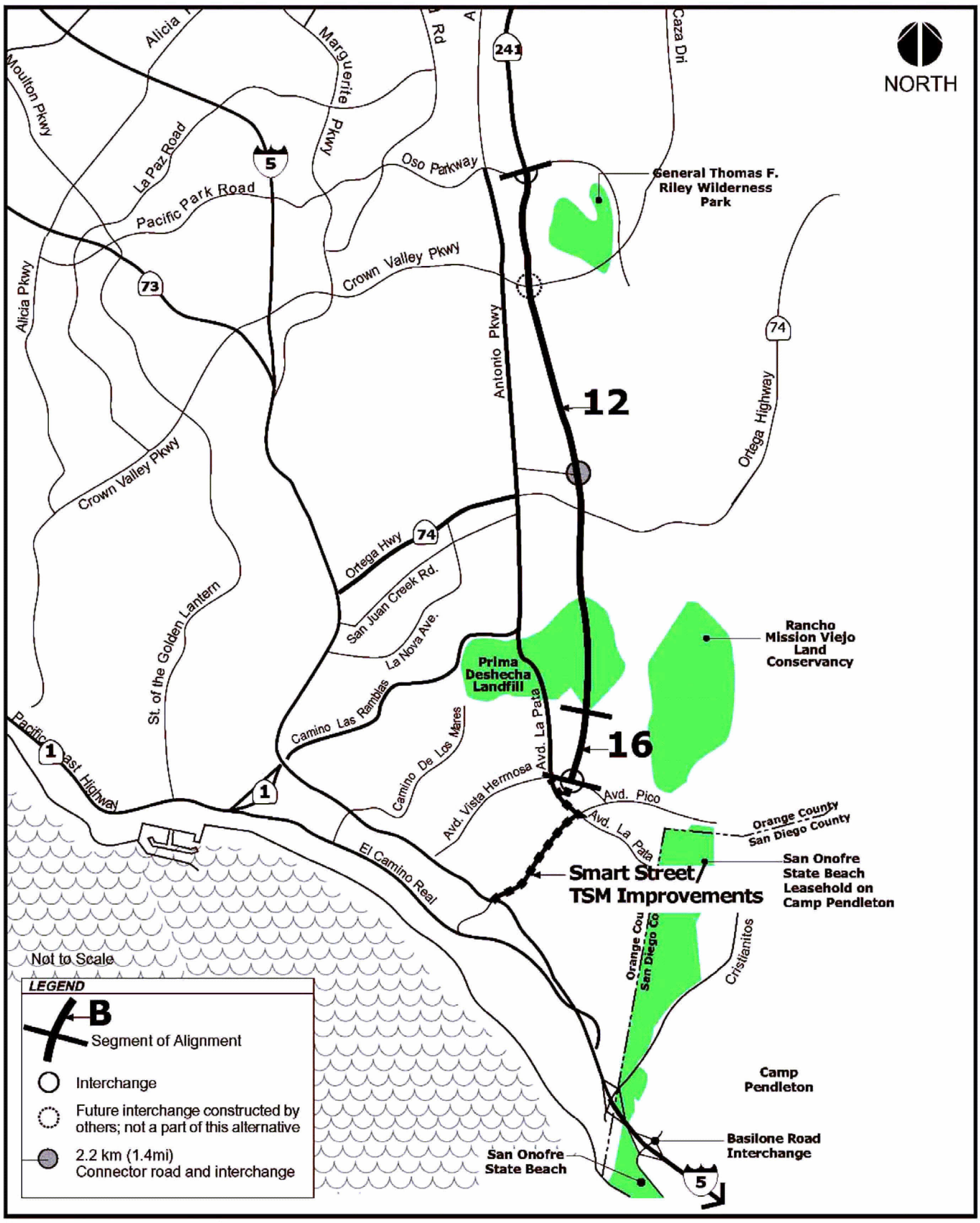
Source: P&D Consultants (2001).

Alignment of the Alignment 7 Corridor-Complete Alternatives



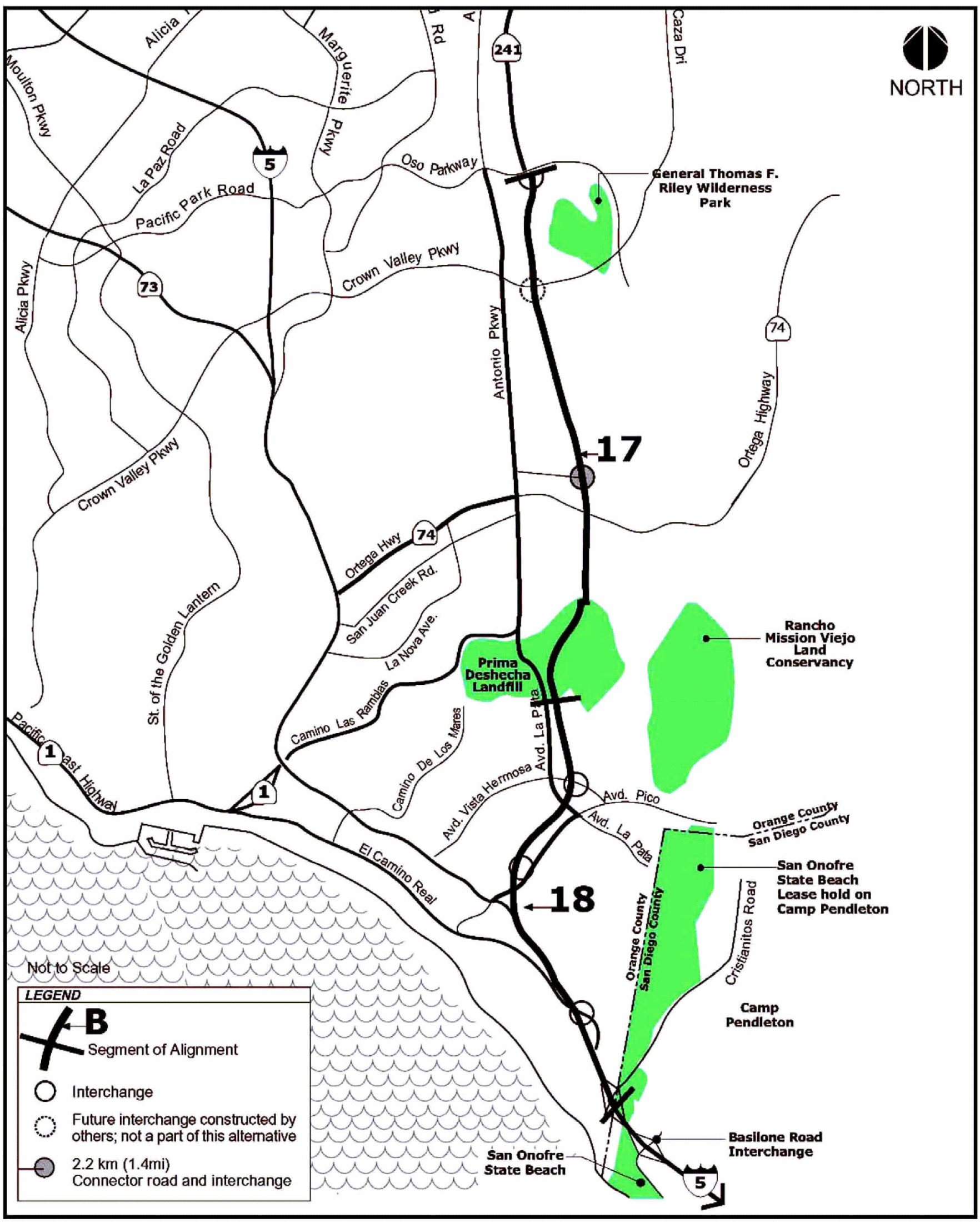
Source: P&D Consultants (2001).

Alignment of the Alignment 7 Corridor - Ortega Highway Variation Alternatives



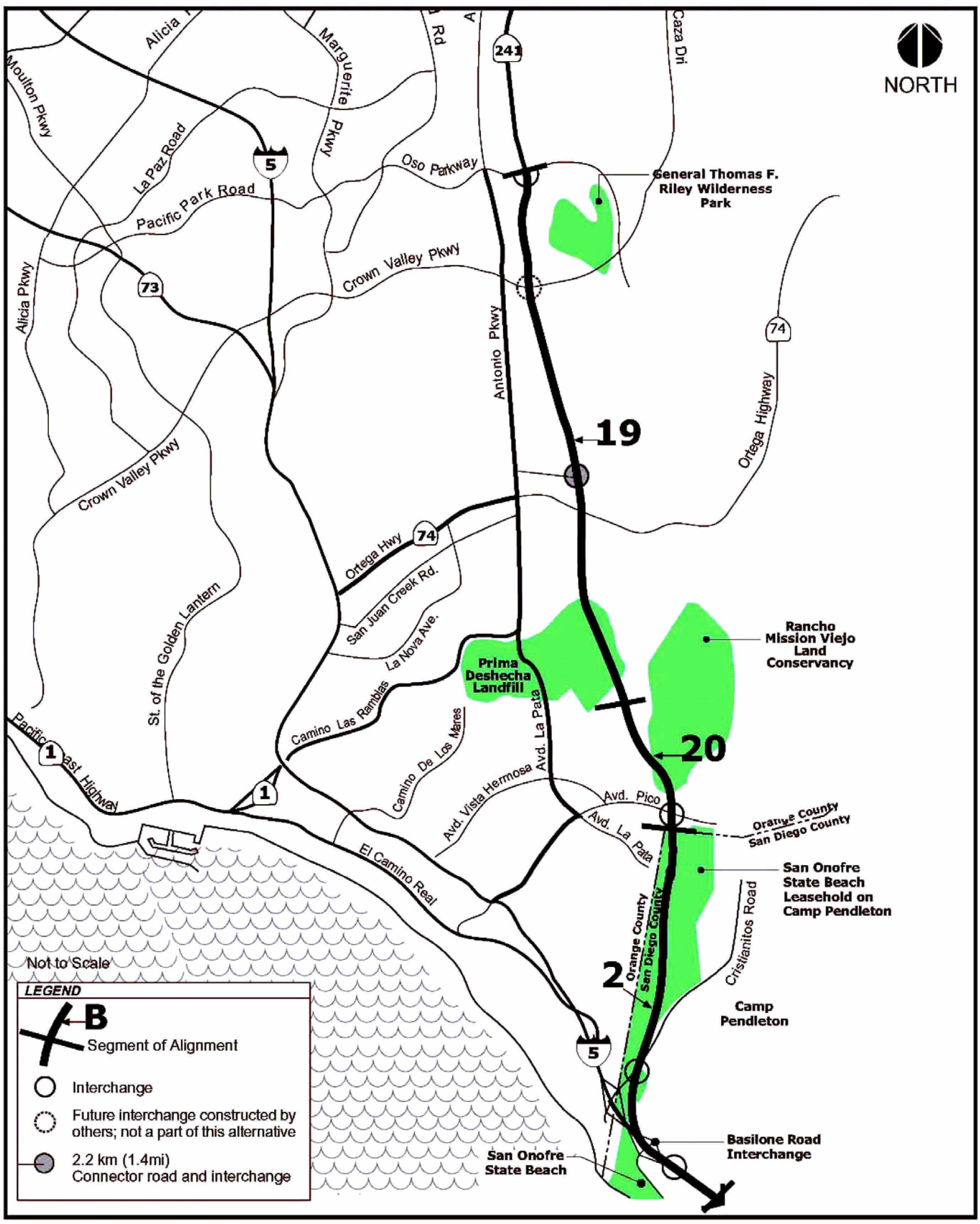
Source: P&D Consultants (2001).

Alignment of the Alignment 7 Corridor - Avenida La Pata Variation Alternatives



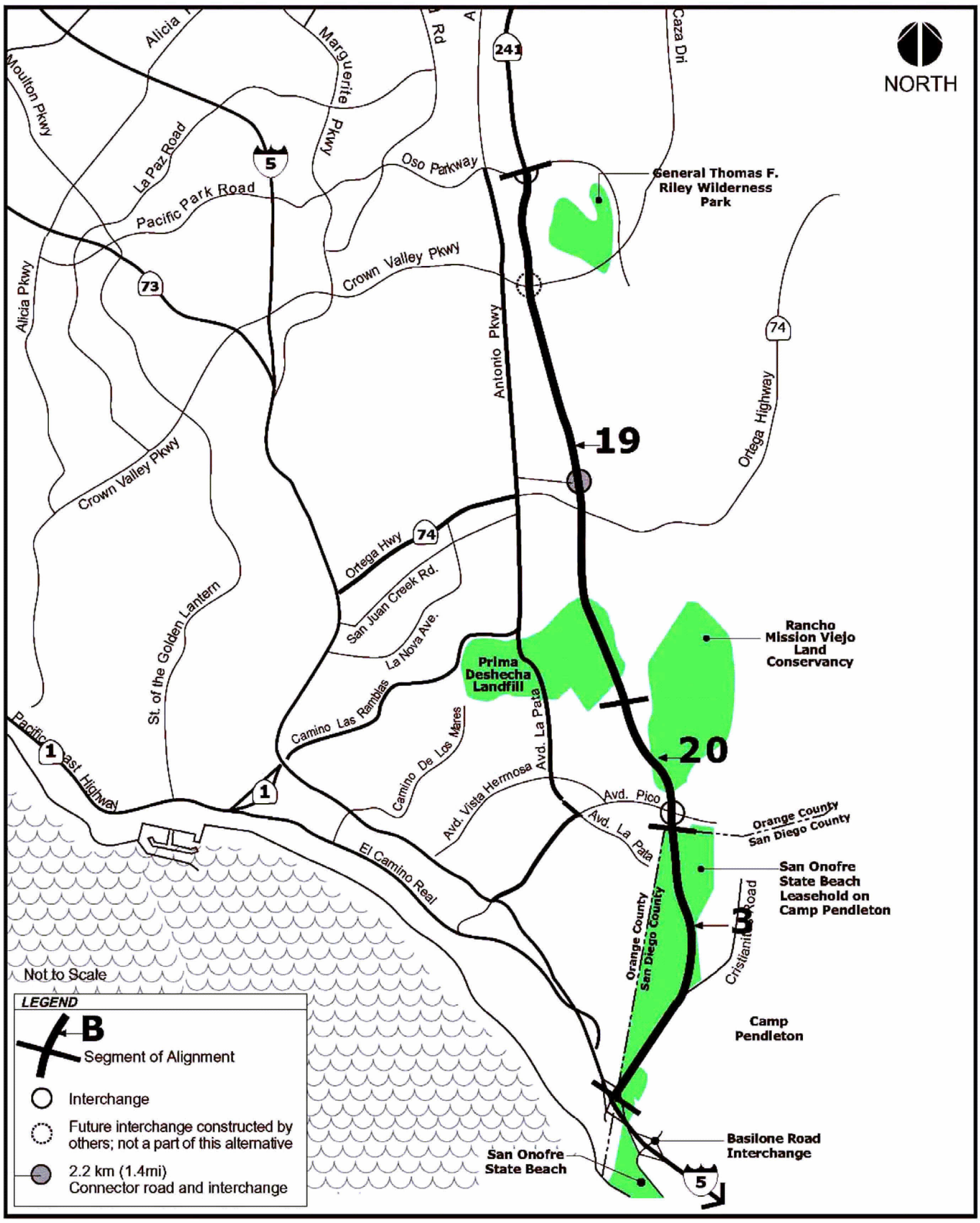
Source: P&D Consultants (2001).

Alignment of the Alignment 7 Corridor - 7 Swing Variation Alternatives



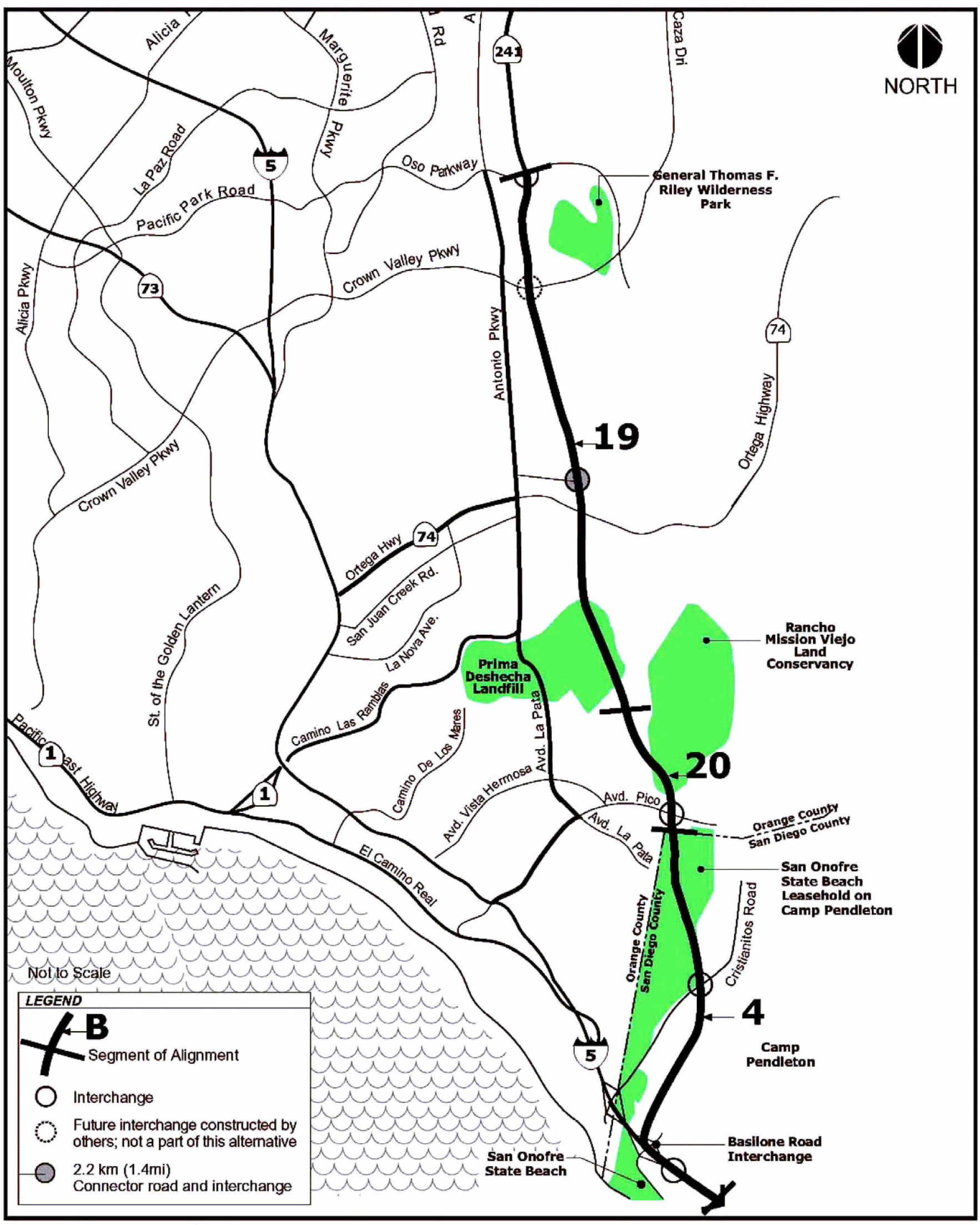
Source: P&D Consultants (2001).

Alignment of the Alignment 7 Corridor - Far East Crossover Variation Alternatives



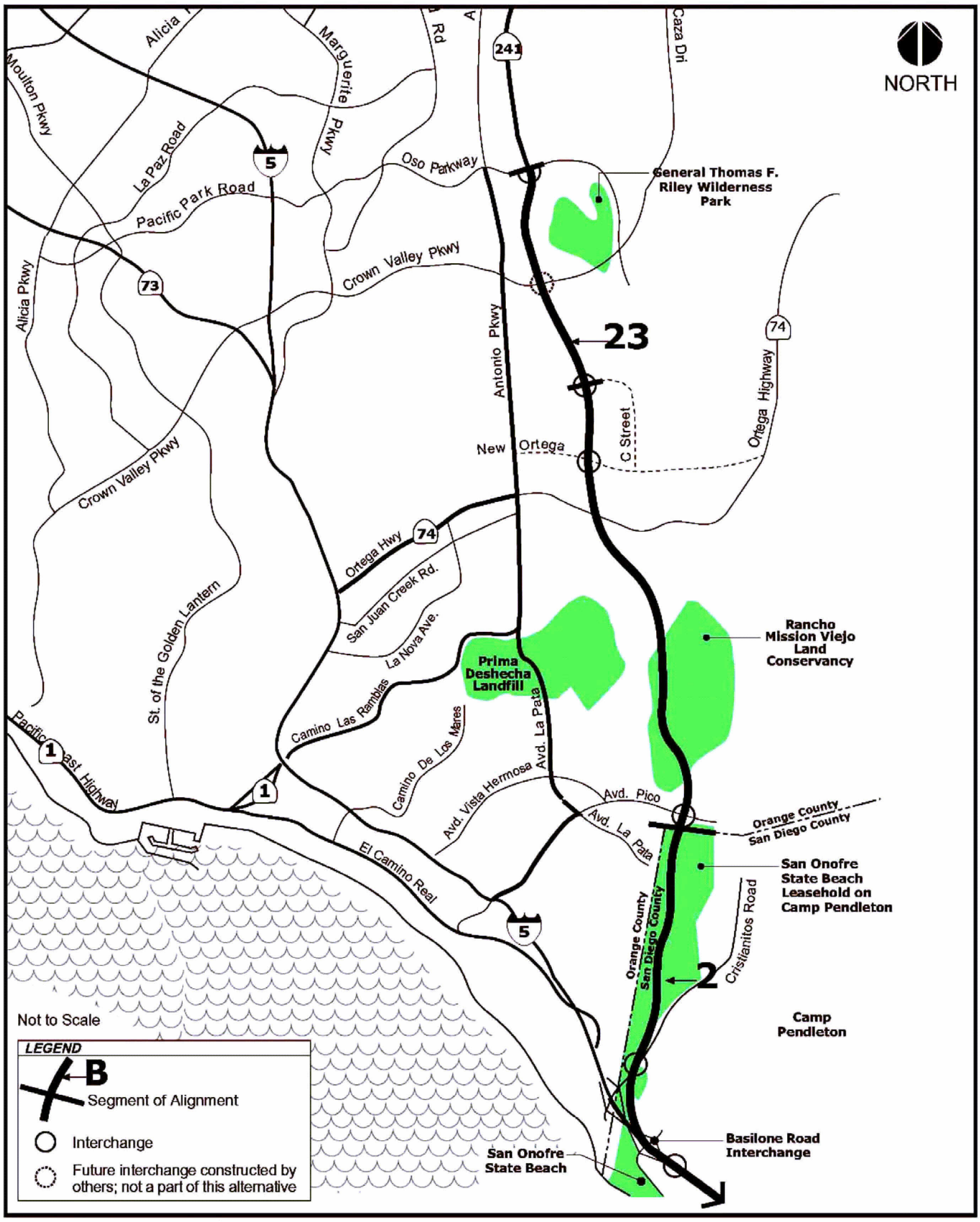
Source: P&D Consultants (2001).

Alignment of the Aligment 7 Corridor - Far East Crossover (Cristianitos) Variation Alternatives



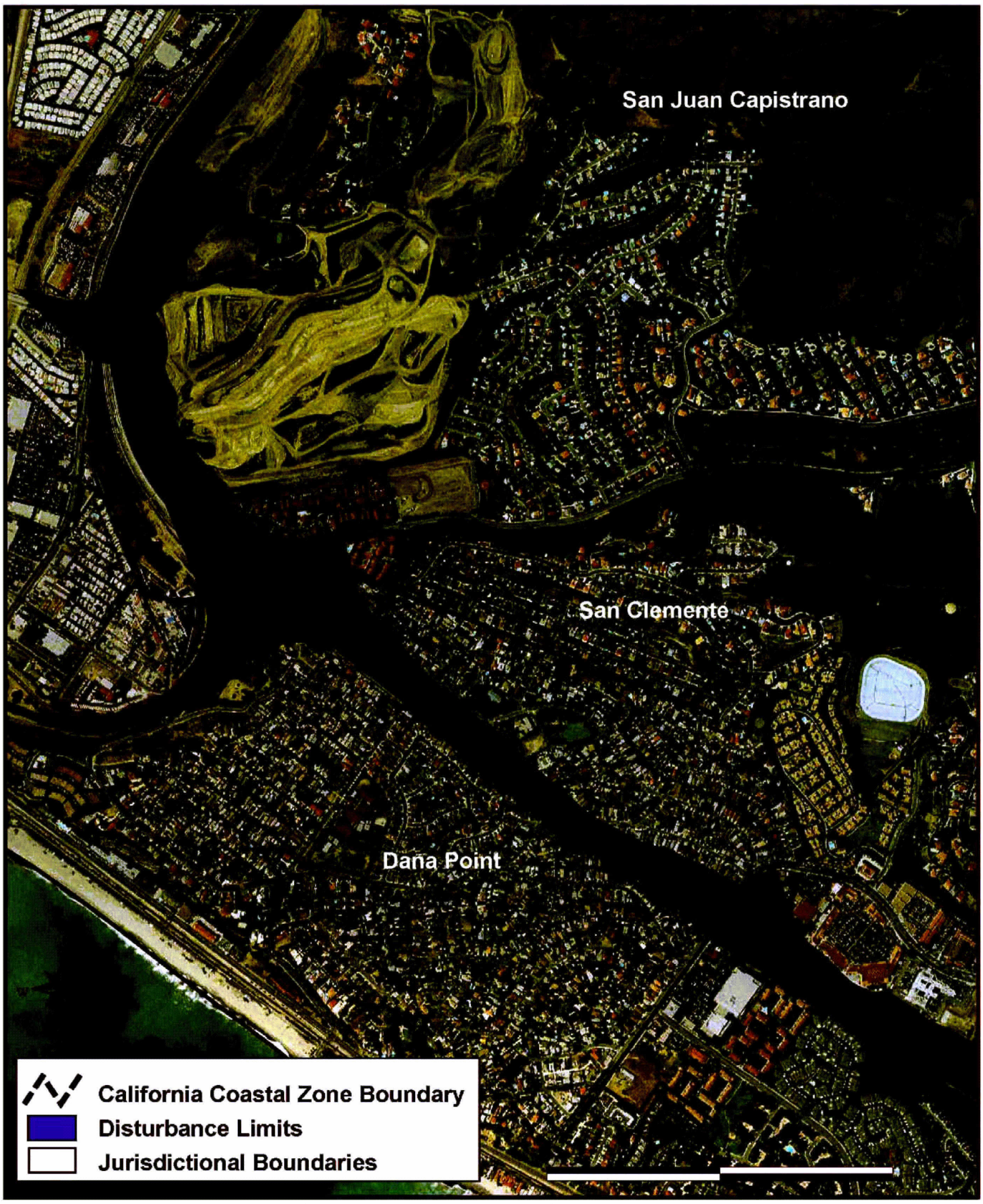
Source: P&D Consultants (2001).

Alignment of the Alignment 7 Corridor - Far East Crossover (Agricultural Fields) Variation Alternatives



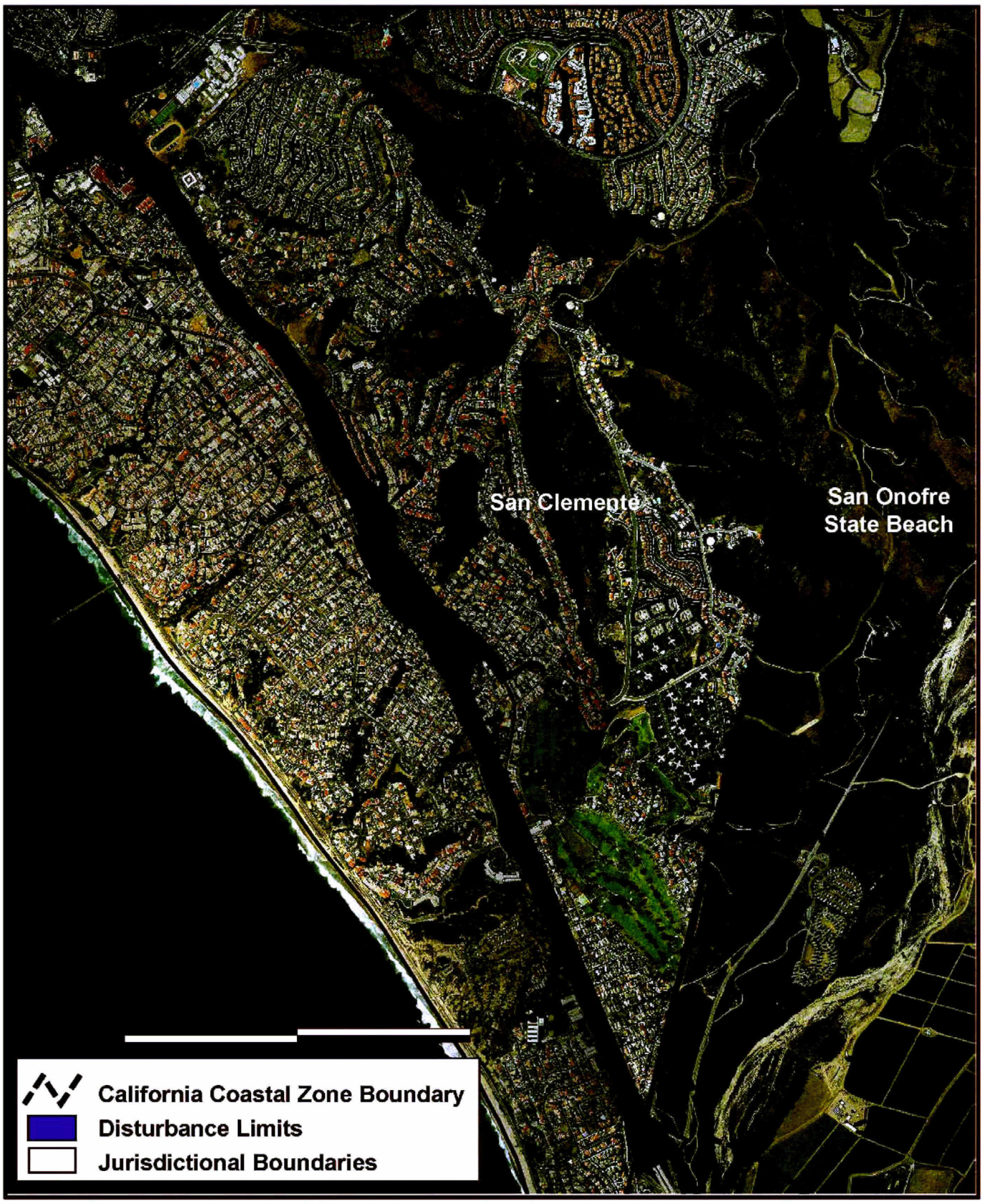
Source: P&D Consultants (2001).

Alignment of the A7C-Far East Crossover-Modified Alternatives



Source: California Coastal Commission Staff (2001) and P&D Consultants (2002)

Area in Coastal Zone for the AIP Alternative

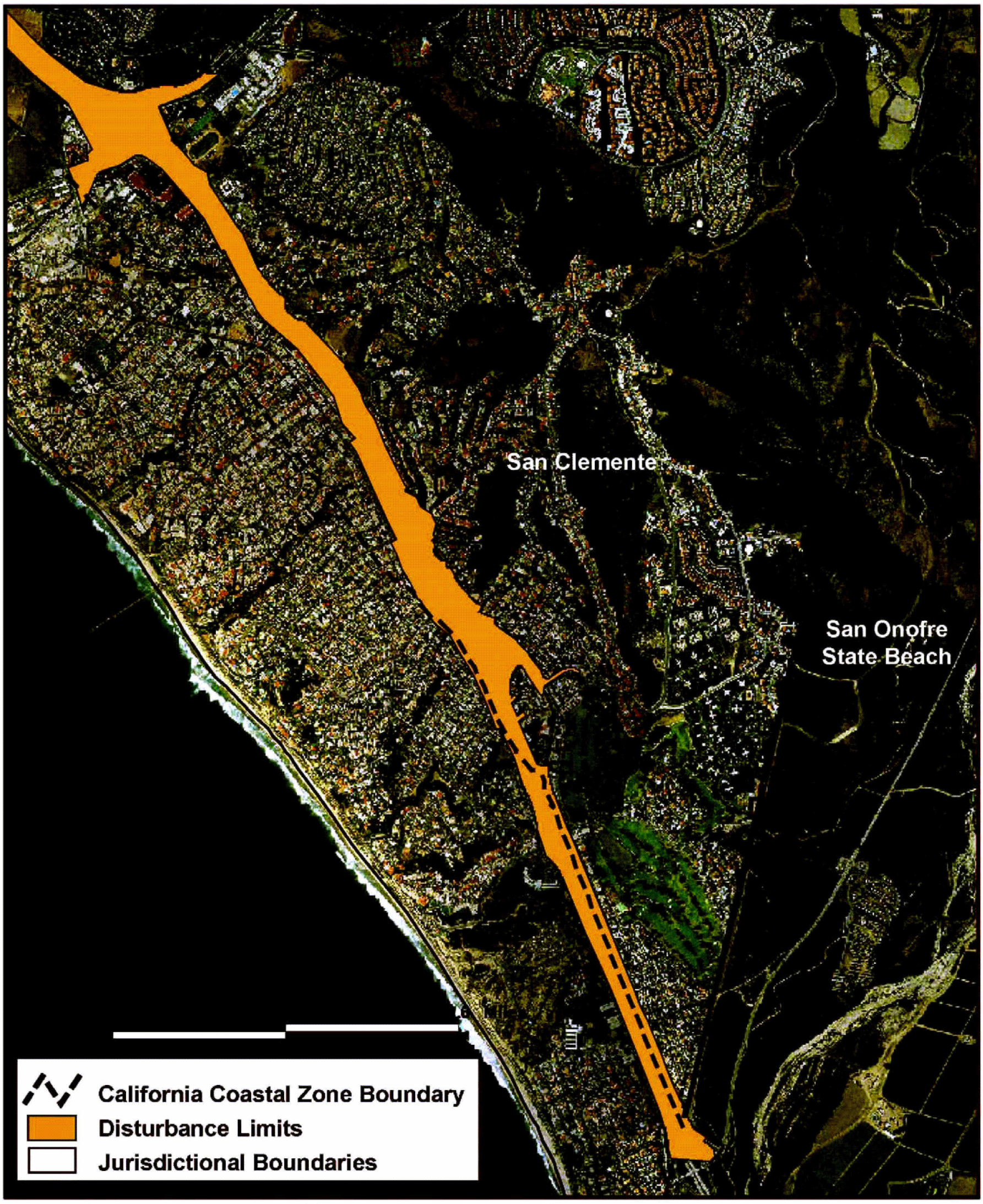


Source: California Coastal Commission Staff (2001) and P&D Consultants (2002)

Area in Coastal Zone for the AIP Alternative

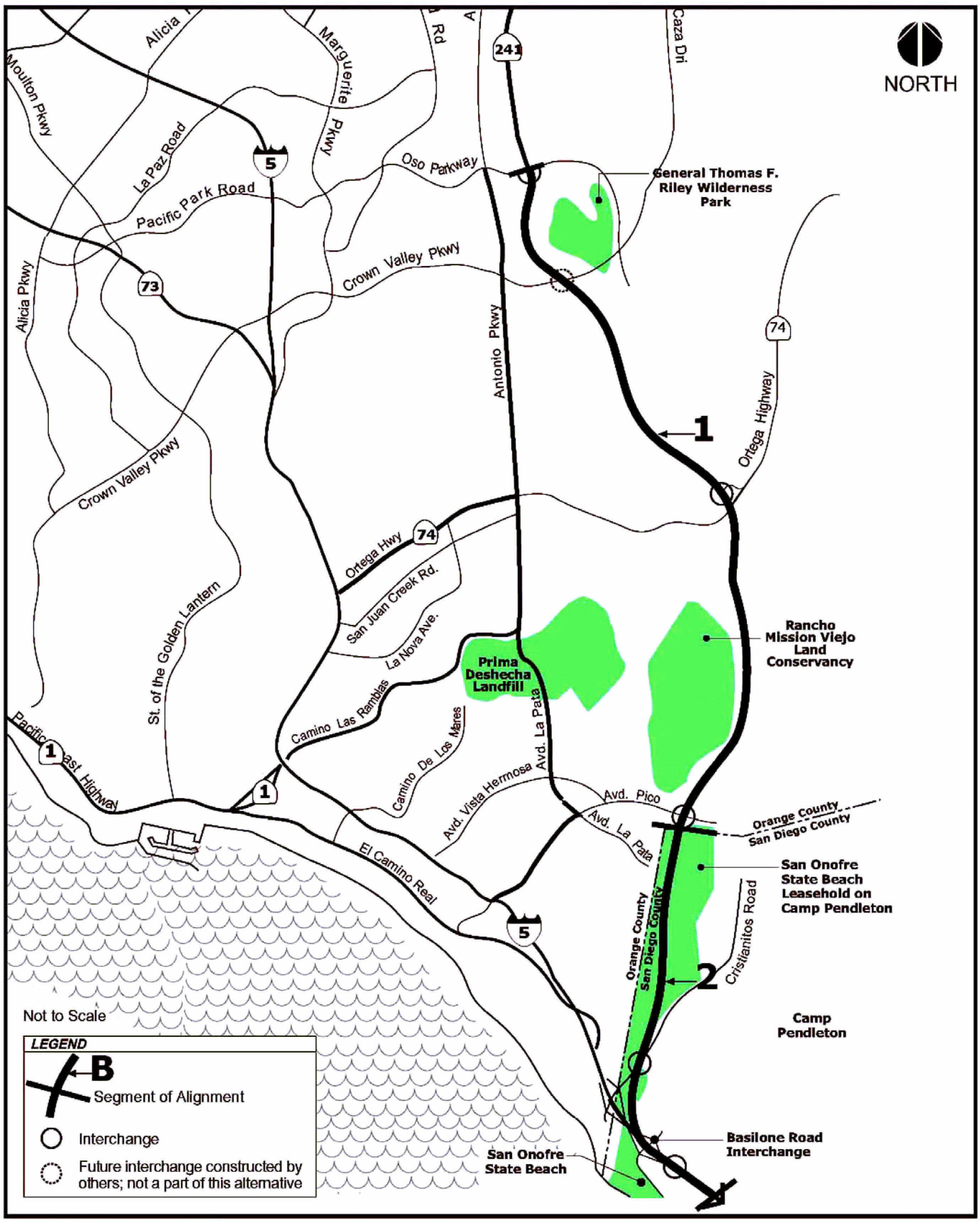
Source: California Coastal Commission Staff (2001) and P&D Consultants (2002)

Area in Coastal Zone for the I-5 Widening Alternative



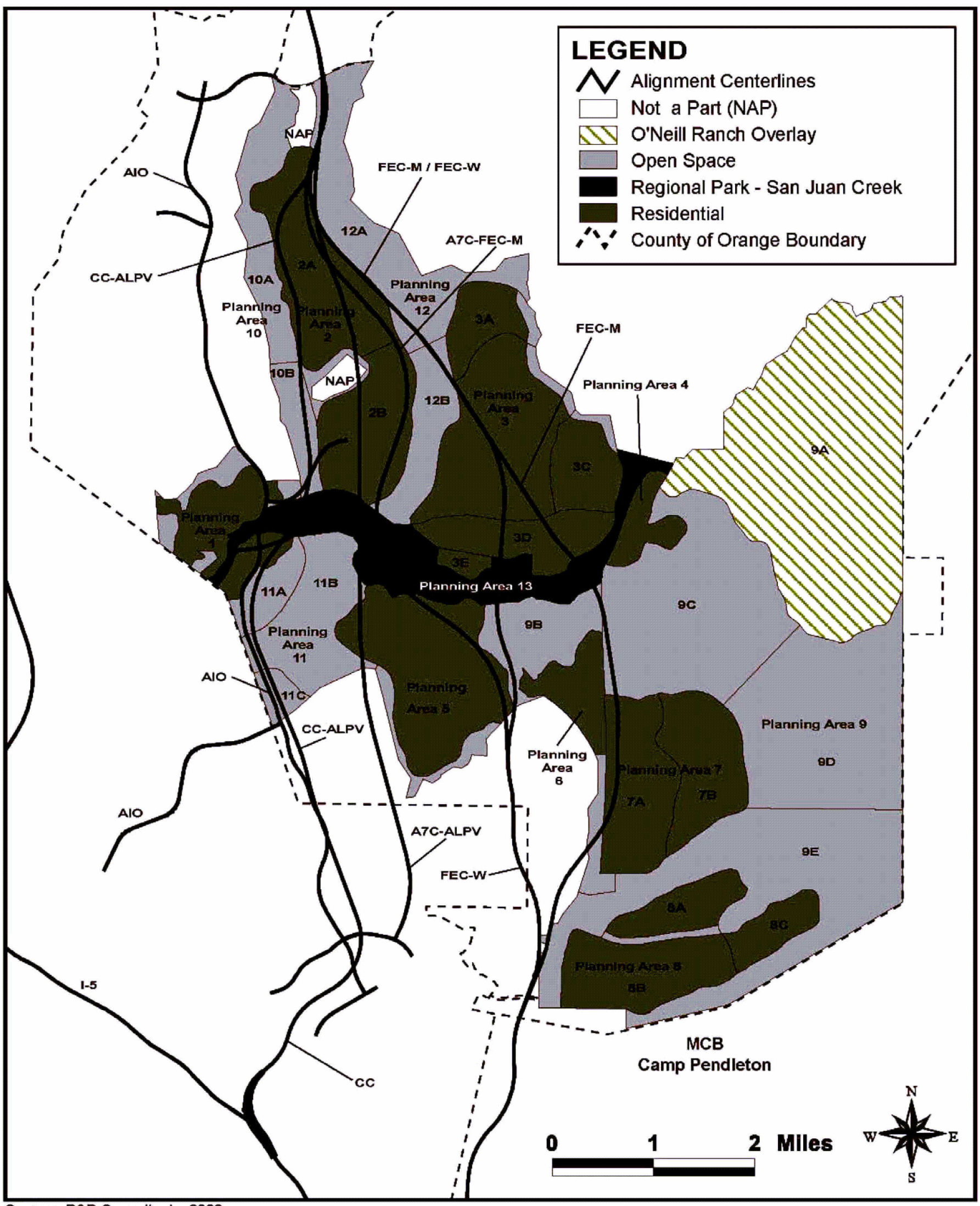
Source: California Coastal Commission Staff (2001) and P&D Consultants (2002)

Area in Coastal Zone for the I-5 Widening Alternative



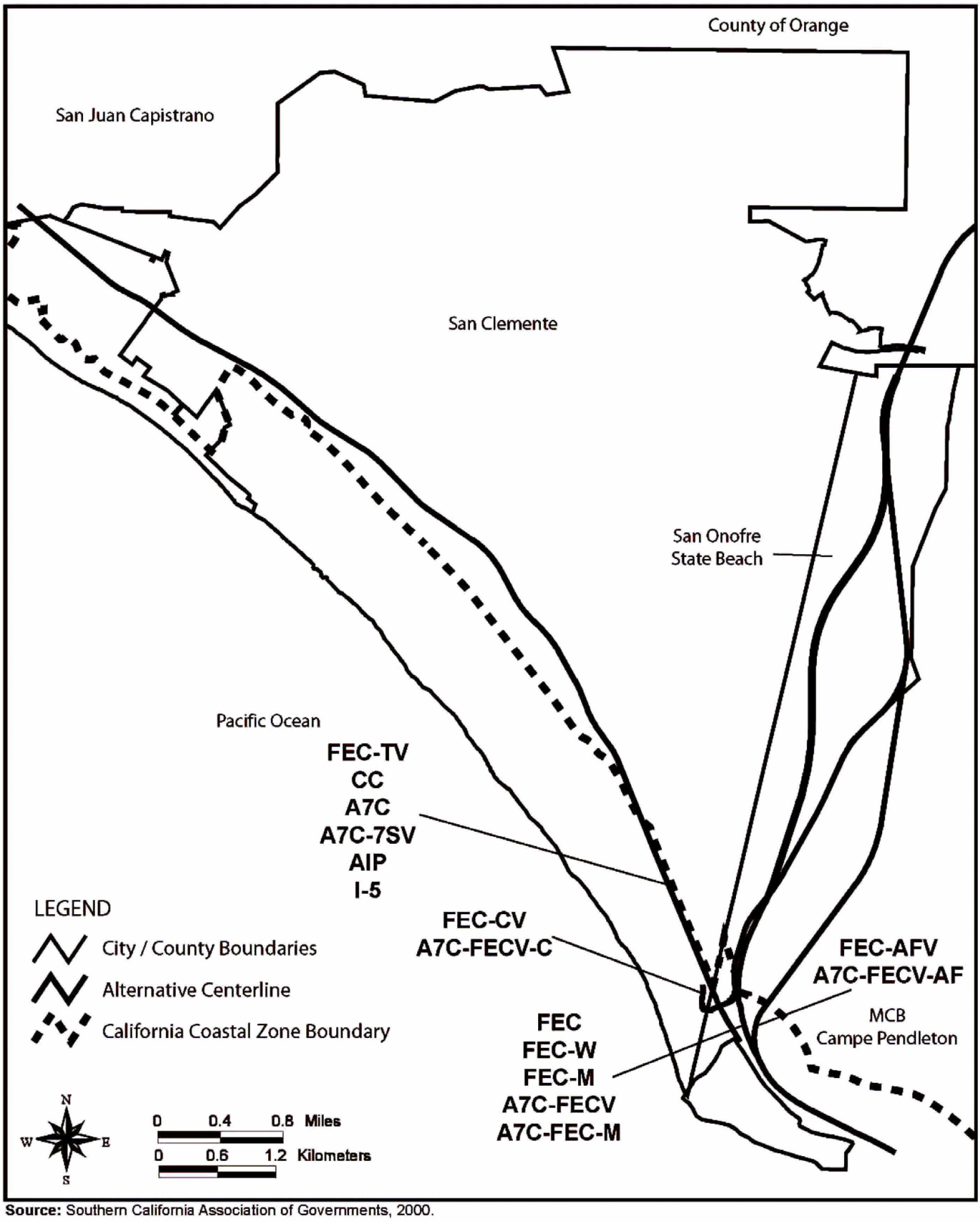
Source: P&D Consultants (2001).

Alignment of the Far East Corridor-Complete Alternatives



Source: P&D Consultants, 2003.

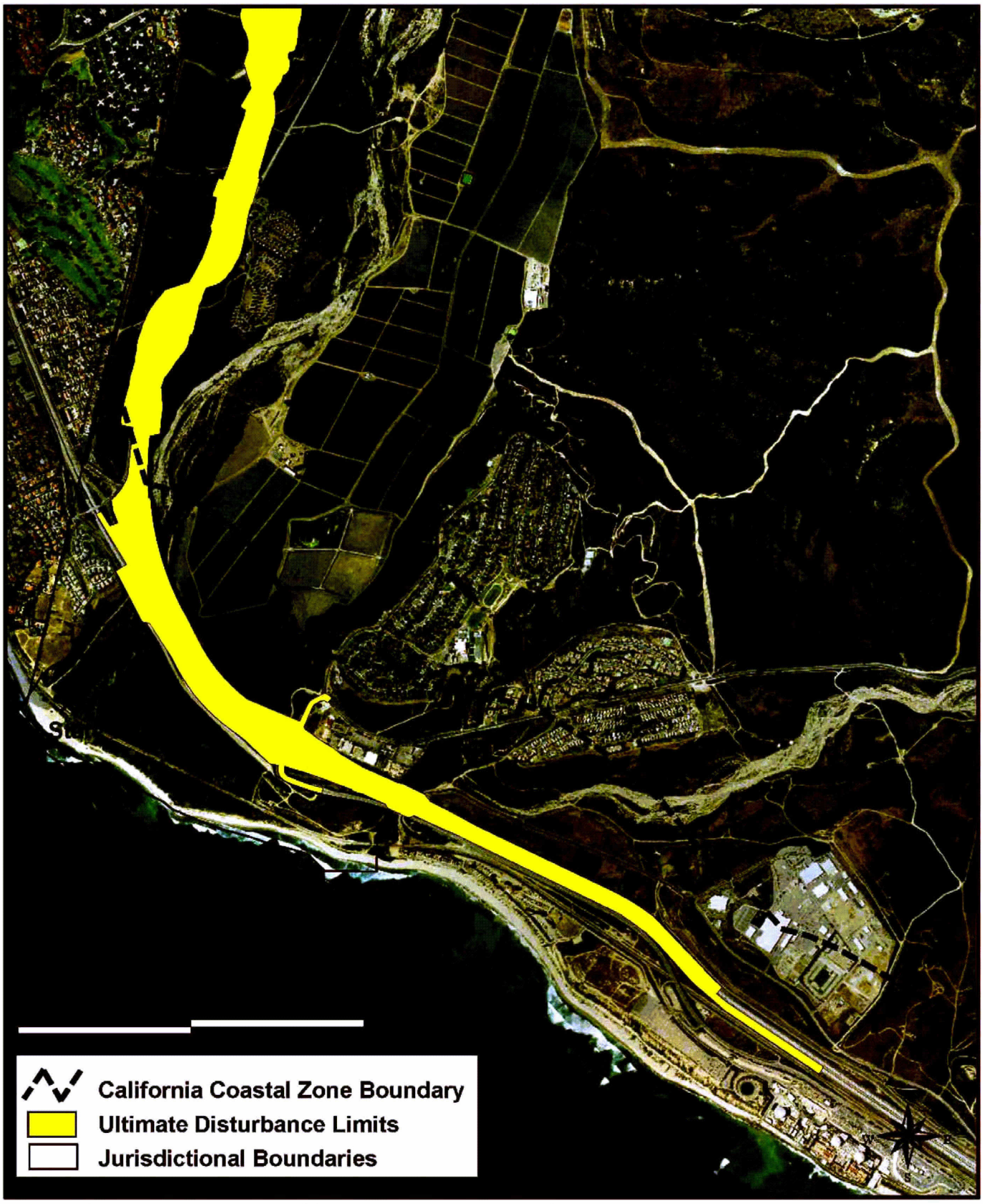
Rancho Mission Viejo Planning Areas as Affected by the SOCTIIP Alternatives



Source: Southern California Association of Governments, 2000.

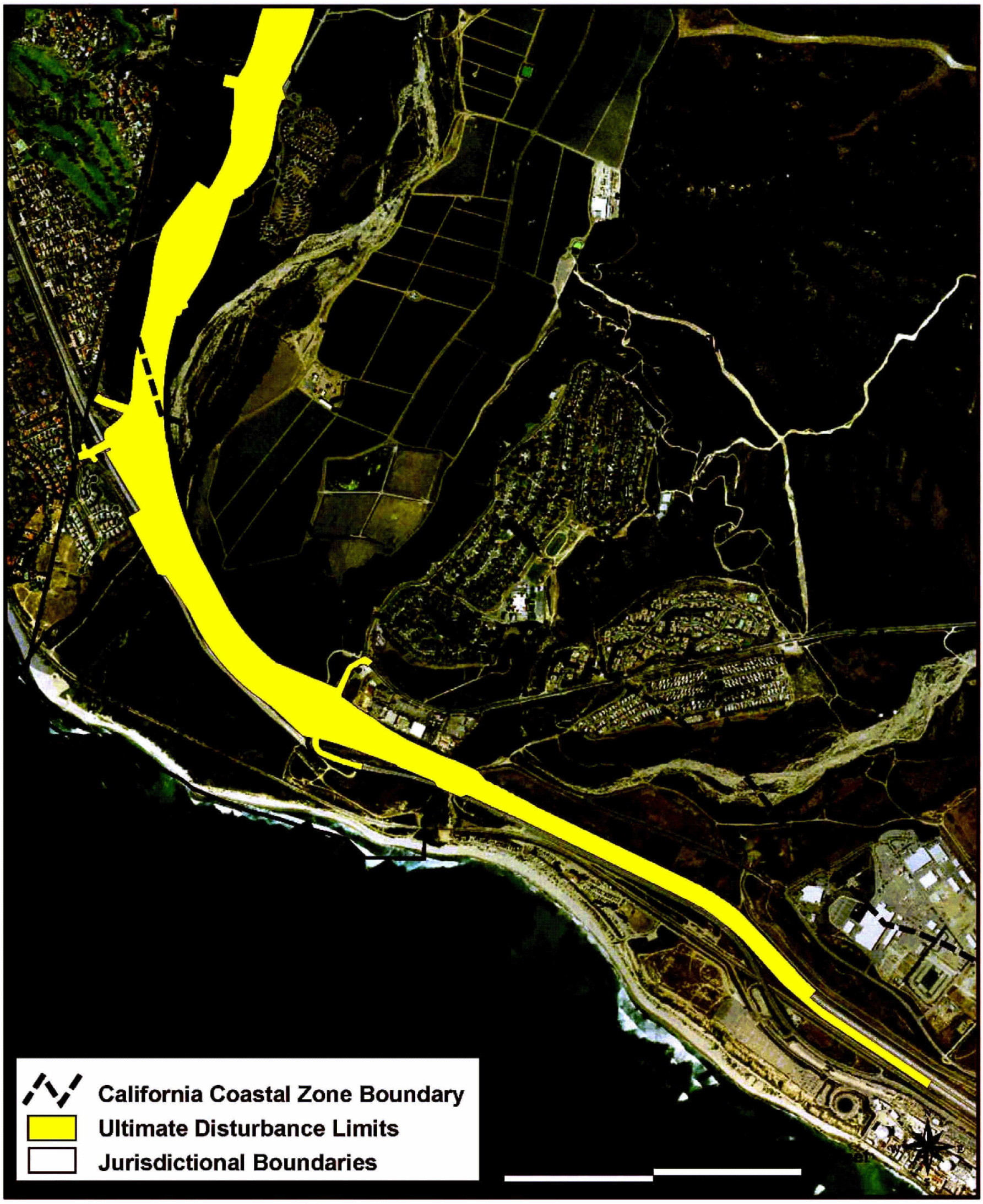
Coastal Zone Boundary in the SOCTIIP Studay Area and the Alignments of the SOCTIIP Build Alternatives

Note: For the locations of the County of Orange and individual cities in the Study Area, refer to Figure 3.3-1.



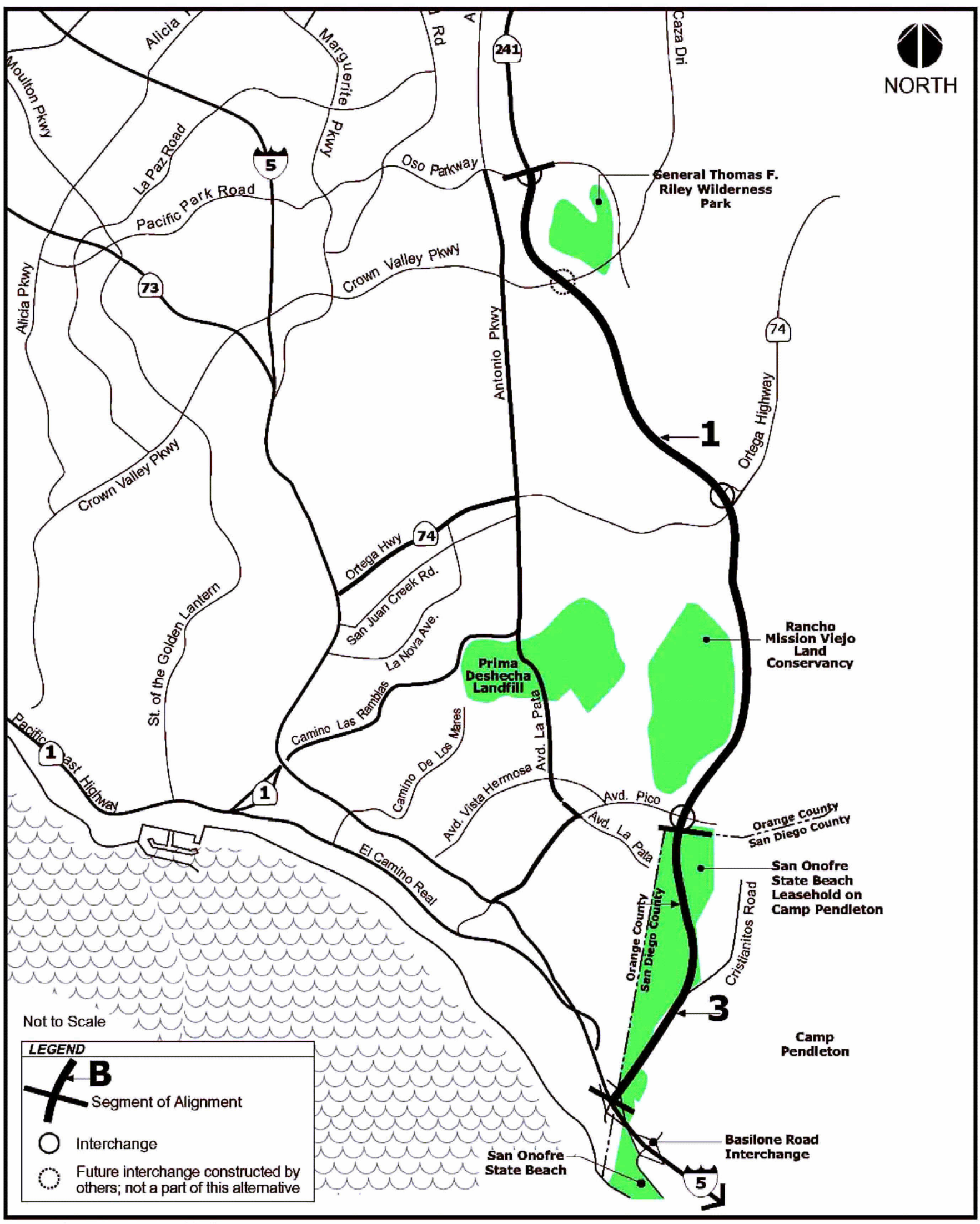
Source: California Coastal Commission Staff (2001) and P&D Consultants (2002)

Area in Coastal Zone for FEC, FEC-W, FEC-M, A7C-FECV and A7C-FEC-M - Initial Alternatives



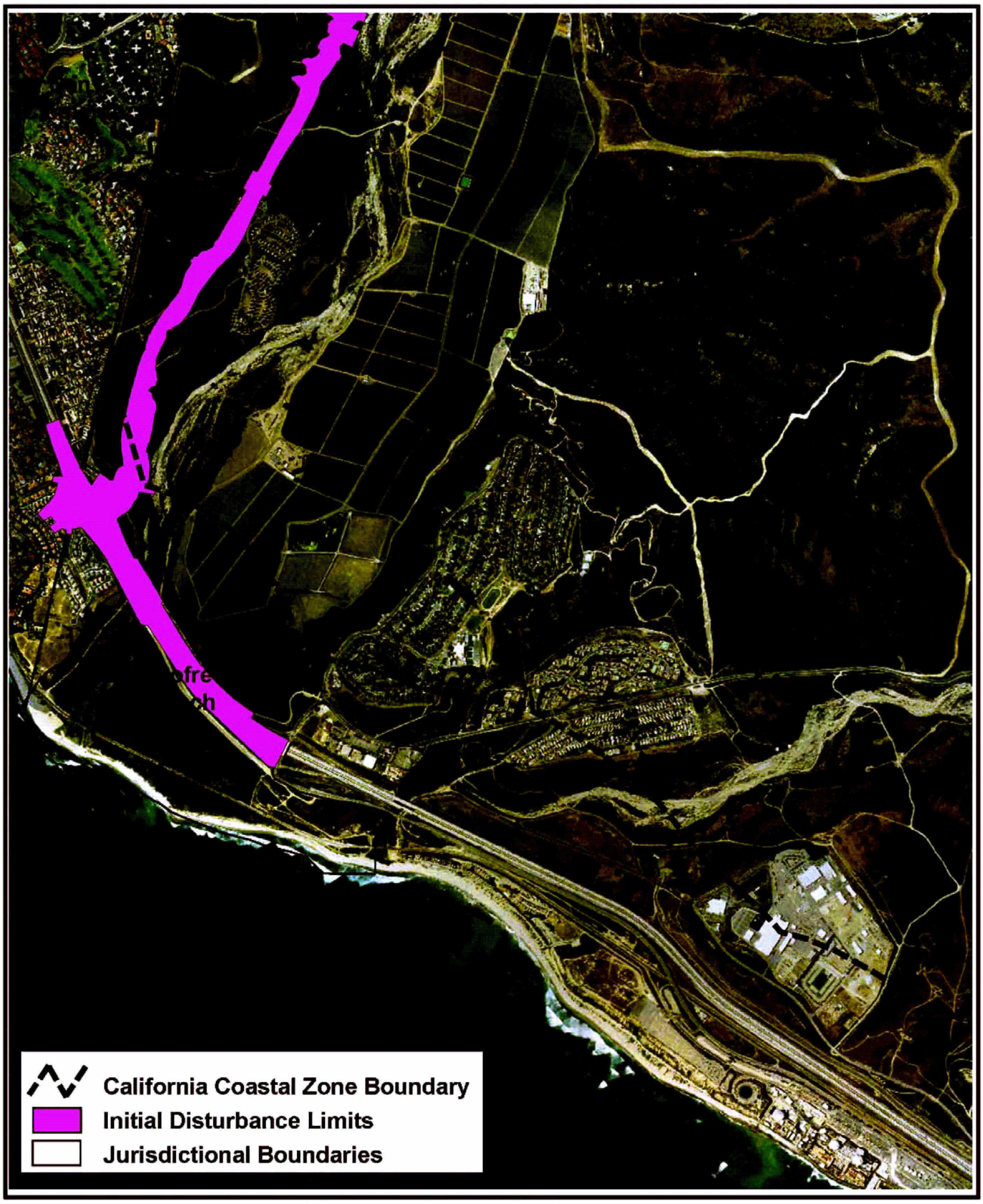
Source: California Coastal Commission Staff (2001) and P&D Consultants (2002)

Area in Coastal Zone for FEC, FEC-W, FEC-M, A7C-FECV and A7C-FEC-M - Ultimate Alternatives



Source: P&D Consultants (2001).

Alignment of the Far East Corridor - Cristianitos Variation Alternatives

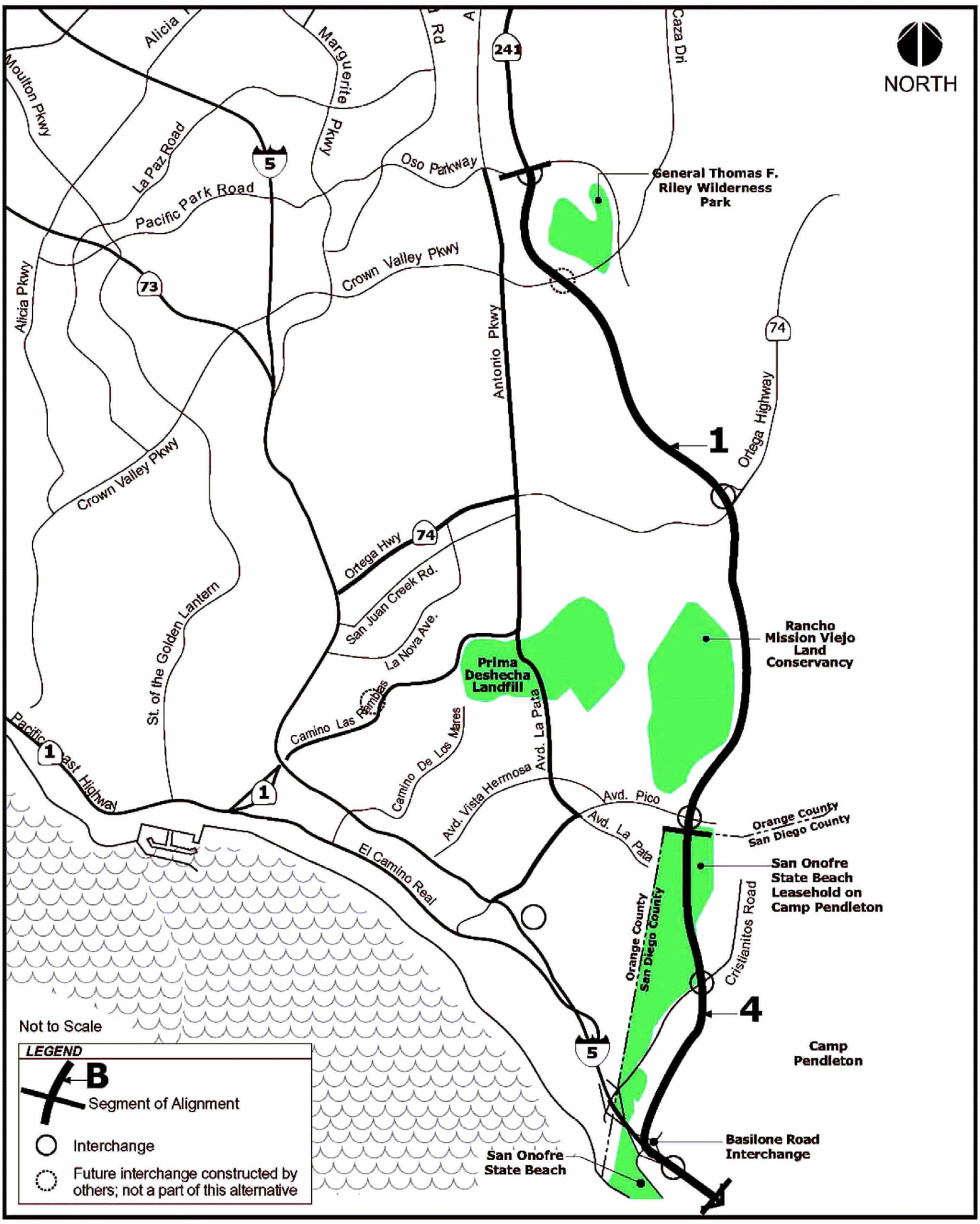


Source: California Coastal Commission Staff (2001) and P&D Consultants (2002)

Area in Coastal Zone for FEC-CV and A7C-FECV-C - Initial Alternatives

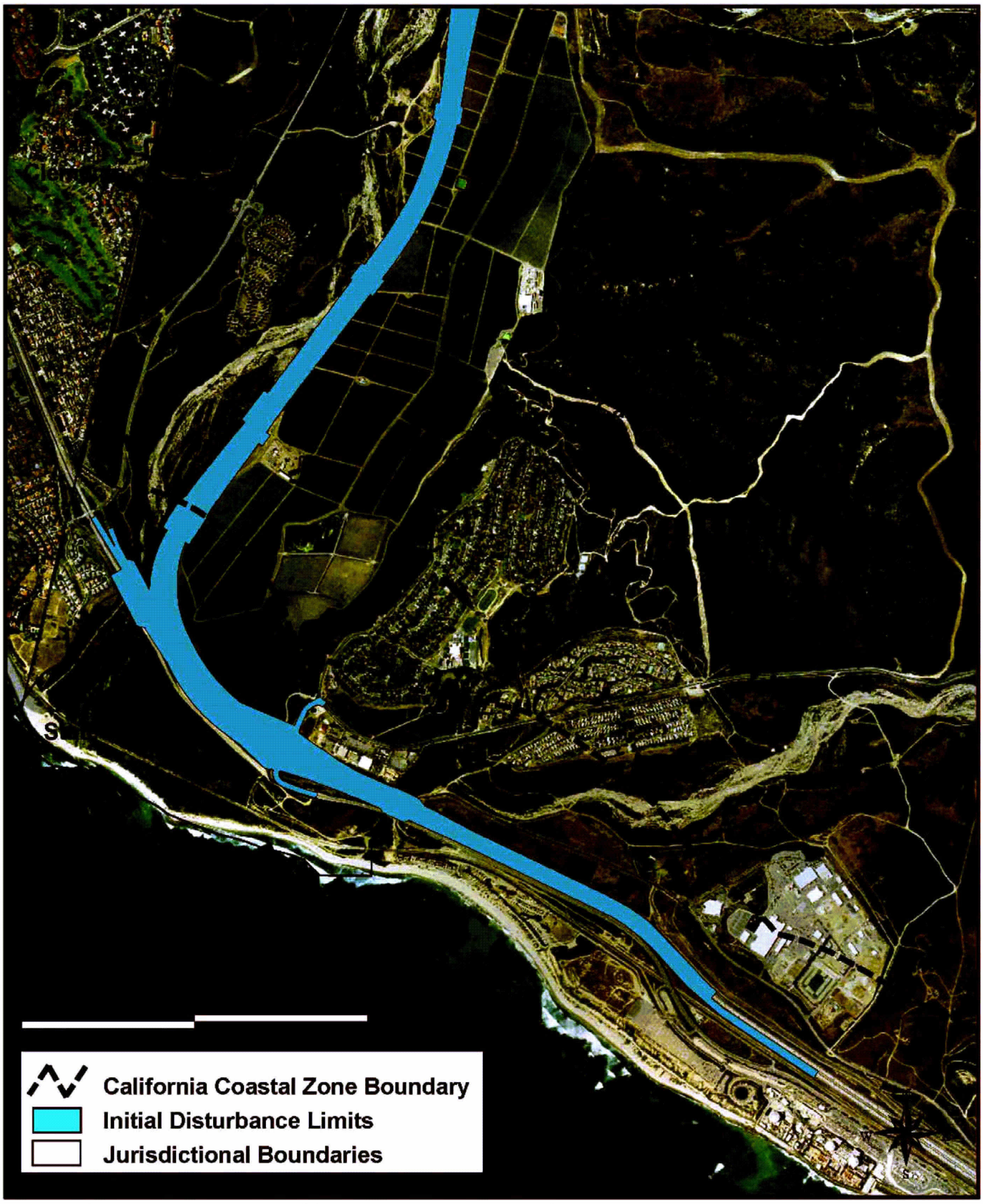
Source: California Coastal Commission Staff (2001) and P&D Consultants (2002)

Area in Coastal Zone for FEC-CV and A7C-FECV-C - Ultimate Alternatives



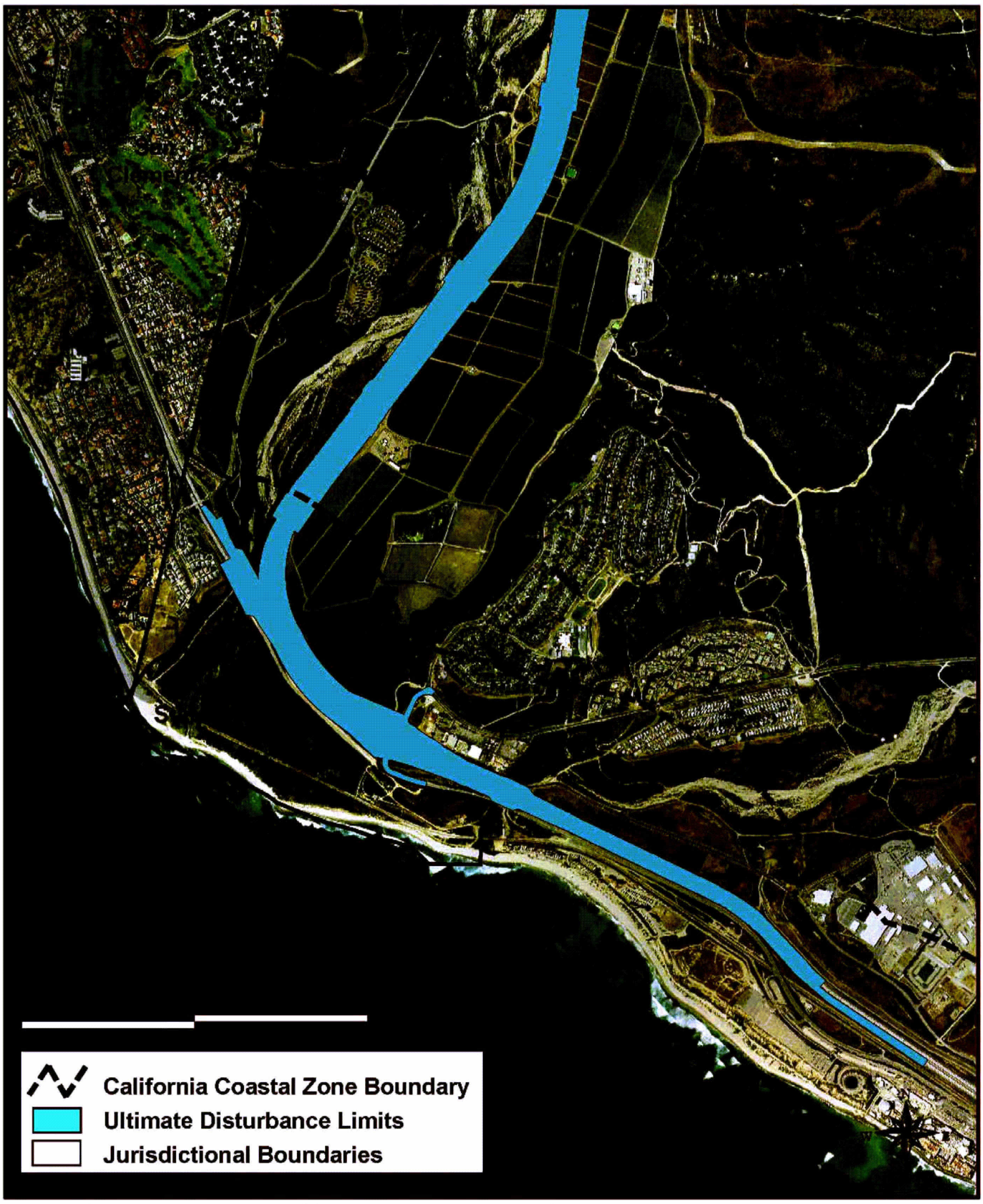
Source: P&D Consultants (2001).

Alignment of the Far East Corridor - Agricultural Fields Variation Alternatives



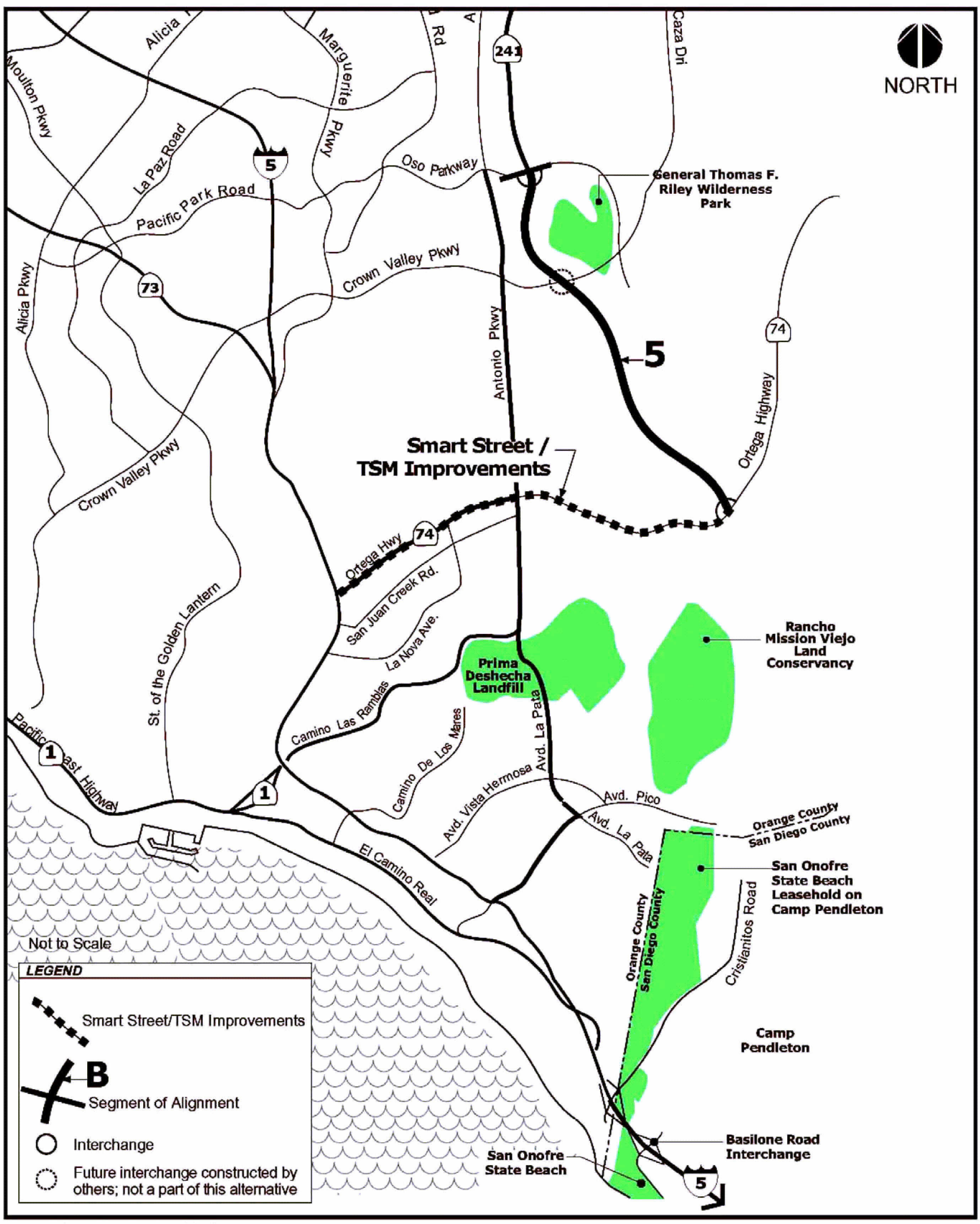
Source: California Coastal Commission Staff (2001) and P&D Consultants (2002)

Area in Coastal Zone for FEC-AFV and A7C-FECV-AF - Initial Alternatives



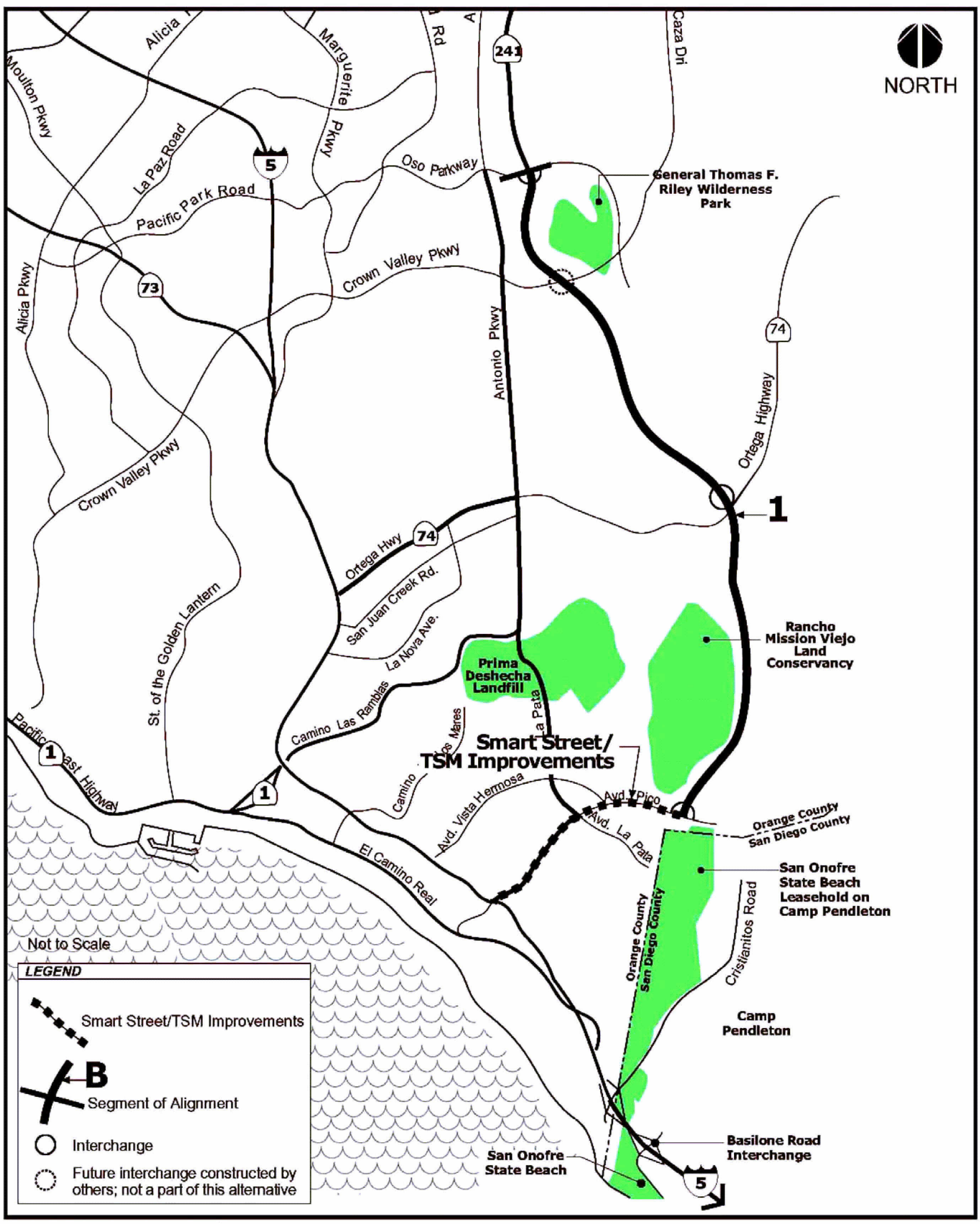
Source: California Coastal Commission Staff (2001) and P&D Consultants (2002)

Area in Coastal Zone for FEC-AFV and A7C-FECV-AF - Ultimate Alternatives



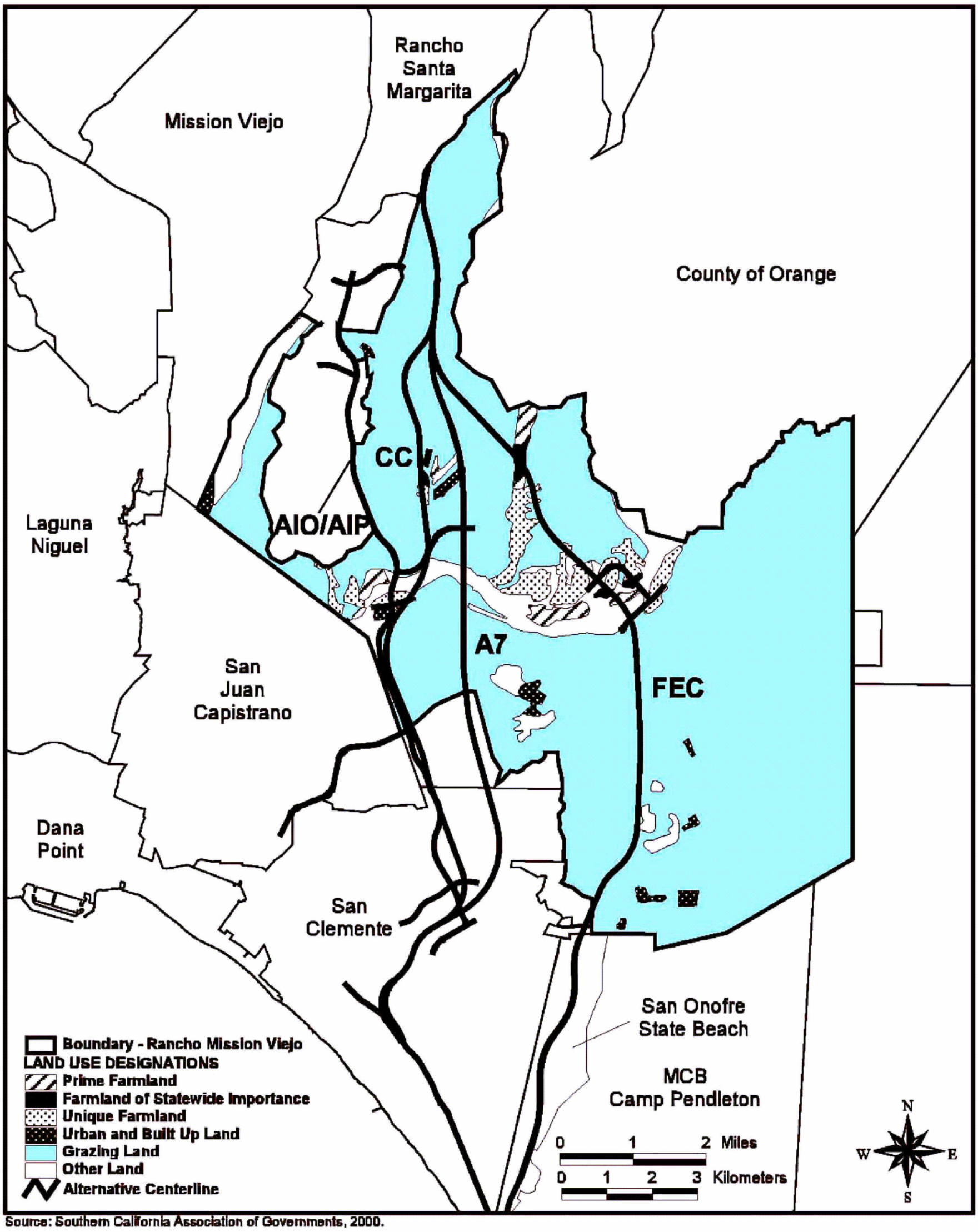
Source: P&D Consultants (2001).

Alignment of the Far East Corridor - Ortega Highway Variation Alternatives



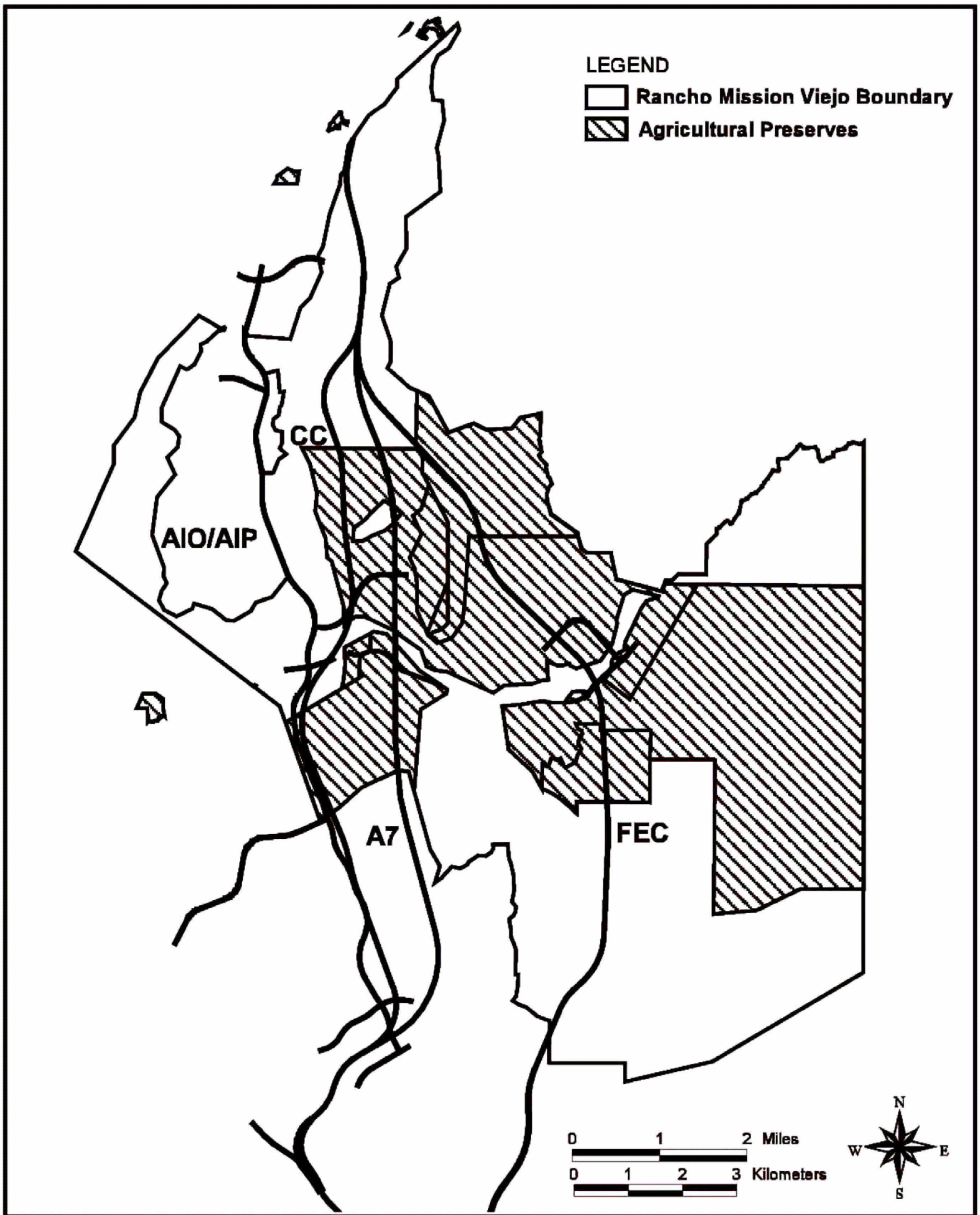
Source: P&D Consultants (2001).

Alignment of the Far East Corridor - Avenida Pico Variation Alternatives



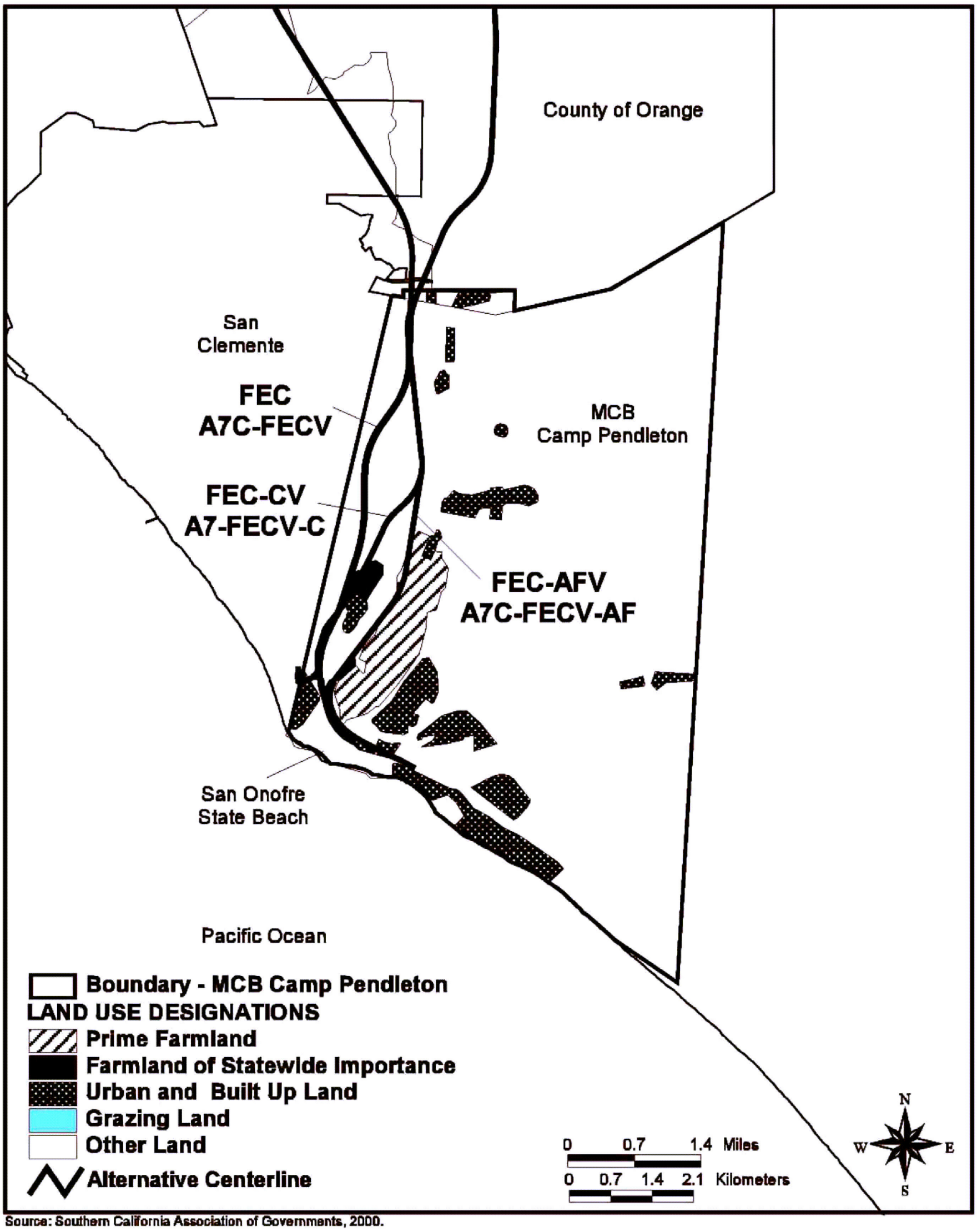
Source: Southern California Association of Governments, 2000.

Rancho Mission Viejo Agricultural Resources as Affected by the SOCTIIP Alternatives



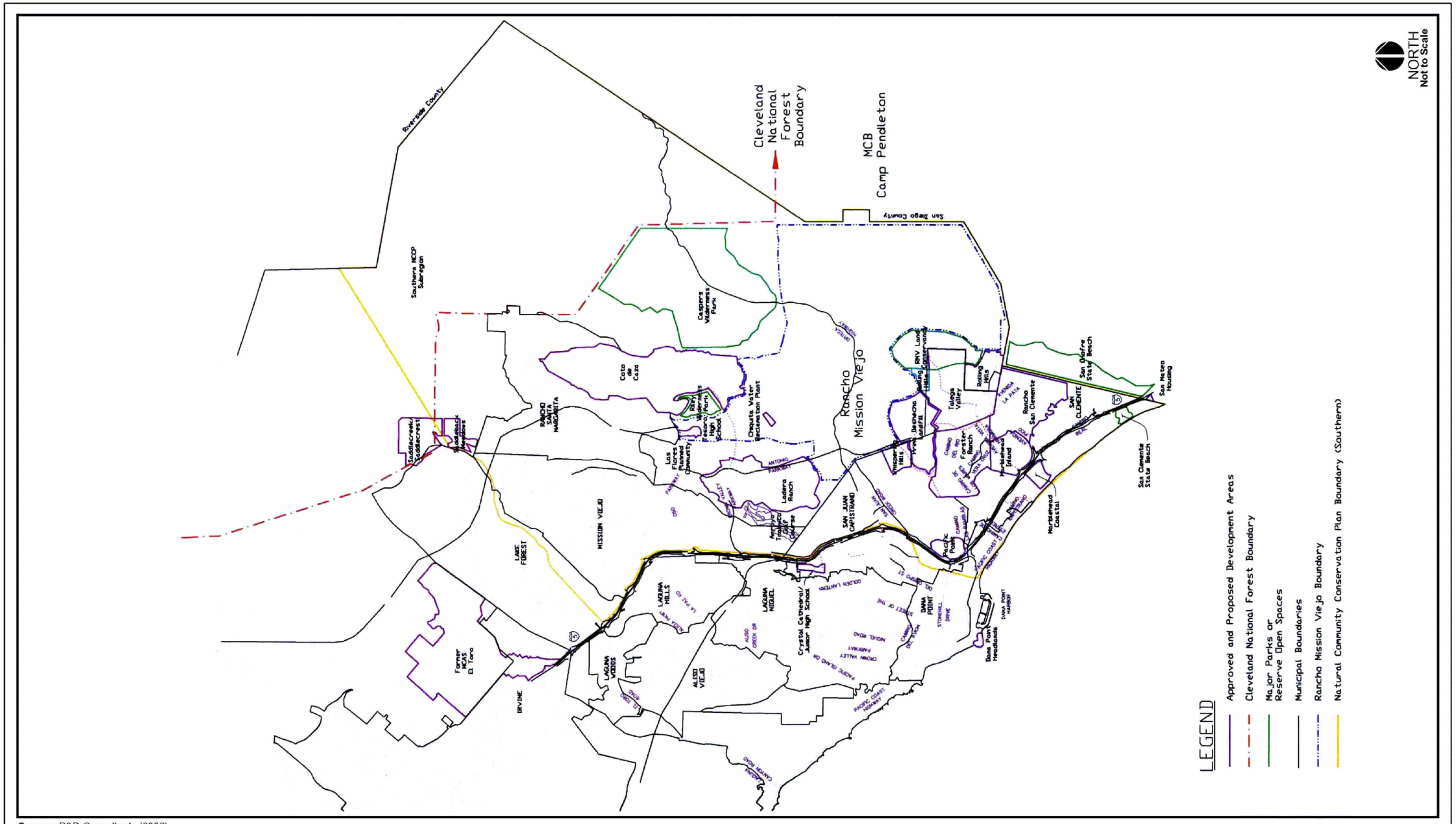
Source: Southern California Association of Governments, 2000.

Rancho Mission Viejo Agricultural Preserves as Affected by the SOCTIIP Alternatives



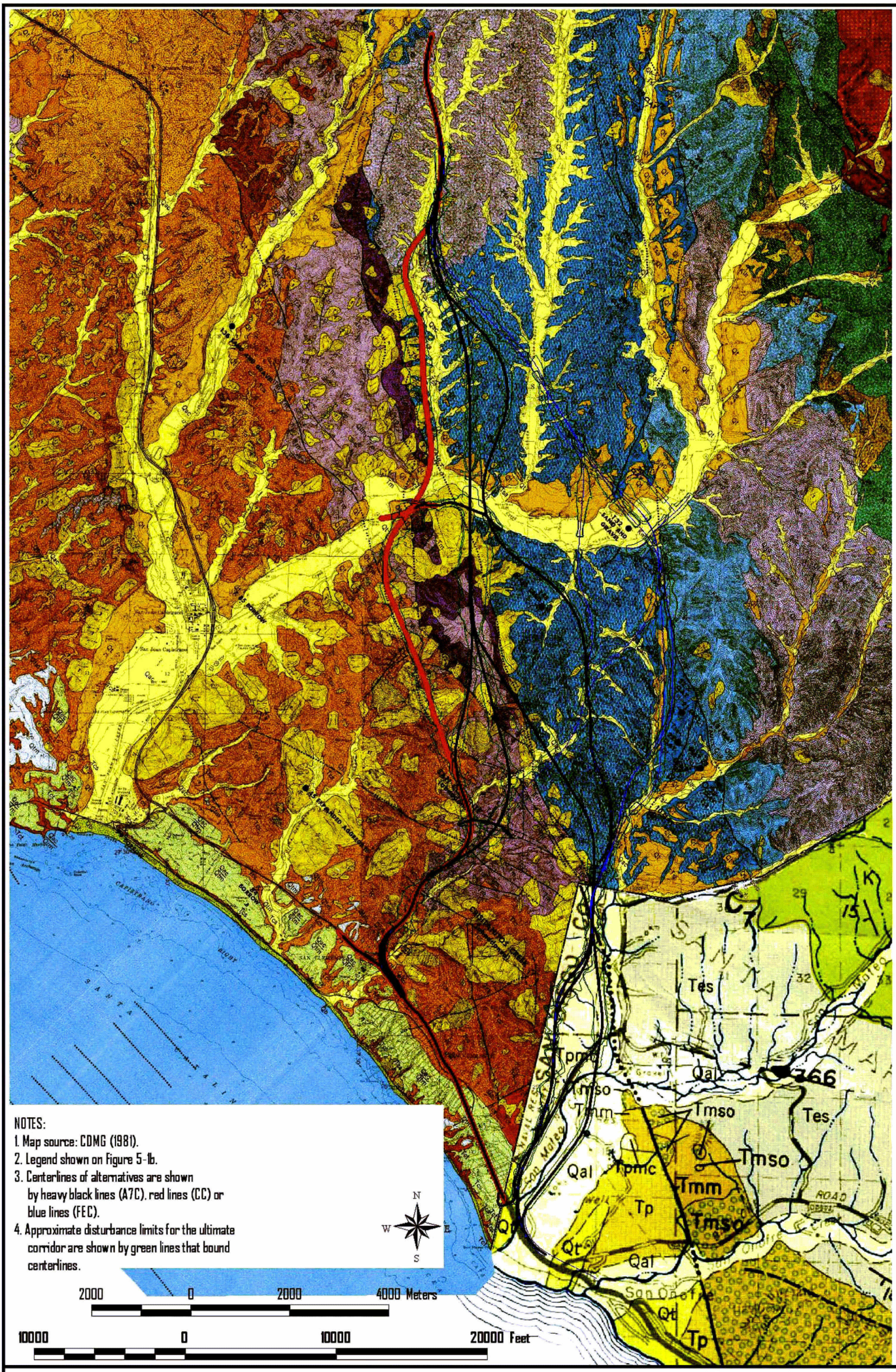
Source: Southern California Association of Governments, 2000.

MCB Camp Pendleton Agricultural Resources as Affected by the SOCTIIP Alternatives

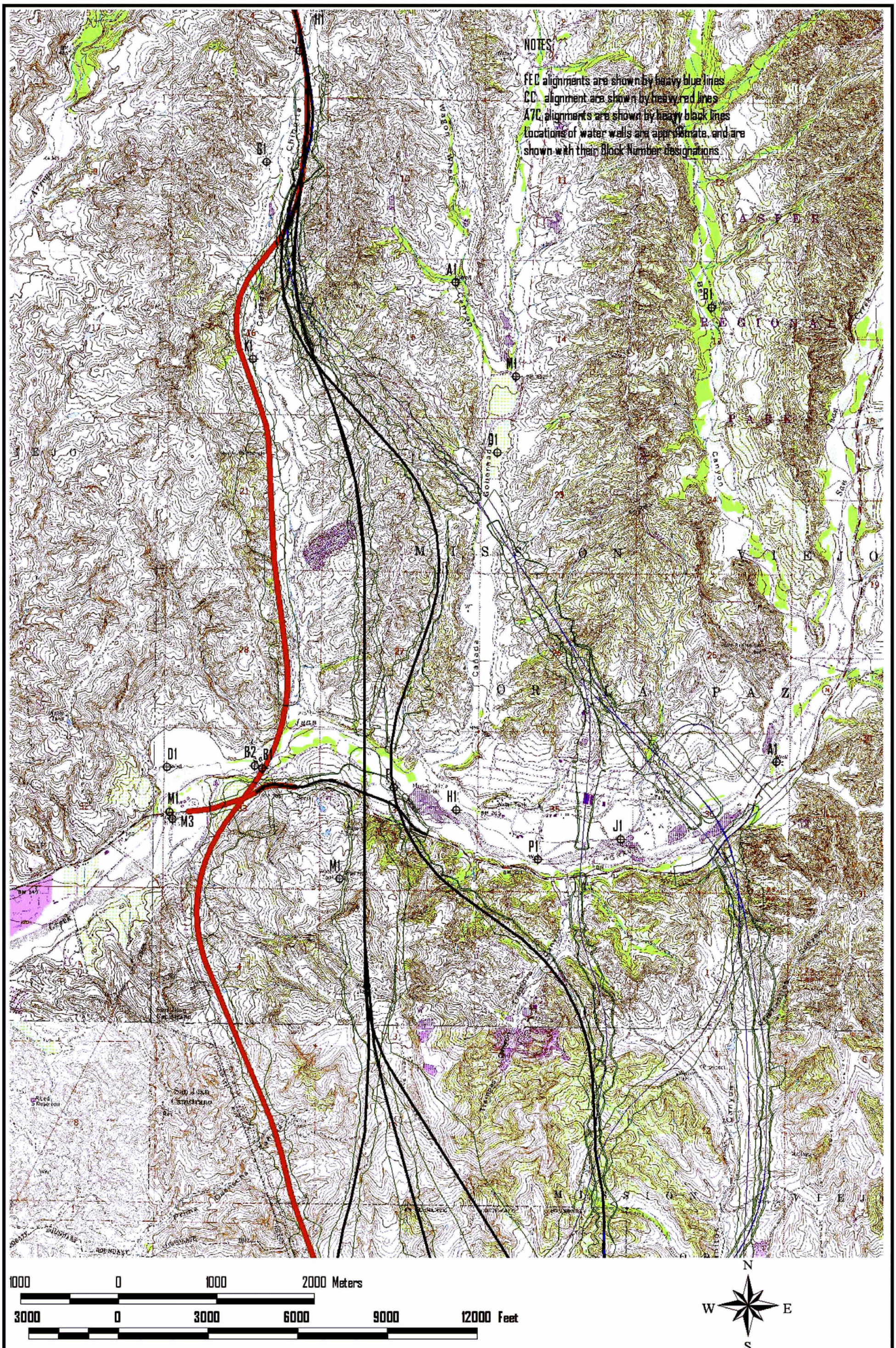


Source: P&D Consultants (2002).

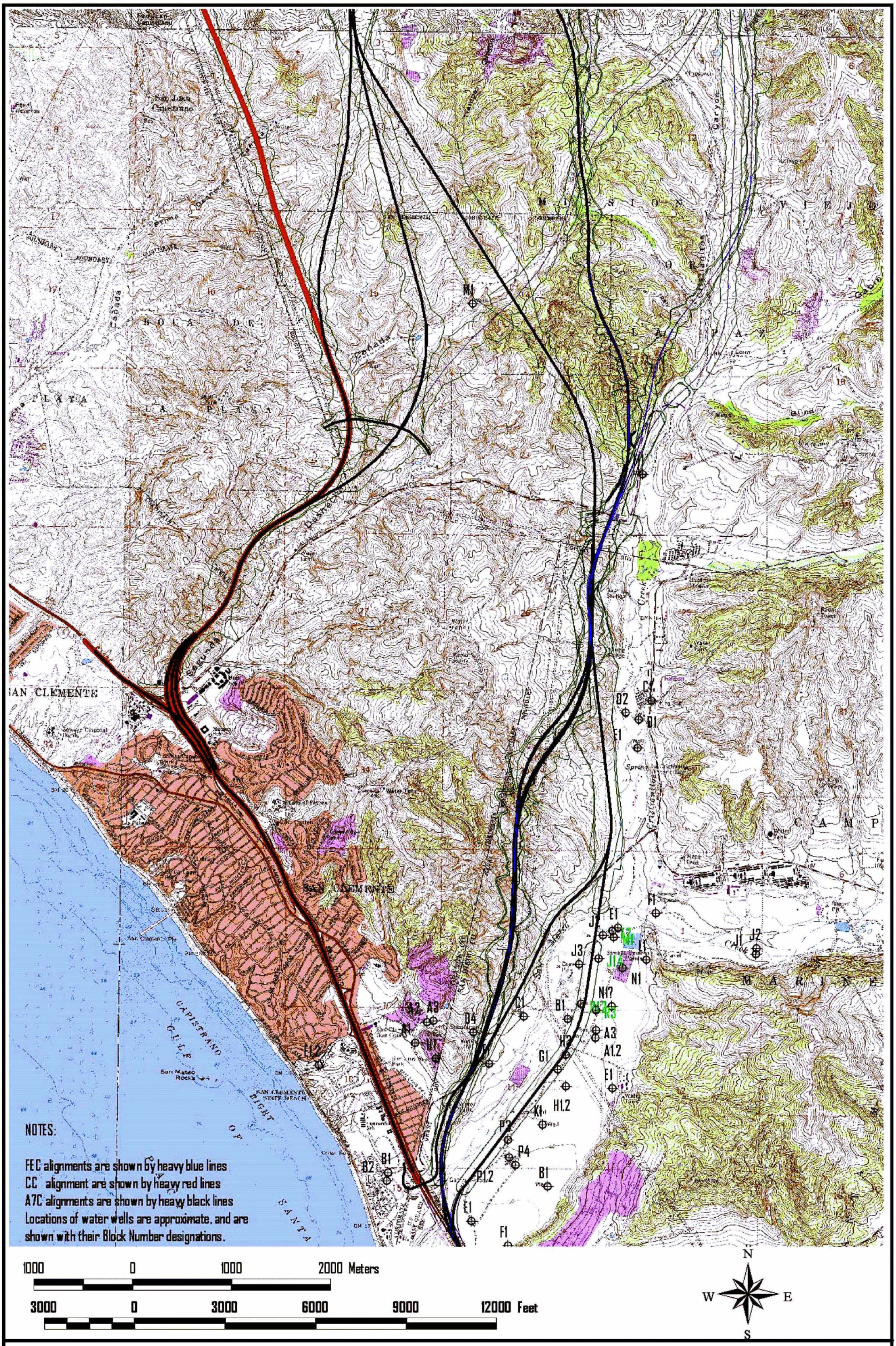
General Locations of Cumulative Projects in the SOCTIIP Area



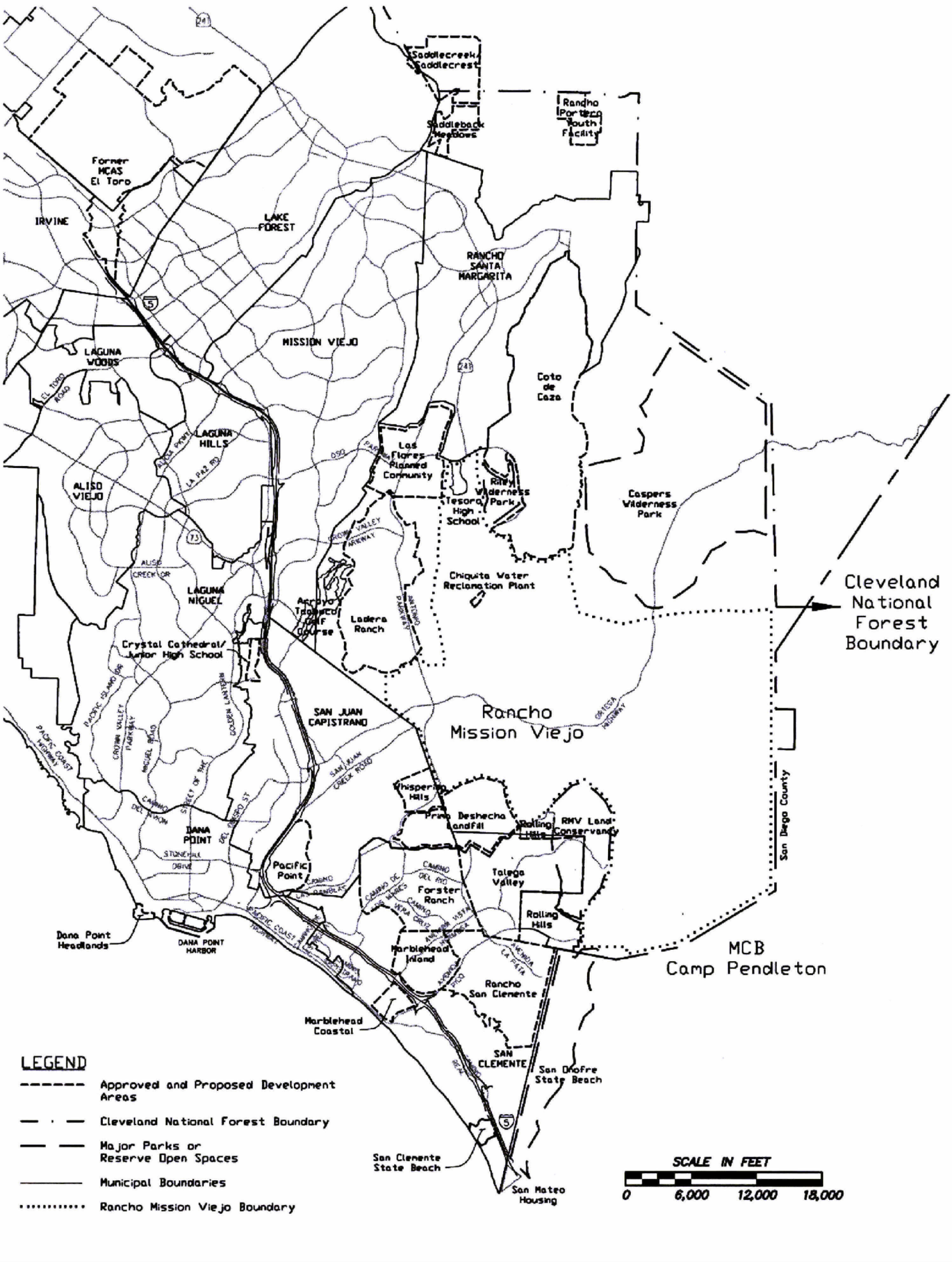
REGIONAL GEOLOGIC MAP



LOCATION OF LOCAL GROUNDWATER WELLS - NORTH HALF OF STUDY AREA



LOCATION OF LOCAL GROUNDWATER WELLS - SOUTH HALF OF STUDY AREA



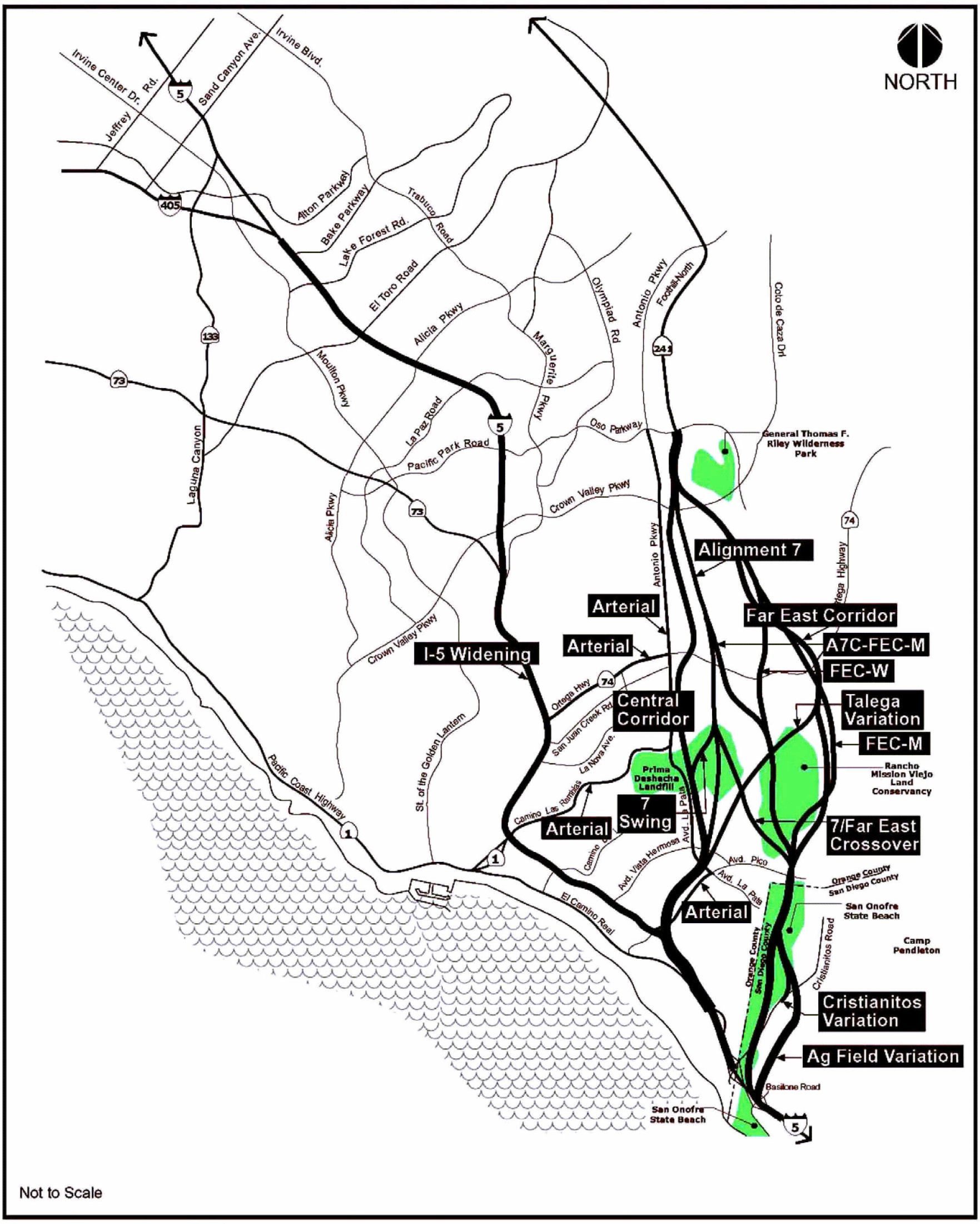
LOCATION MAP FOR CUMULATIVE PROJECTS

SOCTIIP EIS/SEIR

Geotechnical, Geology and Soils Technical Report

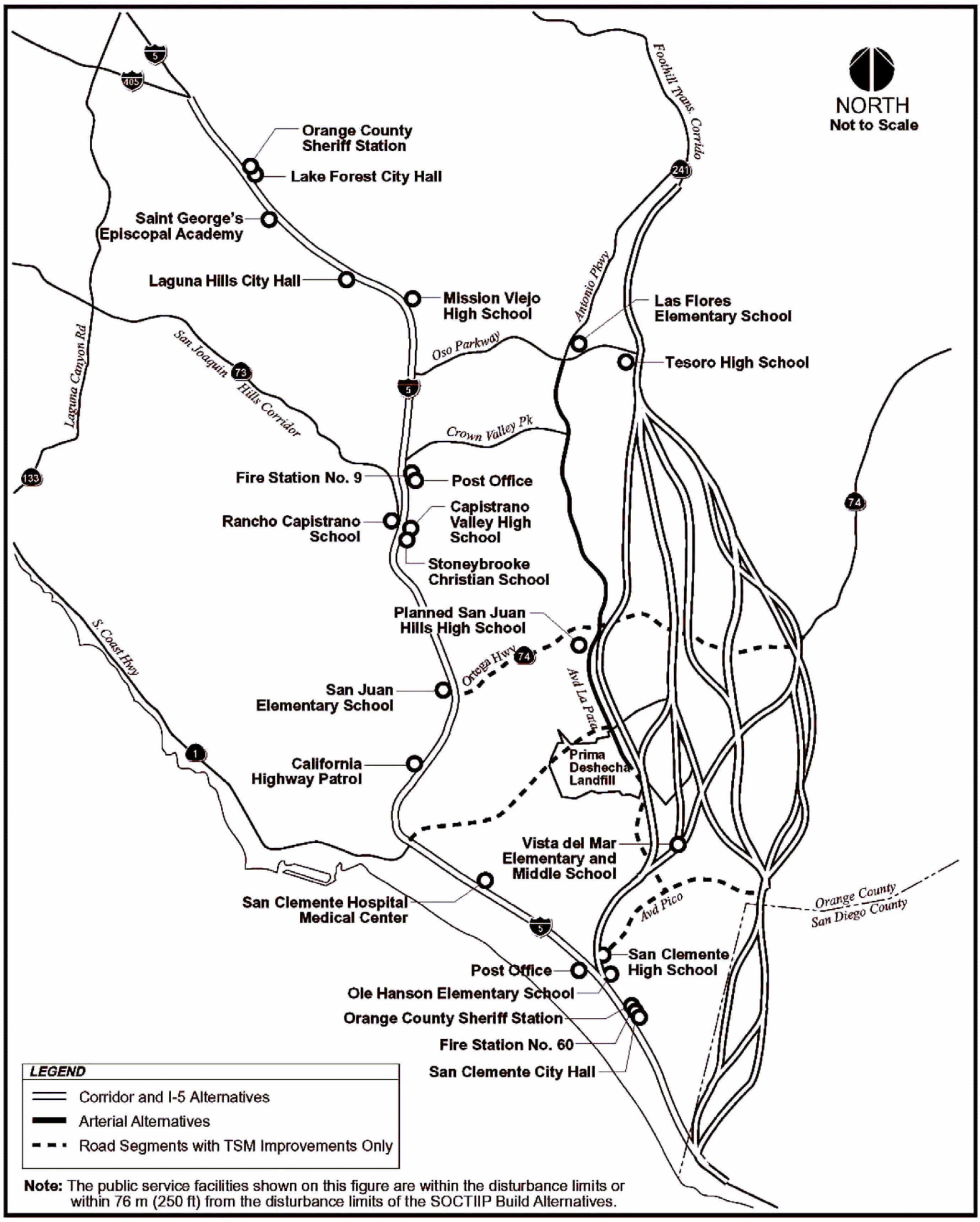
Figure 10-1

File: Figure 10-1.grf



Source: P&D Consultants (2003).

Alignments of the Build Alternatives



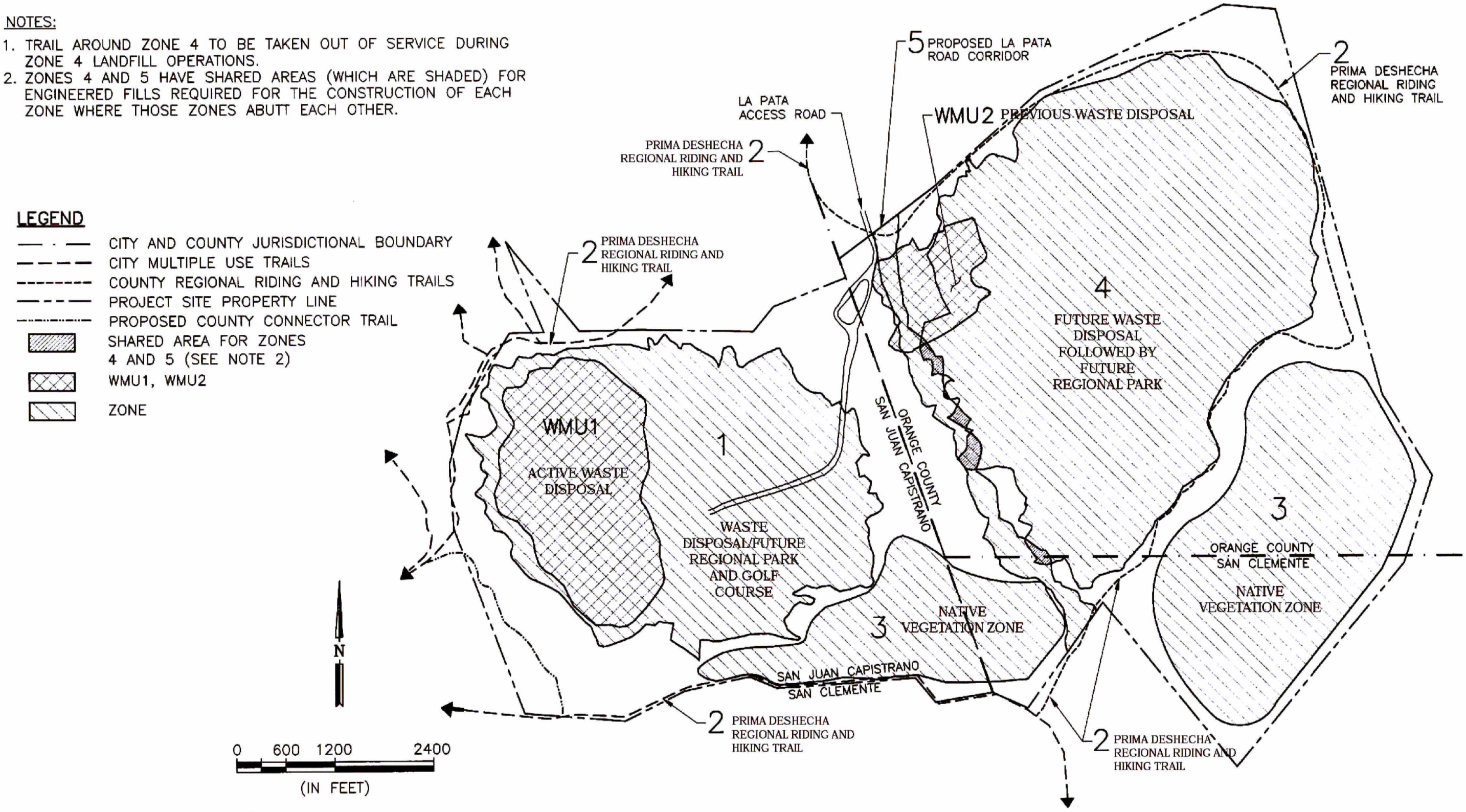
Note: The public service facilities shown on this figure are within the disturbance limits or within 76 m (250 ft) from the disturbance limits of the SOCTIIP Build Alternatives.

Source: P&D Consultants (2003).

Public Service Facilities Near the Alignments of the SOCTIIP Build Alternatives

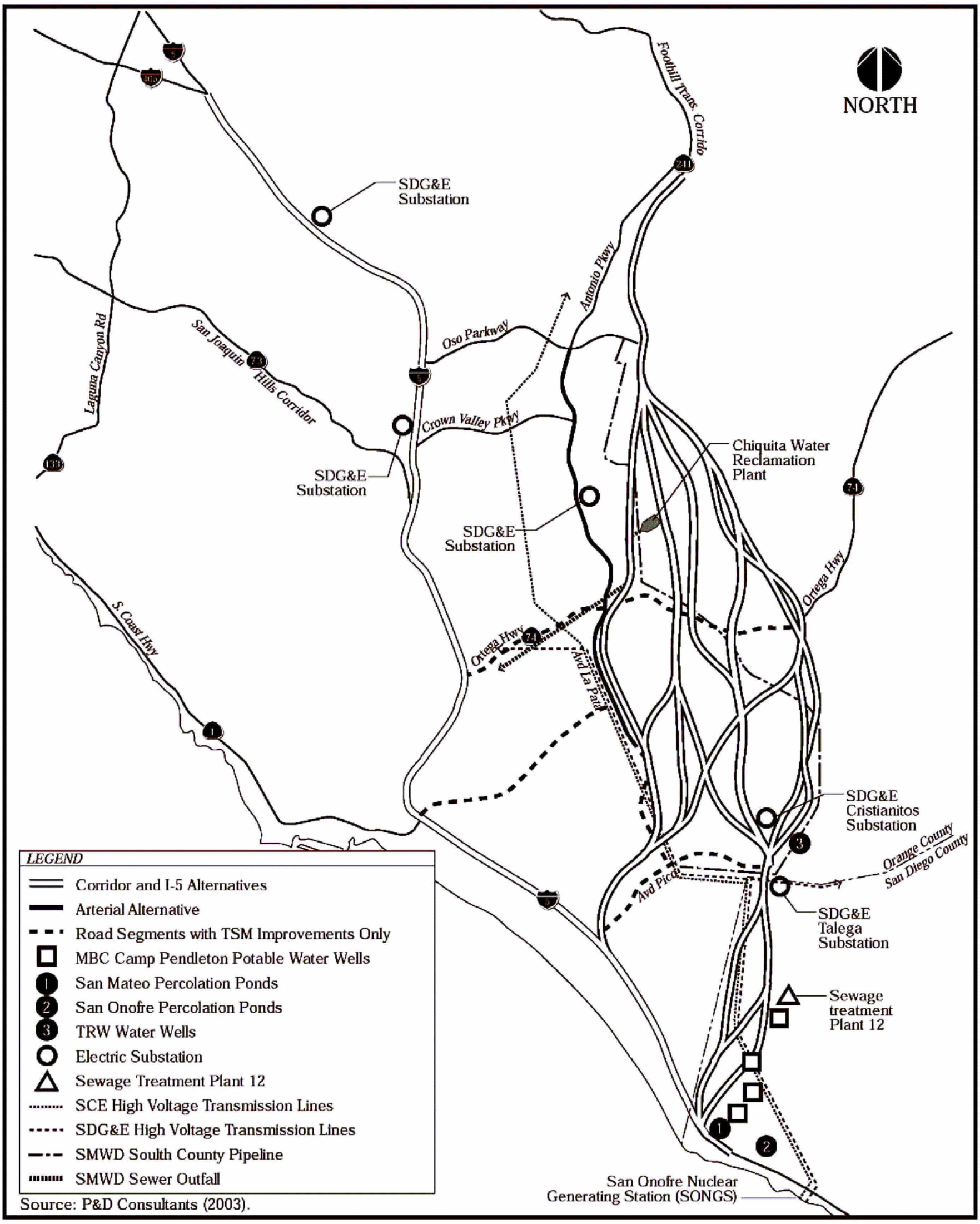
NOTES:

1. TRAIL AROUND ZONE 4 TO BE TAKEN OUT OF SERVICE DURING ZONE 4 LANDFILL OPERATIONS.
2. ZONES 4 AND 5 HAVE SHARED AREAS (WHICH ARE SHADED) FOR ENGINEERED FILLS REQUIRED FOR THE CONSTRUCTION OF EACH ZONE WHERE THOSE ZONES ABUTT EACH OTHER.



SOURCE: PRIMA DESHECHA LANDFILL, 2001 General Development Plan

Prima Deshecha Landfill



Source: P&D Consultants (2003).

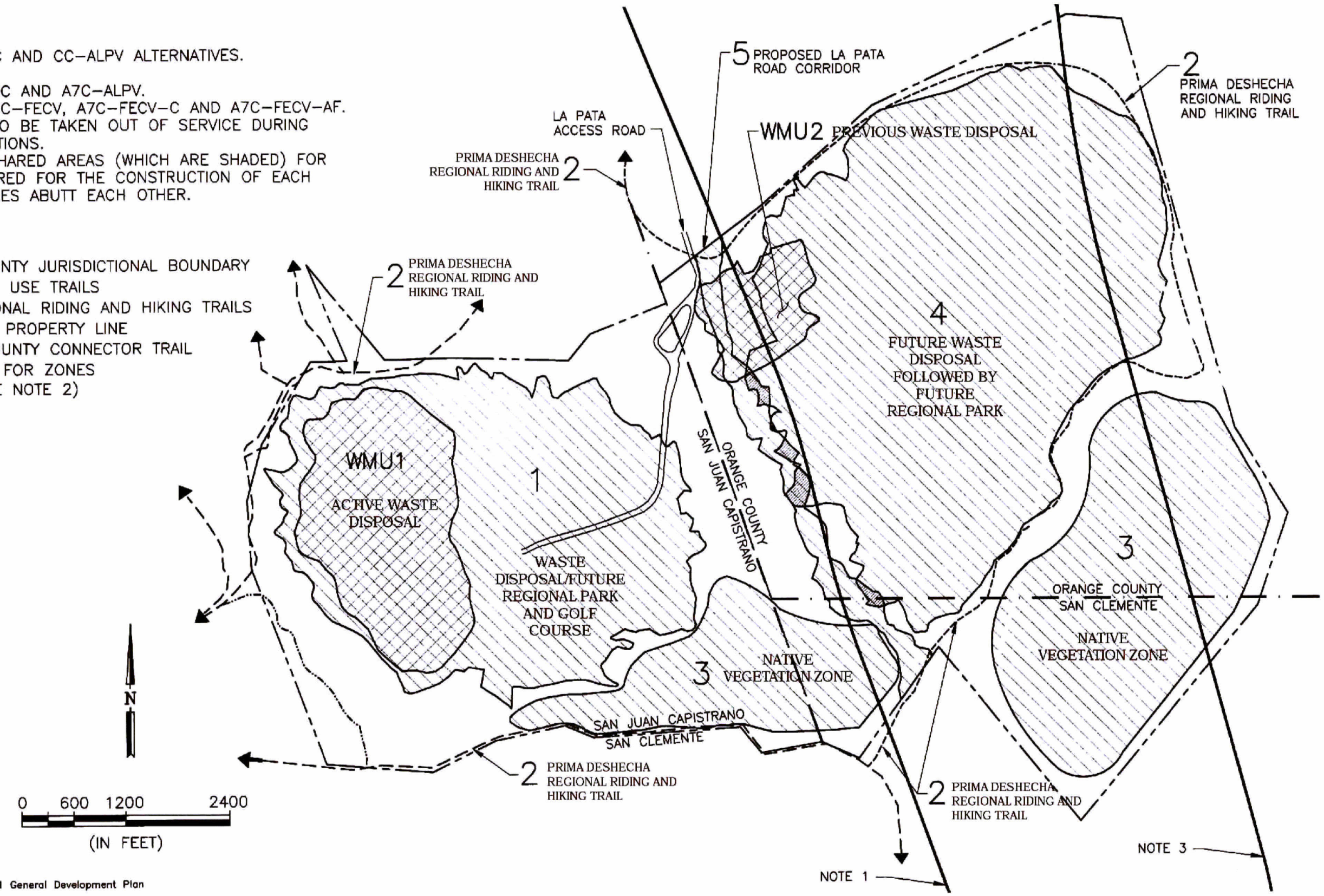
Major Utility Lines and Facilities Near the Alignments of the SOCTIIP Build Alternatives

NOTES:

1. SEGMENT COMMON TO CC AND CC–ALPV ALTERNATIVES.
2. A7C–7SV ALTERNATIVE.
3. SEGMENT COMMON TO A7C AND A7C–ALPV.
4. SEGMENT COMMON TO A7C–FECV, A7C–FECV–C AND A7C–FECV–AF.
5. TRAIL AROUND ZONE 4 TO BE TAKEN OUT OF SERVICE DURING ZONE 4 LANDFILL OPERATIONS.
6. ZONES 4 AND 5 HAVE SHARED AREAS (WHICH ARE SHADED) FOR ENGINEERED FILLS REQUIRED FOR THE CONSTRUCTION OF EACH ZONE WHERE THOSE ZONES ABUTT EACH OTHER.

LEGEND

- CITY AND COUNTY JURISDICTIONAL BOUNDARY
- CITY MULTIPLE USE TRAILS
- COUNTY REGIONAL RIDING AND HIKING TRAILS
- PROJECT SITE PROPERTY LINE
- PROPOSED COUNTY CONNECTOR TRAIL
- SHARED AREA FOR ZONES 4 AND 5 (SEE NOTE 2)
- WMU1, WMU2
- ZONE



SOURCE: PRIMA DESHECHA LANDFILL, 2001 General Development Plan

Prima Deshecha Landfill and Intersecting SOCTIIP Alternatives

ha (328.3 ac) under the FEC-M-Ultimate Alternative, or approximately 1.2 percent of the total area that is currently under agricultural preserve status in the SOCTIIP study area for the FEC-M-Initial and Ultimate Alternatives. This includes areas which have been subject to a notice of non-renewal, with the remainder currently remaining in agricultural preserve status. Williamson Act contracts adjacent to the FEC-M-Alternatives are scheduled for withdrawal between 2001 and 2005. While some of these areas will be withdrawn from agricultural preserves prior to the time any construction of the FEC-M Alternatives could occur, a substantial part of the property will remain in agricultural preserves and will require modifications to existing contracts to remove the land within the disturbance limits for the FEC-M Alternatives. As a result, the FEC-M Alternatives would adversely impact areas in agricultural preserves. These Alternatives would not preclude the use of the remaining preserve areas and would not require early cancellation of any contracts outside the disturbance limits for the FEC-M-Initial and Ultimate Alternatives.

6.2.3B.3 Other Impacts of the Far East Corridor-M-Initial and Ultimate Alternatives on Agricultural Resources on RMV

The FEC-M-Alternatives would impact existing agricultural operations on RMV. These Alternatives would directly impact 232.1 ha (573.5 ac) of grazing land under the FEC-M-Initial Alternative and 277.7 ha (686.3 ac) under the FEC-M-Ultimate Alternative. However, construction of the FEC-M Alternatives alone would not substantially interfere with grazing activities due to the abundance of grazing land that would remain on the RMV. Therefore, the potential impacts of the FEC-M Alternatives related to the loss of grazing land on RMV would not be adverse.

As it traverses RMV, the alignment of the FEC-M Alternatives would bisect existing ranch access roads. The design of the FEC-M Alternatives includes the relocation or realignment of critical ranch access roads. Therefore, the FEC-M Alternatives would not have an adverse impact on access for ranch operations.

The FEC-M Alternatives would be adjacent to and west of the Cristianitos Corrals. As part of these Alternatives, access roads to this facility would be realigned and access to the Corrals maintained. As a result, the FEC-M Initial and Ultimate Alternatives would not result in adverse impacts on the operation of the Corrals.

The alignment of the FEC-M Alternatives would not impact the Cow Camp and Cristianitos Corrals facilities. There would be no adverse impacts to these uses as a result of the FEC-M Alternatives.

The northeast part of the Color Spot Nursery lease area would be traversed by the FEC-M Alternatives. Approximately 3.0 ha (7.3 ac) of the total 98.8 ha (244 ac) lease area would be directly impacted under the FEC-M Alternatives. The FEC-M Alternatives would also result in the direct removal of approximately 28 percent (11.7 ha/29.0 ac) of the orchards north of Ortega Highway and east of the Color Spot Nursery on RMV. Three parcels, totaling approximately 43 ha (105 ac), are involved in agricultural operations. Three would be traversed by the alignment

of the FEC-M. These impacts of the FEC-M Alternatives on the Color Spot Nursery lease area and the RMV agricultural fields would be adverse.

6.2.4 FAR EAST CORRIDOR-ORTEGA HIGHWAY VARIATION-INITIAL AND ULTIMATE ALTERNATIVES

6.2.4.1 Impacts of the Far East Corridor-Ortega Highway Variation-Initial and Ultimate Alternatives on Natural Resource Conservation Service Resources on RMV

As shown in Tables 6.1-3 and 6.1-4, these Alternatives would result in the loss of 3.2 ha (8.0 ac) of Prime Farmland under the FEC-OHV-Initial Alternative and 4.1 ha (10.0 ac) under the FEC-OHV-Ultimate Alternative; 11 ha (27.3ac) of Unique Farmland under the FEC-OHV-Initial Alternative and 13.8 ha (34.1 ac) under the FEC-OHV-Ultimate Alternative; and 6.2 ha (15.3 ac) of Farmland of Statewide Importance under the FEC-OHV-Initial Alternative and 6.8 ha (16.9 ac) under the FEC-OHV-Ultimate Alternative. The farmland converted by these Alternatives represents approximately 0.3 percent of farmland in Orange County under the FEC-OHV Initial Alternative and 0.4 percent under the FEC-OHV Ultimate Alternative**.** Based on the quality of these soil resources as defined by the NRCS, the FEC-OHV Alternatives would adversely impact farmlands and would require evaluation of protection of these farmlands, including the consideration of avoidance alternatives. These Alternatives would also affect 150 ha (373.1 ac) under the Initial and 205.3 ha (507.3 ac) under the Ultimate of lands classified as grazing lands. The loss of this acreage would not preclude grazing activities on the lands remaining and therefore is not an adverse impact.

6.2.4.2 Impacts of the Far East Corridor-Ortega Highway Variation-Initial and Ultimate Alternatives on Williamson Act Agricultural Preserves on RMV

As shown in Tables 6.1-3 and 6.1-4, these Alternatives would result in the use of approximately 74.9 ha (185.1 ac) of agricultural preserve areas under the FEC-OHV-Initial Alternative and 109.3 ha (270 ac) under the FEC-OHV-Ultimate Alternative, or approximately 0.4 percent of property that is currently under agricultural preserve status in the SOCTIIP study area under the FEC-OHV Initial Alternative and 0.7 percent under the FEC-OHV Ultimate Alternative. This includes areas which have been subject to a notice of non-renewal, with the remainder currently remaining in agricultural preserve status. Williamson Act contracts adjacent to the FEC-OHV Alternatives are scheduled for withdrawal between 2001 and 2005. While some of these areas will be withdrawn from agricultural preserves prior to when any construction of the FEC-OHV Alternatives could occur, a substantial part of the RMV property will remain in agricultural preserves and will require modifications to existing contracts to remove the land within the disturbance limits for the FEC-OHV Alternatives. The FEC-OHV Alternatives would adversely impact areas in agricultural preserves. These Alternatives would not preclude the use of the remaining preserve areas and would not require early cancellation of any contracts outside the disturbance limits for the FEC-OHV Alternatives.

6.2.5 FAR EAST CORRIDOR-AVENIDA PICO VARIATION-INITIAL AND ULTIMATE ALTERNATIVES

The impacts of the FEC-APV-Initial and Ultimate Alternatives on agricultural resources would be the same as for the FEC-Initial and Ultimate Alternatives, as shown in Tables 6.1-3 and 6.1-4.

6.2.6 FAR EAST CORRIDOR-TALEGA VARIATION-INITIAL AND ULTIMATE ALTERNATIVES

6.2.6.1 Impacts of the Far East Corridor-Talega Variation-Initial and Ultimate Alternatives on Natural Resource Conservation Service Resources on RMV

As shown in Tables 6.1-3 and 6.1-4, these Alternatives would result in the loss of 6.2 ha (15.3 ac) of Prime Farmland under the FEC-TV-Initial Alternative and 6.5 ha (16.1 ac) under the FEC-TV-Ultimate Alternative; 33.4 ha (82.5 ac) of Unique Farmland under the FEC-TV-Initial Alternative and 41.6 ha (102.7 ac) under the FEC-TV-Ultimate Alternative; and 8.9 ha (22.1 ac) of Farmland of Statewide Importance under the FEC-TV-Initial Alternative and 10.4 ha (25.8 ac) under the FEC-TV-Ultimate Alternative. The farmland converted by these Alternatives represents approximately 0.9 percent of farmland in Orange County under the FEC-TV-Initial Alternative and 1.1 percent under the FEC-TV-Ultimate Alternative. Based on the quality of these soil resources as defined by the NRCS, the FEC-TV Alternatives would adversely impact farmlands and would require evaluation of protection of these farmlands, including the consideration of avoidance alternatives. These Alternatives would also affect 278 8ha (688.9 ac) under the Initial and 345.8 ha (854.5 ac) under the Ultimate of lands classified as grazing lands. The loss of this acreage would not preclude grazing activities on the remaining land and therefore is not an adverse impact.

6.2.6.2 Impacts of the Far East Corridor-Talega Variation-Initial and Ultimate Alternatives on Williamson Act Agricultural Preserves on RMV

As shown in Tables 6.1-3 and 6.1-4, these Alternatives would result in the use of approximately 178.4 ha (440.9 ac) of agricultural preserve areas under the FEC-TV-Initial Alternative and 182.8 ha (451.8 ac) under the FEC-TV-Ultimate Alternative, or approximately 1.3 percent of the total area that is currently under agricultural preserve status in the SOCTIIP study area for the FEC-TV-Initial and Ultimate Alternatives. This includes areas which have been subject to a notice of non-renewal, with the remainder currently remaining in agricultural preserve status. Williamson Act contracts adjacent to the FEC-TV Alternatives are scheduled for withdrawal between 2001 and 2005. While some of these areas will be withdrawn from agricultural preserves prior to when any construction of the FEC-TV Alternatives would occur, a substantial part of the property will remain in agricultural preserve and will require modifications to existing contracts to remove the land within the disturbance limits for the FEC-TV Alternatives. The FEC-TV Alternatives would adversely impact areas in agricultural preserves. The FEC-TV Alternatives would not preclude the use of remaining preserve areas and would not require early cancellation of any contracts.

6.2.7 CENTRAL CORRIDOR-COMPLETE-INITIAL AND ULTIMATE ALTERNATIVES

6.2.7.1 Impacts of the Central Corridor-Complete-Initial and Ultimate Alternatives on Natural Resource Conservation Service Resources on RMV

As shown in Tables 6.1-3 and 6.1-4, these Alternatives would result in no loss of Prime Farmland; the loss of 14.3 ha (35.3 ac) of Unique Farmland under the CC-Initial Alternative and 16 ha (39.6 ac) under the CC-Ultimate Alternative; and the loss of 3.9 ha (9.7 ac) of Farmland of Statewide Importance under the CC-Initial Alternative and 6.0 ha (14.9 ac) under the CC-Ultimate Alternative. This represents approximately 0.3 percent of farmland in the County for the CC-Initial and Ultimate Alternatives. Based on the quality of these soil resources as defined by the NRCS, the CC Alternatives would adversely impact farmlands and would require evaluation of protection of these farmlands, including the consideration of avoidance alternatives. These Alternatives would also affect 273.5 ha (675.8 ac) under the Initial and 326.2 ha (806.1 ac) under the Ultimate of lands classified as grazing lands. The loss of this acreage would not preclude grazing activities on the remaining land and therefore is not considered an adverse impact.

6.2.7.2 Impacts of the Central Corridor-Complete-Initial and Ultimate Alternatives on Williamson Act Agricultural Preserves on RMV

As shown in Tables 6.1-3 and 6.1-4, these Alternatives would result in the loss of approximately 84.2 ha (208.2 ac) of agricultural preserve areas under the CC-Initial Alternative and 110.1 ha (272 ac) under the CC-Ultimate Alternative. This includes areas which have been subject to a notice of non-renewal, with the remainder currently remaining in agricultural preserve status. Williamson Act contracts adjacent to the CC Alternatives are scheduled for withdrawal between 2001 and 2005. While some of these areas will be withdrawn from agricultural preserves prior to construction of the CC Alternatives, a substantial part of the property will remain in agricultural preserves and will require modifications to existing contracts to remove the land within the disturbance limits of the CC Alternatives. The CC Alternatives would adversely impact areas in agricultural preserves. These Alternatives would not preclude the use of remaining preserve areas and would not require early cancellation of any contracts outside the disturbance limits for these Alternatives.

6.2.7.3 Other Impacts of the Central Corridor-Complete-Initial and Ultimate Alternatives on Agricultural Resources on RMV

Similar to the FEC Alternatives, the CC-Initial and Ultimate Alternatives would directly impact agricultural operations at RMV. The CC Alternatives would traverse existing ranch access roads. The design of the CC Alternatives includes the relocation or realignment of critical access roads. Therefore, the CC-Initial and Ultimate Alternatives would not have an adverse impact on access for ranch operations.

The CC-Initial and Ultimate Alternatives would have impacts similar to the FEC-Initial and Ultimate Alternatives on cattle grazing and barley farming activities. These impacts would not be adverse.

Widening of Ortega Highway to accommodate the interchange with the CC Alternatives would require the use of part of southeast corner of the DM ColorExpress nursery lease area. The use of this property would only partially impact ongoing operations and would not result in an adverse impact to this use. However, the Sea Tree Nursery would no longer be able to operate at this location under the CC Alternatives. This would be an adverse impact of thee CC-Initial and Ultimate Alternatives.

The CC Alternatives would not impact Amantes Camp, Cow Camp or the Cristianitos Corrals. Therefore, the CC-Initial and Ultimate Alternatives would not result in adverse impacts on these uses on RMV.

6.2.8 CENTRAL CORRIDOR-AVENIDA LA PATA VARIATION-INITIAL AND ULTIMATE ALTERNATIVES

The impacts of the CC-ALPV-Initial and Ultimate Alternatives on agricultural resources on RMV would be the same as for the CC-Initial and Ultimate Alternatives, as shown in Tables 6.1-3 and 6.1-4. Impacts to grazing lands would be similar to the CC Alternatives, only slightly less area would be affected. This would not preclude continuing grazing activities and is therefore not considered an adverse impact.

6.2.9 CENTRAL CORRIDOR-ORTEGA HIGHWAY VARIATION-INITIAL AND ULTIMATE ALTERNATIVES

6.2.9.1 Impacts of the Central Corridor-Ortega Highway Variation-Initial and Ultimate Alternatives on Natural Resource Conservation Service Resources on RMV

As shown in Tables 6.1-3 and 6.1-4, these Alternatives would result in no loss of Prime Farmland; the loss of 5.7 ha (14.2 ac) of Unique Farmland under the CC-OHV-Initial Alternative and 11.2 ha (27.7 ac) under the CC-OHV-Ultimate Alternative; and the loss of 3.9 ha (9.7 ac) of Farmland of Statewide Importance under the CC-OHV-Initial Alternative and 6.0 ha (14.9 ac) under the CC-OHV-Ultimate Alternative. This represents approximately 0.1 percent of farmland in the County under the CC-OHV-Initial Alternative and 0.2 percent under the CC-OHV-Ultimate Alternative. Based on the quality of these soil resources as defined by the NRCS, the CC-OHV Alternatives would adversely impact farmlands and would require protection of these farmlands, including the consideration of avoidance alternatives.

6.2.9.2 Impacts of the Central Corridor-Ortega Highway Variation-Initial and Ultimate Alternatives on Williamson Act Agricultural Preserves on RMV

As shown in Tables 6.1-3 and 6.1-4, these Alternatives would result in the loss of approximately 58.8 ha (145.2 ac) of agricultural preserve area under the CC-OHV-Initial Alternative and 80.4 ha (198.6 ac) under the CC-OHV-Ultimate Alternative. This includes areas which have been

subject to a notice of non-renewal, with the remainder currently remaining in agricultural preserve status. Williamson Act contracts adjacent to the CC-OHV Alternatives are scheduled for withdrawal between 2001 and 2005. While some of these areas will be withdrawn from agricultural preserves prior to construction of the CC-OHV Alternatives, a substantial part of the property will remain in agricultural preserves and will require modifications to existing contracts to remove the land within the disturbance limits for the CC-OHV Alternatives. The CC-OHV Alternatives would adversely impact areas in agricultural preserves. These Alternatives would not preclude the use of remaining preserve areas and would not require early cancellation of any contracts.

6.2.9.3 Other Impacts of the Central Corridor-Ortega Highway Variation-Initial and Ultimate Alternatives on Agricultural Resources on RMV

These Alternatives would affect 146.7 ha (362.6 ac) under the Initial and 188.3 ha (465.4 ac) under the Ultimate of lands classified as grazing lands. The loss of this acreage would not preclude grazing activities on the remaining land and therefore is not considered an adverse impact. There are no other impacts to agricultural or ranching uses on RMV as a result of the CC-OHV-Initial and Ultimate Alternatives.

6.2.10 ALIGNMENT 7 CORRIDOR-COMPLETE-INITIAL AND ULTIMATE ALTERNATIVES

6.2.10.1 Impacts of the Alignment 7 Corridor-Complete-Initial and Ultimate Alternatives on Natural Resource Conservation Service Resources on RMV

As shown in Tables 6.1-3 and 6.1-4, these Alternatives would result in the loss of 3.2 ha (7.9 ac) of Prime Farmland under the A7C-Initial Alternative and 3.5 ha (8.5 ac) under the A7C-Ultimate Alternative; and no loss of Unique Farmland and Farmland of Statewide Importance. This represents approximately 0.05 percent of farmland in the County under the A7C-Initial and Ultimate Alternatives. Based on the quality of these soil resources as defined by the NCRS, the A7C Alternatives would adversely impact farmlands and would require evaluation of protection of these farmlands, including the consideration of avoidance alternatives.

6.2.10.2 Impacts of the Alignment 7 Corridor-Complete-Initial and Ultimate Alternatives on Williamson Act Agricultural Preserves on RMV

As shown in Tables 6.1-3 and 6.1-4, these Alternatives would result in the loss of approximately 171.3 ha (423.2 ac) of agricultural preserve area under the A7C-Initial Alternative and 182.6 ha (451.3 ac) under the A7C-Ultimate Alternative. This includes areas which have been subject to a notice of non-renewal, with the remainder currently remaining in agricultural preserve status. Williamson Act contracts adjacent to the A7C Alternatives are scheduled for withdrawal between 2001 and 2005. While some of these areas will be withdrawn from agricultural preserves prior to construction of the A7C Alternatives, a substantial part of the property will remain in agricultural preserves and will require modifications to existing contracts to remove the land within the disturbance limits of this Alternative. The A7C Alternatives would adversely impact areas in agricultural preserves. These Alternatives would not preclude the use of

remaining preserve areas and would not require early cancellation of any contracts outside the disturbance limits for these Alternatives.

6.2.10.3 Other Impacts of the Alignment 7 Corridor-Initial and Ultimate Alternatives on Agricultural Resources on RMV

These Alternatives would affect 388.9 ha (961.0 ac) under the Initial and 423.5 ha (1,046.4 ac) under the Ultimate of lands classified as grazing lands. The loss of this acreage would not preclude grazing activities on the remaining land and therefore is not considered an adverse impact. There are no other impacts to agricultural or ranching uses on RMV as a result of the A7C-Initial and Ultimate Alternatives.

6.2.11 ALIGNMENT 7 CORRIDOR-7 SWING VARIATION-INITIAL AND ULTIMATE ALTERNATIVES

6.2.11.1 Impacts of the Alignment 7 Corridor-7 Swing Variation-Initial and Ultimate Alternatives on Natural Resource Conservation Service Resources on RMV

As shown in Tables 6.1-3 and 6.1-4, these Alternatives would result in the loss of 3.2 ha (7.9 ac) of Prime Farmland under the A7C-7SV-Initial Alternative and 3.5 ha (8.5 ac) under the A7C-7SV-Ultimate Alternative; and no loss of Unique Farmland and Farmland of Statewide Importance. This represents approximately 0.05 percent of farmland in the County under the A7C-7SV-Initial and Ultimate Alternatives. Based on the quality of these soil resources as defined by the NRCS, the A7C-7SV Alternatives would adversely impact farmlands and would require evaluation of protection of these farmlands, including the consideration of avoidance alternatives.

6.2.11.2 Impacts of the Alignment 7 Corridor-7 Swing Variation-Initial and Ultimate Alternatives on Williamson Act Agricultural Preserves on RMV

As shown in Tables 6.1-3 and 6.1-4, these Alternatives would result in the loss of approximately 171.3 ha (423.2 ac) of agricultural preserve area under the A7C-7SV-Initial Alternative and 182.6 ha (451.3 ac) under the A7C-7SV-Ultimate Alternative. This includes areas which have been subject to a notice of non-renewal, with the remainder currently remaining in agricultural preserve status. Williamson Act contracts adjacent to the A7C-7SV Alternatives are scheduled for withdrawal between 2001 and 2005. While some of these areas will be withdrawn from agricultural preserves prior to construction of the A7C-7SV Alternatives, a substantial part of the property will remain in agricultural preserves and will require modifications to existing contracts to remove the land within the disturbance limits for these Alternatives. The A7C-7SV Alternatives would adversely impact areas in agricultural preserves. These Alternatives would not preclude the use of remaining preserve areas and would not require early cancellation of any contracts outside the disturbance limits.

6.2.11.3 Other Impacts of the Alignment 7 Corridor-7 Swing Variation-Initial and Ultimate Alternatives on Agricultural Resources on RMV

These Alternatives would affect 381.4 ha (942.5 ac) under the Initial and 415.7 ha (1,027.2 ac) under the Ultimate of lands classified as grazing lands. The loss of this acreage would not preclude grazing activities on the remaining land and therefore is not considered an adverse impact. There are no other impacts to agricultural or ranching uses on RMV as a result of the A7C-7SV-Initial and Ultimate Alternatives.

6.2.12 ALIGNMENT 7 CORRIDOR-FAR EAST CROSSOVER VARIATION-INITIAL AND ULTIMATE ALTERNATIVES

6.2.12.1 Impacts of the Alignment 7 Corridor-Far East Crossover Variation-Initial and Ultimate Alternatives on Natural Resource Conservation Service Resources on RMV

As shown in Tables 6.1-3 and 6.1-4, these Alternatives would result in the loss of 2.4 ha (6 ac) of Prime Farmland under the A7C-FECV-Initial Alternative and 2.6 ha (6.5 ac) under the A7C-FECV-Ultimate Alternative; and no loss of Unique Farmland and Farmland of Statewide Importance. This represents approximately 0.04 percent of farmland in the County under the A7C-FECV-Initial and Ultimate Alternatives. Based on the quality of these soil resources as defined by the NRCS, the A7C-FECV Alternatives would adversely impact farmlands and would require evaluation of protection of these farmlands, including the consideration of avoidance alternatives.

6.2.12.2 Impacts of the Alignment 7 Corridor-Far East Crossover Variation-Initial and Ultimate Alternatives on Williamson Act Agricultural Preserves on RMV

As shown in Tables 6.1-3 and 6.1-4, these Alternatives would result in the loss of approximately 171.3 ha (423.2 ac) of agricultural preserve areas under the A7C-FECV-Initial Alternative and 182.6 ha (451.3 ac) under the A7C-FECV-Ultimate Alternative. This includes areas which have been subject to a notice of non-renewal, with the remainder currently remaining in agricultural preserve status. Williamson Act contracts adjacent to the A7C-FECV Alternatives are scheduled for withdrawal between 2001 and 2005. While some of these areas will be withdrawn from agricultural preserves prior to construction of the A7C-FECV Alternatives, a substantial part of the property will remain in agricultural preserves and will require modifications to existing contracts to remove the land within the disturbance limits of this Alternative. The A7C-FECV Alternatives would adversely impact areas in agricultural preserves. These Alternatives would not preclude the use of remaining preserve areas and would not require early cancellation of any contracts outside the disturbance limits.

6.2.12.3 Other Impacts of the Alignment 7 Corridor-Far East Crossover Variation-Initial and Ultimate Alternatives on Agricultural Resources on RMV

These Alternatives would affect 387 ha (956.4 ac) under the Initial and 444.6 ha (1,098.5 ac) under the Ultimate of lands classified as grazing lands. The loss of this acreage would not preclude grazing activities on the remaining land and therefore is not considered an adverse

impact. There are no other impacts to agricultural or ranching uses on RMV as a result of the A7C-FECV-Initial and Ultimate Alternatives.

6.2.13 ALIGNMENT 7 CORRIDOR-FAR EAST CROSSOVER (CRISTIANITOS) VARIATION-INITIAL AND ULTIMATE ALTERNATIVES

The impacts of the A7C-FECV-C-Initial and Ultimate Alternatives on agricultural resources on the RMV would be the same as for the A7C-FECV-Initial and Ultimate Alternatives, as shown in Tables 6.1-3 and 6.1-4.

6.2.14 ALIGNMENT 7 CORRIDOR-FAR EAST CROSSOVER (AGRICULTURAL FIELDS) VARIATION-INITIAL AND ULTIMATE ALTERNATIVES

The impacts of the A7C-FECV-AF-Initial and Ultimate Alternatives on agricultural resources on the RMV would be the same as for the A7C-FECV-Initial and Ultimate Alternatives, as shown in Tables 6.1-3 and 6.1-4.

6.2.14A ALIGNMENT 7 CORRIDOR-FAR EAST CROSSOVER-MODIFIED-INITIAL AND ULTIMATE ALTERNATIVES

6.2.14A.1 Impacts of the Alignment 7 Corridor-Far East Crossover-Modified-Initial and Ultimate Alternatives on Natural Resource Conservation Service Resources on RMV

As shown in Tables 6.1-3 and 6.1-4, the A7C-FEC-M Initial and Ultimate Alternatives would not result in the loss of rated farmland as defined by the NRCS on RMV. Therefore, the A7C-FEC-M Alternatives would not adversely impact farmlands and would not require evaluation of protection of these farmlands or the consideration of avoidance alternatives.

6.2.14A.2 Impacts of the Alignment 7 Corridor-Far East Crossover-Modified-Initial and Ultimate Alternatives on Williamson Act Agricultural Preserves on RMV

As shown in Tables 6.1-3 and 6.1-4, these Alternatives would result in the loss of approximately 88.9 ha (219.7 ac) of agricultural preserve areas under the A7C-FEC-M-Initial Alternative and 91.8 ha (226.9 ac) under the A7C-FEC-M-Ultimate Alternative. This includes areas which have been subject to a notice of non-renewal, with the remainder currently remaining in agricultural preserve status. Williamson Act contracts adjacent to the A7C-FEC-M Alternatives are scheduled for withdrawal between 2001 and 2005. While some of these areas will be withdrawn from agricultural preserves prior to construction of the A7C-FEC-M Alternatives, a substantial part of the property will remain in agricultural preserves and will require modifications to existing contracts to remove the land within the disturbance limits of this Alternative. The A7C-FEC-M Alternatives would adversely impact areas in agricultural preserves. These Alternatives would not preclude the use of remaining preserve areas and would not require early cancellation of any contracts outside the disturbance limits.

6.2.14A.3 Other Impacts of the Alignment 7 Corridor-Far East Crossover-Modified-Initial and Ultimate Alternatives on Agricultural Resources on RMV

These Alternatives would affect 278.8 ha (689.0 ac) under the Initial and 314.7 ha (777.5 ac) under the Ultimate of lands classified as grazing lands. The loss of this acreage would not preclude grazing activities on the remaining land and therefore is not considered an adverse impact. There are no other impacts to agricultural or ranching uses on RMV as a result of the A7C-FEC-M-Initial and Ultimate Alternatives.

6.2.15 ALIGNMENT 7 CORRIDOR-ORTEGA HIGHWAY VARIATION-INITIAL AND ULTIMATE ALTERNATIVES

6.2.15.1 Impacts of the Alignment 7 Corridor-Ortega Highway Variation-Initial and Ultimate Alternatives on Natural Resource Conservation Service Resources on RMV

As shown in Tables 6.1-3 and 6.1-4, these Alternatives would result in the loss of 2.4 ha (6 ac) of Prime Farmland under the A7C-OHV-Initial Alternative and 2.6 ha (6.5 ac) under the A7C-OHV-Ultimate Alternative. This represents approximately 0.04 percent of farmland in the County under the A7C-OHV Initial and Ultimate Alternatives. Based on the quality of these soil resources as defined by the NRCS, the A7C-OHV Alternatives would adversely impact farmlands and would require evaluation of protection of these farmlands, including the consideration of avoidance alternatives.

6.2.15.2 Impacts of the Alignment 7 Corridor-Ortega Highway Variation-Initial and Ultimate Alternatives on Williamson Act Agricultural Preserves on RMV

As shown in Tables 6.1-3 and 6.1-4, these Alternatives would result in the loss of approximately 76.5 ha (189 ac) of agricultural preserve area under the A7C-OHV-Initial Alternative and 92.4 ha (228.4 ac) under the A7C-OHV-Ultimate Alternative. This includes areas which have been subject to a notice of non-renewal, with the remainder currently remaining in agricultural preserve status. Williamson Act contracts adjacent to the A7C-OHV Alternatives are scheduled for withdrawal between 2001 and 2005. While some of these areas will be withdrawn from agricultural preserves prior to construction of the A7C-OHV Alternative, a substantial part of the property will remain in agricultural preserves and will require modifications to existing contracts to remove the land within the disturbance limits for these Alternatives. The A7C-OHV Alternatives would adversely impact areas in agricultural preserves. These Alternatives would not preclude the use of remaining preserve areas and would not require early cancellation of any contracts outside the disturbance limits.

6.2.15.3 Other Impacts of the Alignment 7 Corridor-Ortega Highway Variation-Initial and Ultimate Alternatives on Agricultural Resources on RMV

These Alternatives would affect 175.3 ha (433.3 ac) under the Initial and 202.9 ha (501.5 ac) under the Ultimate of lands classified as grazing lands. The loss of this acreage would not preclude grazing activities on the remaining land and therefore is not considered an adverse

impact. There are no other impacts to agricultural or ranching uses on RMV as a result of the A7C-OHV-Initial and Ultimate Alternatives.

6.2.16 ALIGNMENT 7 CORRIDOR-AVENIDA LA PATA VARIATION-INITIAL AND ULTIMATE ALTERNATIVES

The impacts of the A7C-ALPV-Initial and Ultimate Alternatives on agricultural resources on the RMV would be the same as for the A7C-Initial and Ultimate Alternatives, as shown in Tables 6.1-3 and 6.1-4 except for impacts to lands classified as grazing land. Under the A7C-ALPV-Initial Alternative there would be a loss of 369.5 ha (913.0 ac) and under the A7C-ALPV-Ultimate Alternative there would be a loss of 412.2 ha (1,018.7 ac).

6.2.17 ARTERIAL IMPROVEMENTS ONLY ALTERNATIVE

As discussed in Section 2.0 (Description of the Alternatives), the AIO Alternative proposes widening of Antonio Parkway/La Pata Avenue beyond its current Master Plan of Arterials Highways (MPAH) designation. There are some agricultural resources in the vicinity of the intersection of Antonio Parkway and Ortega Highway.

6.2.17.1 Impacts of the Arterial Improvements Only Alternative on Natural Resource Conservation Service Resources on RMV

As shown in Table 6.1-4, the AIO Alternative would result in a 6.6 ha (16.3 ac) loss of Unique Farmland. This represents approximately 0.08 percent of farmland in the County. Based on the quality of these soil resources as defined by the NRCS, the AIO Alternative would adversely impact farmlands and would require evaluation of protection of these farmlands, including the consideration of avoidance alternatives.

6.2.17.2 Impacts of the Arterial Improvements Only Alternative on Williamson Act Agricultural Preserves on RMV

As shown in Table 6.1-4, the AIO Alternative would result in the loss of approximately 14.9 ha (36.9 ac) that are currently under agricultural preserve status. This includes areas which have been subject to a notice of non-renewal, with the remainder currently remaining in agricultural preserve status. Williamson Act contracts adjacent to the AIO Alternative are scheduled for withdrawal between 2001 and 2005. While some of these areas will be withdrawn from agricultural preserves prior to construction of the AIO Alternative, a substantial part of the property will remain in agricultural preserves and will require modifications to existing contracts to remove the land within the disturbance limits for this Alternative. The AIO Alternative would adversely impact areas in agricultural preserves. This Alternative would not preclude the use of remaining preserve areas and would not require early cancellation of any contracts.

6.2.17.3 Other Impacts of the Arterial Improvements Only Alternative on Agricultural Resources on RMV

This Alternative has only minor impacts to lands classified as grazing lands along Antonio/La Pata which are not considered adverse. There are no other impacts to agricultural or ranching uses on RMV as a result of the AIO Alternative.

6.2.18 ARTERIAL IMPROVEMENTS PLUS HOV AND SPOT MIXED FLOW LANES ON I-5 ALTERNATIVE

As shown in Table 6.1-4, the impacts of the AIP Alternative on agricultural resources on the RMV would be the same as the impacts described earlier for the AIO Alternative.

6.2.19 I-5 WIDENING ALTERNATIVE

As shown in Table 6.1-4, the I-5 Alternative will not result in impacts related to agricultural soils, Williamson Act contracts or ranch operations on the RMV.

6.2.20 NO ACTION ALTERNATIVES

The No Action Alternatives will not result in impacts related to agricultural soils, Williamson Act contracts or ranch operations on the RMV.

6.3 IMPACTS ON AGRICULTURAL RESOURCES ON MCB CAMP PENDLETON

Approximately 4.5 percent of the farmland resources in the SOCTIIP study area are in San Diego County on MCB Camp Pendleton property, as described earlier in Section 3.0 (Existing Environment Related to Land Use). Nine SOCTIIP build Alternatives are aligned on or in the vicinity of the agricultural resources lands on MCB Camp Pendleton as shown on Figure 6.3-1 and as described in the following Sections.

6.3.1 FAR EAST CORRIDOR-COMPLETE-INITIAL AND ULTIMATE ALTERNATIVES

6.3.1.1 Impacts of the Far East Corridor-Complete-Initial and Ultimate Alternatives on Natural Resources Conservation Service Resources on MCB Camp Pendleton

As shown in Tables 6.1-3 and 6.1-4, these Alternatives would result in the loss of 2.7 ha (6.7 ac) of Farmland of Statewide Importance on MCB-Pendleton under the FEC-Initial Alternative and 3.4 ha (8.4 ac) under the FEC-Ultimate Alternative. This represents approximately 0.04 percent of farmland in the SOCTIIP study area. Based on the quality of these soil resources as defined by the NRCS, the FEC Alternatives would adversely impact farmlands and would require evaluation of protection of these farmlands, including the consideration of avoidance alternatives.

6.3.1.2 Impacts of the Far East Corridor-Complete-Initial and Ultimate Alternatives on Williamson Act Agricultural Preserves on Camp Pendleton

As shown in Tables 6.1-3 and 6.1-4, there are no Williamson Act agricultural preserves on MCB Camp Pendleton. Therefore, the FEC-Initial and Ultimate Alternatives would not result in adverse impacts related to Williamson Act contracts on MCB Camp Pendleton.

6.3.1.3 Other Impacts of the Far East Corridor-Complete-Initial and Ultimate Alternatives on Agricultural Resources on MCB Camp Pendleton

The FEC Alternatives would directly impact part of the agricultural operations at San Clemente Ranch in the San Mateo Valley on MCB Camp Pendleton. The largest contiguous row crop lease on the Base covers nearly 246 ha (600 ac) in San Mateo Valley adjacent to SOSB and San Mateo Creek. The FEC Alternatives would remove part of the 3.5 ha (8.7 ac) parcel on the west side of Cristianitos Road. This represents approximately 18.9 percent of the total area being farmed in this area. This part of San Clemente Ranch has been identified as a high yield crop area because it is not typically subject to frost. Removal of this area from production would negatively impact the leaseholder and would be considered adverse. The remaining part of the lease area could continue to be farmed.

The existing access road for this operation immediately north of I-5 could be impacted temporarily during construction of the FEC Alternatives. Because this is one of only two access roads and it is the only all-weather access road for this operation, disruption of this road would be an adverse impact on this operation. The FEC Alternative would also require modifications to Cristianitos Road which is the route used by trucks to access the packing house at San Clemente Farms. The inability of trucks to use this route would be an adverse impact to these agricultural operations. Because Cristianitos Road would remain open during construction of the FEC Alternatives, no adverse impacts related to access along this route would be anticipated under the FEC-Initial and Ultimate Alternatives. There are no lands classified as grazing land on MCB-Camp Pendleton.

6.3.2 FAR EAST CORRIDOR-CRISTIANITOS VARIATION-INITIAL AND ULTIMATE ALTERNATIVES

6.3.2.1 Impacts of the Far East Corridor-Cristianitos Variation-Initial and Ultimate Alternatives on Natural Resources Conservation Service Resources on MCB Camp Pendleton

As shown in Tables 6.1-3 and 6.1-4, these Alternatives would result in the loss of 3.9 ha (9.6 ac) of Farmland of Statewide Importance MCB Camp Pendleton under the FEC-CV-Initial and Ultimate Alternatives. This represents approximately 0.06 percent of farmland in the SOCTIIP study area. Based on the quality of these soil resources as defined by the NRCS, the FEC-CV Alternatives would adversely impact farmlands and would require evaluation of protection of these farmlands, including the consideration of avoidance alternatives.

6.3.2.2 Impacts of the Far East Corridor-Cristianitos Variation-Initial and Ultimate Alternatives on Williamson Act Agricultural Preserves on Camp Pendleton

As shown in Tables 6.1-3 and 6.1-4, there are no Williamson Act agricultural preserves on MCB Camp Pendleton. Therefore, the FEC-CV-Initial and Ultimate Alternatives would not result in adverse impacts related to Williamson Act contracts on MCB Camp Pendleton.

6.3.2.3 Other Impacts of the Far East Corridor-Cristianitos Variation-Initial and Ultimate Alternatives on Agricultural Resources on MCB Camp Pendleton

The FEC-CV Alternatives would directly impact part of the agricultural operations at San Clemente Ranch in San Mateo Valley on MCB Camp Pendleton. The FEC-CV Alternatives would remove part of the 15.2 ha (37.4 ac) parcel on the west side of Cristianitos Road. This represents approximately 0.8 percent of the total area being farmed in this area. Removal of this area from production would negatively impact the leaseholder and would be adverse. The remaining part of the lease area could continue to be farmed.

The existing access road for this operation immediately north of I-5 could be impacted temporarily during construction of the FEC-CV Alternatives. Because this is one of only two access roads and it is the only all-weather access road for the operation, disruption of the road would be an adverse impact. The FEC-CV Alternatives would require modifications to Cristianitos Road which is the route used by trucks to access the packing house at San Clemente Farms. The inability of trucks to use this route would be an adverse impact to this agricultural operation. Because Cristianitos Road would remain open during construction of the FEC-CV Alternatives, these Alternatives would not result in adverse impacts related to access along this route. There are no lands classified as grazing lands on MCB-Camp Pendleton.

6.3.3 FAR EAST CORRIDOR-AGRICULTURAL FIELDS VARIATION-INITIAL AND ULTIMATE ALTERNATIVES

6.3.3.1 Impacts of the Far East Corridor-Agricultural Fields Variation-Initial and Ultimate Alternatives on Natural Resources Conservation Service Resources on MCB Camp Pendleton

As shown in Tables 6.1-3 and 6.1-4, these Alternatives would result in the loss of 10.5 ha (25.9 ac) of Prime Farmland under the FEC-AFV-Initial Alternative and 13.1 ha (32.3 ac) under the FEC-AFV-Ultimate Alternative; and 3.6 ha (8.8 ac) of Farmland of Statewide Importance under the FEC-AFV-Initial Alternative and 3.6 ha (9 ac) under the FEC-AFV-Ultimate Alternative. This represents approximately 0.2 percent of farmland in the SOCTIIP study area. Based on the quality of these soil resources as defined by the NRCS, the FEC-AFV Alternatives would adversely impact farmlands and would require evaluation of protection of these farmlands, including the consideration of avoidance alternatives.

6.3.3.2 Impacts of the Far East Corridor-Agricultural Fields Variation-Initial and Ultimate Alternatives on Williamson Act Agricultural Preserves on Camp Pendleton

As shown in Tables 6.1-3 and 6.1-4, there are no Williamson Act agricultural preserves on MCB Camp Pendleton. Therefore, the FEC-AFV-Initial and Ultimate Alternatives would not result in adverse impacts related to Williamson Act contracts on MCB Camp Pendleton.

6.3.3.3 Other Impacts of the Far East Corridor-Agricultural Fields Variation-Initial and Ultimate Alternatives on Agricultural Resources on Camp Pendleton

The FEC-AFV Alternatives would directly impact part of the agricultural operations at San Clemente Ranch in San Mateo Valley on MCB Camp Pendleton. The FEC-AFV Alternatives would impact 16.3 ha (40.5 ac) of the west part of the 243 ha (600 ac) parcel east of Cristianitos Road. This represents approximately 6.8 percent of the total area being farmed in this area. Removal of this area from production would negatively impact the leaseholder and would be adverse. The remaining part of the lease area could continue to be farmed.

The existing access road for this operation immediately north of I-5 could be impacted temporarily during construction of the FEC-AFV Alternatives. Because this is one of only two access roads and it is the only all-weather access road for the operation, disruption of the road would be adverse impact. The FEC-AFV Alternatives would require modifications to Cristianitos Road which is the route used by trucks to access the packing house at San Clemente Farms. The inability of trucks to use this route would be an adverse impact to this agricultural operation. Because Cristianitos Road would remain open during construction of the FEC-AFV Alternatives, there would be no adverse impacts related to access along this route. There is no land classified as grazing land on MCB-Camp Pendleton.

6.3.3A FAR EAST CORRIDOR-WEST, FAR EAST CORRIDOR- MODIFIED AND ALIGNMENT 7 CORRIDOR-FAR EAST CROSSOVER-MODIFIED-INITIAL AND ULTIMATE ALTERNATIVES

These six alternatives have the same disturbance and right-of-way impacts among the initial configuration and ultimate configuration across MCB Camp Pendleton as they relate to agricultural resources. Therefore, the discussion of impacts would be the same for all three and has been consolidated into this section. For ease of reading the discussion will focus on the Far East Corridor-West-Initial and Ultimate Alternatives (FEC-W), but the discussion will apply to the Far East Corridor-Modified and the Alignment 7 Corridor-Far East Crossover-Modified-Initial and Ultimate Alternatives.

6.3.3A.1 Impacts of the Far East Corridor-West-Initial and Ultimate Alternatives on Natural Resources Conservation Service Resources on MCB Camp Pendleton

As shown in Tables 6.1-3 and 6.1-4, these Alternatives would result in the loss of 2.9 ha (7.1 ac) of Farmland of Statewide Importance on MCB-Pendleton under the FEC-W-Initial Alternative and 2.9 ha (7.3 ac) under the FEC-W-Ultimate Alternative. This represents approximately 0.04 percent of farmland in the SOCTIIP study area. Based on the quality of these soil resources as

defined by the NRCS, the FEC-W Alternatives would adversely impact farmlands and would require evaluation of protection of these farmlands, including the consideration of avoidance alternatives.

6.3.3A.2 Impacts of the Far East Corridor-West-Initial and Ultimate Alternatives on Williamson Act Agricultural Preserves on Camp Pendleton

As shown in Tables 6.1-3 and 6.1-4, there are no Williamson Act agricultural preserves on MCB Camp Pendleton. Therefore, the FEC-W-Initial and Ultimate Alternatives would not result in adverse impacts related to Williamson Act contracts on MCB Camp Pendleton.

6.3.3A.3 Other Impacts of the Far East Corridor-West-Initial and Ultimate Alternatives on Agricultural Resources on MCB Camp Pendleton

The FEC-W Alternatives would directly impact part of the agricultural operations at San Clemente Ranch in the San Mateo Valley on MCB Camp Pendleton. The largest contiguous row crop lease on the Base covers nearly 246 ha (600 ac) in San Mateo Valley adjacent to SOSB and San Mateo Creek. The FEC-W Alternatives would remove the east part of the 3.5 ha (8.7 ac) parcel currently bisected by Cristianitos Road. This represents approximately 18.9 percent of the total area being farmed in this area. This part of San Clemente Ranch has been identified as a high yield crop area because it is not typically subject to frost. Removal of this area from production would negatively impact the leaseholder and would be considered adverse. The remaining part of the lease area could continue to be farmed.

The existing access road for this operation immediately north of I-5 could be impacted temporarily during construction of the FEC-W Alternatives. Because this is one of only two access roads and it is the only all-weather access road for this operation, disruption of this road would be an adverse impact on this operation. The FEC-W Alternatives would also require modifications to Cristianitos Road which is the route used by trucks to access the packing house at San Clemente Farms. The inability of trucks to use this route would be an adverse impact to these agricultural operations. Because Cristianitos Road would remain open during construction of the FEC-W Alternatives, no adverse impacts related to access along this route would be anticipated under the FEC-W-Initial and Ultimate Alternatives. There are no lands classified as grazing land on MCB Camp Pendleton.

6.3.4 ALIGNMENT 7 CORRIDOR-FAR EAST CROSSOVER VARIATION-INITIAL AND ULTIMATE ALTERNATIVES

The impacts of the A7C-FECV-Initial and Ultimate Alternatives on agricultural resources on MCB Camp Pendleton would be the same as the impacts described earlier for the FEC-Initial and Ultimate Alternatives except for impacts to Farmland of Statewide Importance. Under the A7C-FECV-Initial Alternative there would be a loss of 3.1 ha (7.6 ac) and under the A7C-FECV-Ultimate Alternative there would be a loss of 3.7 ha (9.2 ac).

6.3.5 ALIGNMENT 7 CORRIDOR-FAR EAST CROSSOVER-CRISTIANITOS VARIATION-INITIAL AND ULTIMATE ALTERNATIVES

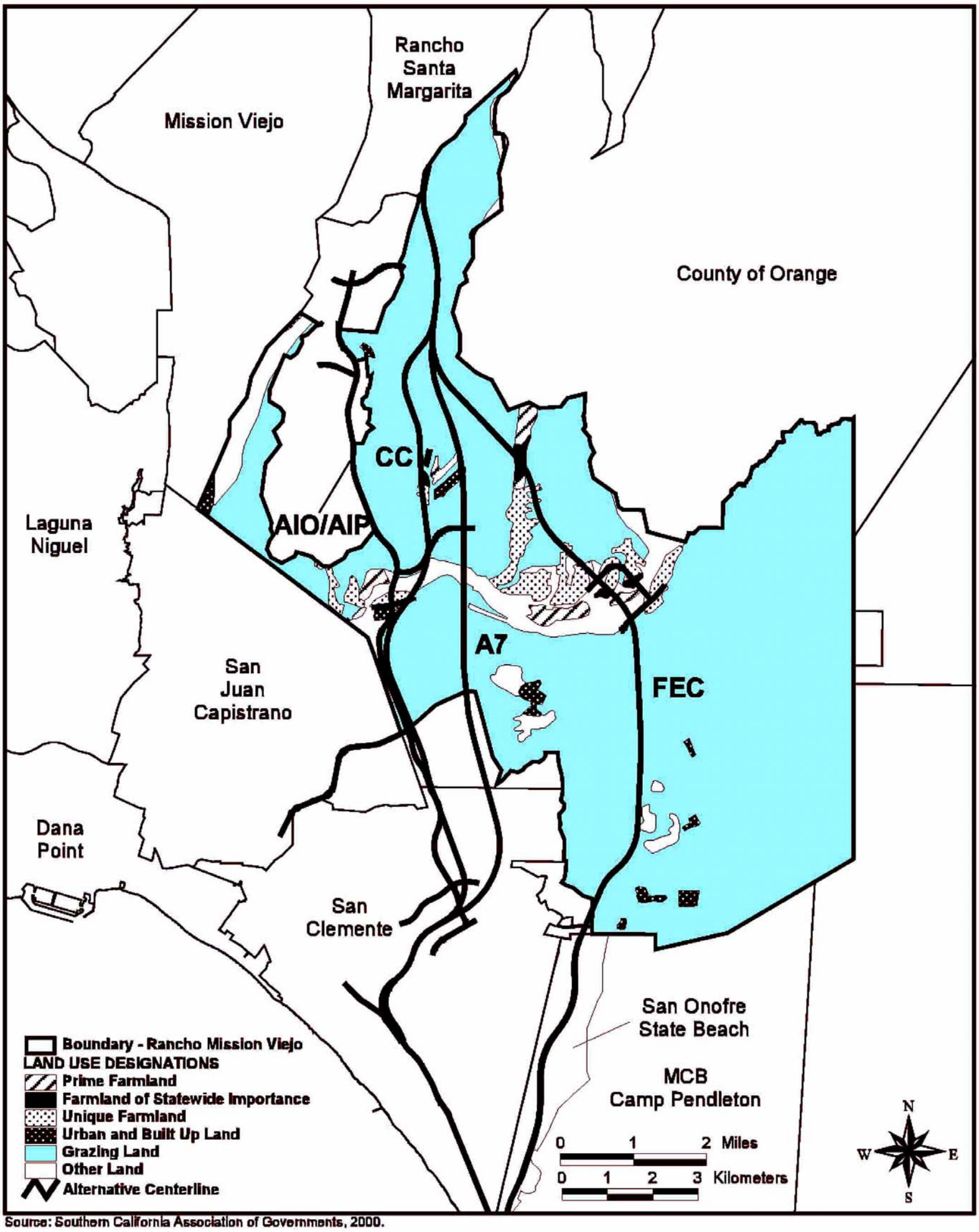
The impacts of the A7C-FECV-C-Initial and Ultimate Alternatives on agricultural resources on MCB Camp Pendleton would be the same as the impacts described earlier for the FEC-CV-Initial and Ultimate Alternatives except for impacts to Farmland of Statewide Importance. Under the A7C0FECV-C-Initial Alternative there would be a loss of 3.4 ha (8.5 ac) and under the A7C-FECV-C-Ultimate Alternative there would be loss of 3.5 ha (8.6 ac).

6.3.6 ALIGNMENT 7 CORRIDOR-FAR EAST CROSSOVER-AGRICULTURAL FIELDS VARIATION-INITIAL AND ULTIMATE ALTERNATIVES

The impacts of the A7C-FECV-AF-Initial and Ultimate Alternatives on agricultural resources on MCB Camp Pendleton would be the same as the impacts described earlier for the FEC-AFV-Initial and Ultimate Alternatives.

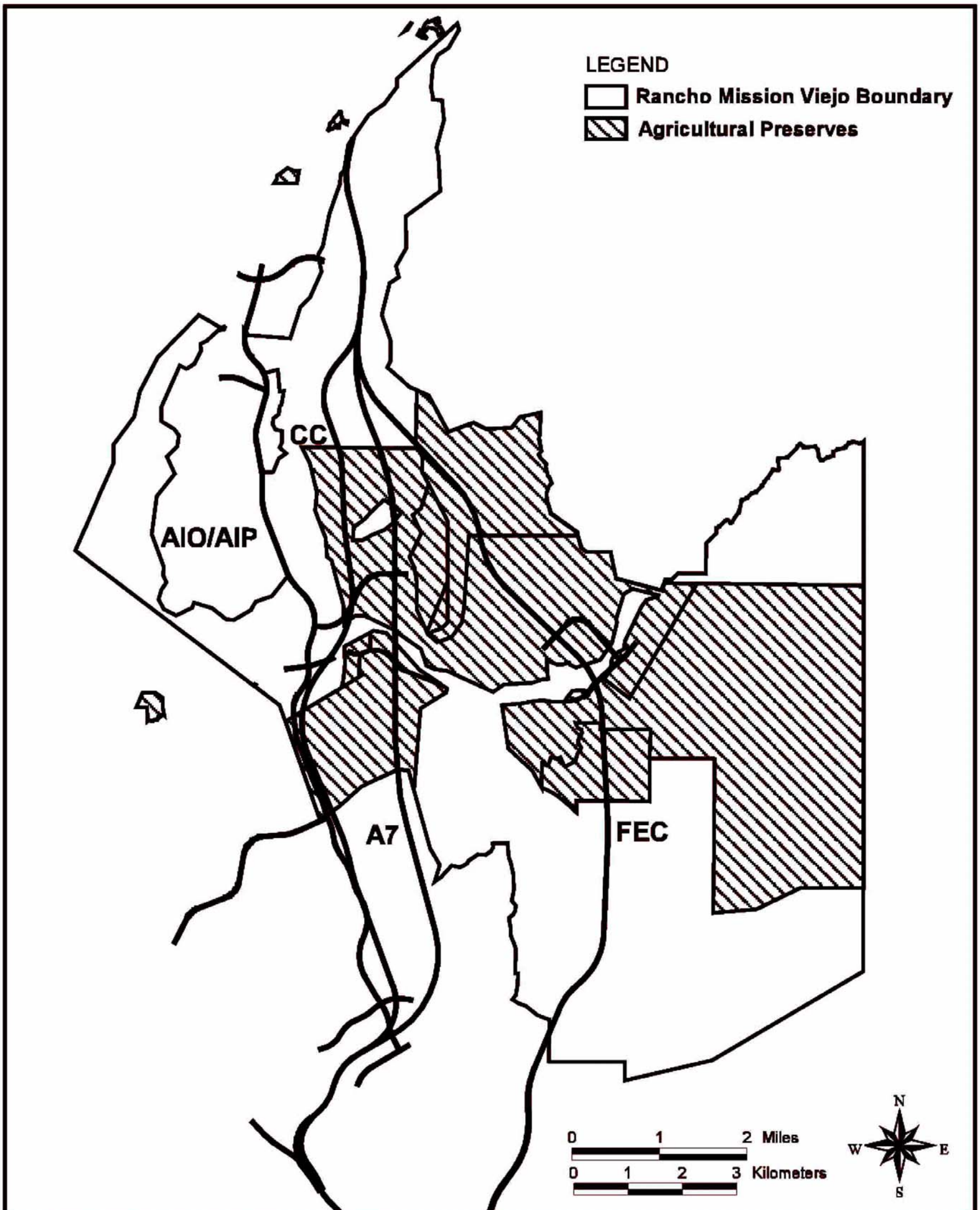
6.3.7 OTHER BUILD ALTERNATIVES AND THE NO ACTION ALTERNATIVES

The remaining build alternatives and the No Action Alternatives will not require any construction or disturbance of agricultural lands or resources on MCB Camp Pendleton. Therefore, these Alternatives will not result in impacts related to agricultural soils, Williamson Act contracts or agricultural operations on MCB Camp Pendleton.



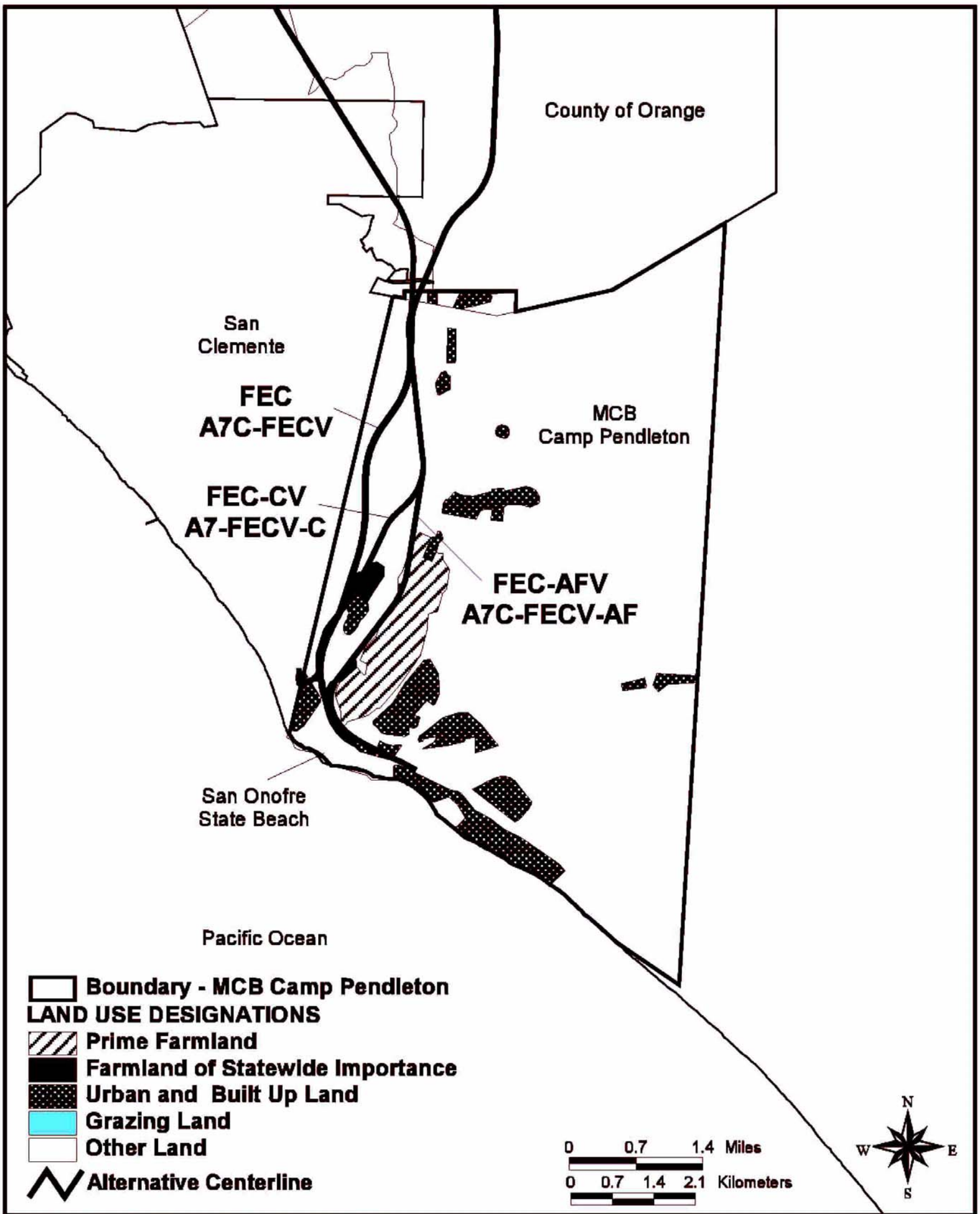
Source: Southern California Association of Governments, 2000.

Rancho Mission Viejo Agricultural Resources as Affected by the SOCTIIP Alternatives



Source: Southern California Association of Governments, 2000.

Rancho Mission Viejo Agricultural Preserves as Affected by the SOCTIIP Alternatives



Source: Southern California Association of Governments, 2000.

MCB Camp Pendleton Agricultural Resources as Affected by the SOCTIIP Alternatives

SECTION 7.0
MITIGATION MEASURES

7.1 MITIGATION MEASURES ORIGINALLY IDENTIFIED IN EIR NO. 3

Table 7.1-1 lists the mitigation measures originally provided in EIR No. 3 and indicates their applicability to the SOCTIIP alternatives. The reasons why each measure is or is not carried forward into the mitigation program for the SOCTIIP alternatives are provided in the following discussion. Mitigation measures originally identified in the Mitigation Monitoring Program (MMP) in Transportation Corridor Agencies (TCA) Final Environmental Impact Report (EIR) No. 3 (Final EIR Foothill Transportation Corridor Oso Parkway to Interstate 5, MBA, October 1991) have been incorporated, as appropriate, in the mitigation measures identified here for the South Orange County Transportation Infrastructure Improvement Project (SOCTIIP) alternatives. Table 7.1-1 is provided following the last page of text in this Section.

7.2 MITIGATION MEASURES FOR LAND USE

Table 7.2-1 lists the mitigation measures for adverse impacts of the SOCTIIP alternatives related to land use and identifies which measures apply to each SOCTIIP alternative. The mitigation measures for impacts of the SOCTIIP build alternatives related to land use are later in this Section.

All temporary use and permanent acquisition of right-of-way for the build alternatives will be conducted consistent with the requirements of the Uniform Relocation and Assistance Real Property Acquisition Polices Act of 1970, as amended (California Government Code, Chapter 16, Section 7260, et. seq.). A mitigation measure regarding compliance with this Act for all temporary use and permanent acquisition of property for the build alternatives is included in the Socioeconomics and Growth Inducing Impacts Technical Report. That measure, as referenced in this Section, would also apply to some of the land use and agricultural resources impacts of the SOCTIIP build alternatives.

<u>Measure LU-1: Impacts on Existing Land Uses</u>. If a SOCTIIP build Alternative is selected, design refinements to avoid or minimize impacts to existing land uses, related to the temporary use and/or permanent acquisition of property, will be incorporated in the final design of the selected Alternative, where prudent and feasible.

<u>Measure LU-2: TRW Capistrano Test Site</u>. During final design and/or construction, as appropriate, in coordination with TRW and Rancho Mission Viejo (landowner), the facility access road and front gate at the TRW Capistrano Test Site will be relocated to minimize disruption and impacts to TRW security and to maintain access to this facility. During final design and/or construction, as appropriate, the contractor will coordinate with TRW and incorporate design features and security measures, as appropriate, to mitigate construction related impacts to operations at the TRW Capistrano Test Site.

7.3 MITIGATION MEASURES FOR AGRICULTURAL RESOURCES

7.3.1 CALTRANS COMMUNITY IMPACT ASSESSMENT GUIDELINES

The Caltrans Community Impact Assessment (CIA) Guidelines suggest that if the environmental assessment concludes that the amount or type of farmland that would be adversely affected by a transportation improvement project would constitute a significant environmental impact, measures should be taken to protect the farmland. The CIA Guidelines lists mitigation measures for impacts related to agricultural resources in three general categories:

(1) Alternative alignments that do not affect agricultural resources.
(2) Reducing impacts by modifying the design to reduce the total impact or avoid agricultural resources.
(3) Replacement or preservation mitigation.

These types of mitigation are discussed below and were analyzed for feasibility for the identified impacts of the SOCTIIP alternatives related to agricultural resources. The following sections analyze these possible mitigation options to avoid or substantially reduce adverse impacts of the SOCTIIP alternatives related to agricultural resources.

7.3.1.1 Avoiding Agricultural Resources

The construction of bridges and widening of existing highways instead of the construction of new transportation facilities that impact farmland can be a farmland protection method, as recognized by the Natural Resources Conservation Service (NRCS). The Arterial Improvements Only (AIO), Arterial Improvements Plus High Occupancy Vehicle (HOV) and Mixed Flow Lanes on Interstate 5 (I-5) (AIP) and I-5 Widening Alternatives avoid or substantially reduce impacts to agricultural resources compared to the corridor alternatives which would impact agricultural resources on RMV or MCB Camp Pendleton, as described in detail in Section 6.0 (Impacts Related to Agricultural Resources).

7.3.1.2 Design Modifications

The Caltrans CIA Guidelines suggest that certain design measures can potentially reduce the total acreage of impacts to agricultural resources. These include minimizing shoulder width using concrete median barriers instead of wider medians. However, these types of design exceptions or modifications are generally not refined until final design. It is anticipated that, if a SOCTIIP build alternative is selected for implementation, design refinements would be incorporated as feasible without affecting the safety or operation of the road, to avoid or minimize impacts on resources, including agricultural resources.

7.3.1.3 Replacement of Resources

The last type of mitigation for agricultural impacts suggested by the CIA Guidelines is leasing right-of-way for agricultural purposes where no immediate or near future need exists for the farmland's use for transportation or acquiring (leasing or buying) land and placing a

conservation easement on alternate farmland parcels. Agricultural easements involve permanent restrictions on the use of land from more intensive purposes. The property ownership does not change. While easements may be pursued by local governments, easements that limit the future use of land do not provide mitigation for the loss of agricultural land. An easement preventing agricultural land from being converted to a non-farm use does not create new farmland and does not compensate for the conversion of farmland.

Even if such easements were mitigation, an easement is not feasible because of the high cost of land in south Orange County. Raw land costs in Orange County are believed to be approximately $50,000 per acre (based on mitigation fees for coastal sage scrub habitat replacement set by the United States Fish and Wildlife Service). This cost does not reflect value associated with opportunity costs for other development.

The typical standard for lost resources is replacement. However, with agricultural land, replacement is difficult and very expensive. In Orange County, the cost alone would make replacement as a mitigation measure infeasible, as market conditions for land continue to heavily favor development over agricultural uses. This is illustrated by the announcement of proposed plans for development of approximately 5,581 ha (13,780 acres) of the Rancho Mission Viejo for non-agricultural uses.

In summary, review of the guidance provided in the CIA Guidelines and published court decisions on mitigation measures for loss of agricultural land did not result in the identification of specific mitigation measures for agricultural resources impacts under the SOCTIIP build alternatives. Refer to Section 7.3.2, below for measures proposed to reduce the adverse impacts of the build alternatives related to agricultural resources.

7.3.2 MITIGATION MEASURES FOR AGRICULTURAL RESOURCES

Table 7.3-1 lists the mitigation measures for adverse impacts related to agricultural resources and identifies which measures apply to each SOCTIIP alternative.

7.3.2.1 Measures for Agricultural Resources on Rancho Mission Viejo

<u>Measure AG-1 . Existing Operations on RMV</u>. During final design, and in coordination with RMV and its agricultural leaseholders, the contractor will finalize the realignments of access roads on the ranch to provide cattle and equipment crossings to minimize impediments to cattle movement and routine agricultural operations and normal business activities.

<u>Measure AG-2: Existing Operations on RMV</u>. Prior to the start of any construction activities, any corrals and/or windmills within the disturbance limits of a SOCTIIP build alternative will be relocated or replaced. In the event that the RMV or the leaseholder does not want the facility relocated, appropriate compensation for the facility will be provided.

7.3.2.2 Measures for Agricultural Resources on MCB Camp Pendleton

Measure AG-3: Agricultural Operations on Camp Pendleton (San Clemente Ranch). During final design, the contractor will develop a realigned access road for the San Clemente Ranch to ensure all-weather access to the agricultural operations in the outlease area on MCB Camp Pendleton. The timing of the construction of this realigned access road will be coordinated with the agricultural operator to ensure that peak operation times are not affected. The realigned road must be completed prior to closure of the existing road.

In addition to mitigation measures AG-1, AG-2 and AG-3, above, which identify specific actions to avoid, minimize or compensate for potential adverse impacts related to agricultural resources, the following commitment is included in the project alternatives:

Commitment AGC-1: Existing Operations on RMV. Prior to the start of any construction activity, written notification will be provided to agricultural property owners or leaseholders immediately adjacent to the disturbance limits for the SOCTIIP build Alternative. The notification is to indicate the intent to begin construction, including an estimated date for the start of construction. This notification shall be provided at least three, but no more than 12, months prior to the start of construction activity.

TABLE 7.1-1
PROPOSED STATUS OF MITIGATION MEASURES FROM EIR NO. 3

Mitigation Measures From the MMP in EIR No. 3	PROPOSED STATUS
Measure 4 – Agricultural Resources. Prior to start of construction activity, the TCA shall provide written notification to agricultural property owners or leaseholders within the corridor right-of-way of the TCA's intent to begin construction activity. This notification shall be at least 3 month, but no longer than 12 months prior to start of construction activity.	This measure has been incorporated in current Commitment AGC-1.
Measure 5 – Agricultural Resources. In conjunction with final design, the TCA shall coordinate with Rancho Mission Viejo and leaseholders (e.g., TRW, Ford Aerospace, and Riverside Cement) to provide cattle and equipment crossings to minimize impediments to cattle movement and routine operations and normal business activities.	This measure has been incorporated in current measure AG-1.
Measure 6 – Agricultural Resources. Prior to start of construction activities, the TCA shall relocate, replace or pay for replacement (at fair market value) of any corrals and/or windmills located within the Corridor right-of-way.	This measure has been incorporated in current measure AG-2.
Measure 7 – Agricultural Resources. In conjunction with final design, the TCA, in conjunction with the County of and Rancho Mission Viejo, shall secure an amendment to the Agricultural Preserve Agreement between the County of Orange and Rancho Mission Viejo to remove the right-of-way required for the corridor alignment from agricultural preserves.	This measure has not been incorporated because TCA is not a party to this agreement. Therefore, any amendments would be undertaken by RMV, the Landowner.

TABLE 7.1-1
PROPOSED STATUS OF MITIGATION MEASURES FROM EIR NO. 3

Mitigation Measures From the MMP in EIR No. 3	PROPOSED STATUS
Measure 43 – Land Use. Any property required as right-of-way for the selected alignment will be acquired by the TCA in conformance with Section 301 of the Uniform Relocation Assistance and Real Property Act of 1970, Public law 91-646; Chapter 16 of Provision 7 of Title 1 of the Government Code; and Title 25, Chapter 6, of the California Code of Regulations.	A measure addressing right-of-way acquisition and relocation, consistent with the requirements of the Uniform Relocation and Assistance Real Property Acquisition Policies Act of 1970 will be provided in the Socioeconomics and Growth Inducing Technical Report. Therefore, no measure for right-of-way acquisition and relocation is necessary for land use related impacts and measure 43 from TCA EIR No. is proposed to be deleted and replaced with the updated measure in the Socioeconomics and Growth Inducing Impacts Technical Report.
Measure 44 – Land Use. In conjunction with final design, the TCA shall relocate, in coordination with TRW and Rancho Mission Viejo (landowner), the facility access road and front gate to minimize disruption and impacts to TRW security.	This measure has been incorporated in current measure LU-2.
Measure 59 – Relevant Planning Programs. All requirements of the Coastal Zone Management Act shall be met.	This measure does not provide mitigation of an impact. It simply states the law. Compliance with the Federal Coastal Zone Management Act (CZMA) is mandatory for any alternative that results in adverse impacts under the CZMA. Therefore, it does not really address or mitigate an impact and a specific mitigation measure is not required.
Measure 60 – Relevant Planning Programs. Analysis pertaining to Section 4(f) of the Department of Transportation Act of 1966 and Section 106 of the Nation Historic Preservation Act shall be complied with through the National Environmental Policy Act (NEPA) environmental documentation process.	This measure describes mandatory compliance with Section 4(f) and Section 106. These processes are documented in the Recreation Resources and Cultural Resources Technical Reports, respectively. Compliance with these processes is mandatory for any alternative that potentially results in impacts on defined Section 4(f) or Section 106 resources.

TABLE 7.2-1
APPLICABILITY OF LAND USE AND AGRICULTURAL MITIGATION MEASURES BY ALTERNATIVE

Alternatives	LU-1	LU-2	AGC-1	AG-1	AG-2			AG-3
FEC - Initial	✔	✔	✔	✔	✔			✔
FEC - Ultimate	✔	✔	✔	✔	✔			✔
FEC-TV - Initial	✔	--	✔	✔	✔			--
FEC-TV - Ultimate	✔	--	✔	✔	✔			--
FEC-CV - Initial	✔	✔	✔	✔	✔			✔
FEC- CV - Ultimate	✔	✔	✔	✔	✔			✔
FEC-AFV - Initial	✔	✔	✔	✔	✔			✔
FEC-AFV - Ultimate	✔	✔	✔	✔	✔			✔
FEC-OHV - Initial	✔	--	✔	✔	✔			--
FEC-OHV - Ultimate	✔	--	✔	✔	✔			--
FEC-APV - Initial	✔	✔	✔	✔	✔			--
FEC-APV - Ultimate	✔	✔	✔	✔	✔			--
FEC-W – Initial	✔	--	✔	✔	✔			✔
FEC-W – Ultimate	✔	--	✔	✔	✔			✔
FEC-M – Initial	✔	✔	✔	✔	✔			✔
FEC-M – Ultimate	✔	✔	✔	✔	✔			✔
CC – Initial	✔	--	✔	✔	✔			--
CC – Ultimate	✔	--	✔	✔	✔			--
CC-ALPV – Initial	✔	--	✔	✔	✔			--
CC-ALPV – Ultimate	✔	--	✔	✔	✔			--
CC-OHV – Initial	✔	--	✔	✔	✔			--
CC-OHV – Ultimate	✔	--	✔	✔	✔			--
A7C – Initial	✔	--	✔	✔	✔			--
A7C – Ultimate	✔	--	✔	✔	✔			--
A7C-7SV – Initial	✔	--	✔	✔	✔			--
A7C-7SV – Ultimate	✔	--	✔	✔	✔			--
A7C-FECV – Initial	✔	--	✔	✔	✔			✔
A7C-FECV – Ultimate	✔	--	✔	✔	✔			✔
A7C-FECV-C – Initial	✔	--	✔	✔	✔			✔
A7C-FECV-C – Ultimate	✔	--	✔	✔	✔			✔
A7C-FECV-AF – Initial	✔	--	✔	✔	✔			✔
A7C-FECV-AF – Ultimate	✔	--	✔	✔	✔			✔
A7C-OHV – Initial	✔	--	✔	✔	✔			--
A7C-OHV – Ultimate	✔	--	✔	✔	✔			--
A7C-ALPV – Initial	✔	--	✔	✔	✔			--
A7C-ALPV – Ultimate	✔	--	✔	✔	✔			--
A7C-FEC-M - Initial	✔	--	✔	✔	✔			✔
A7C-FEC-M - Ultimate	✔	--	✔	✔	✔			✔
AIO	✔	--	✔	--	✔			--
AIP	✔	--	✔	--	✔			--
I-5	✔	--	--	--	✔			--
No Action-OCP	--	--	--	--	--			--
No Action-RMV	--	--	--	--	--			--

SECTION 8.0
CEQA SIGNIFICANCE

The California Environmental Quality Act (CEQA) requires that each significant impact be identified in the Environmental Impact Report (EIR). This Section identifies the CEQA thresholds of significance for determining whether an impact of a South Orange County Transportation Infrastructure Improvement Project (SOCTIIP) alternative is significant related to land use and agricultural resources. This section also identifies the significance of the impacts of the SOCTIIP alternatives related to land use and agricultural resources after the implementation of the mitigation measures described in Section 7.0 (Mitigation Measures).

8.1 CEQA THRESHOLDS OF SIGNIFICANCE

8.1.1 THRESHOLDS OF SIGNIFICANCE FOR LAND USE AND PLANNING

A SOCTIIP alternative would be considered to result in significant impacts related to land use and planning if it:

- Conflicts with an adopted land use plan, plan policy or regulation of an agency with jurisdiction over the project, including but not limited to General Plans (GPs), Specific Plans (SPs), Local Coastal Programs (LCPs) or Zoning Ordinances (ZOs) adopted for the purpose of avoiding or mitigating an environmental effect or conflict with the Camp Pendleton Integrated Land Use Management Plan (INRMP).

- Conflicts with any applicable Habitat Conservation Plan (HCP) or Natural Community Conservation Plan (NCCP).

- Physically divides an established community.

8.1.2 THRESHOLDS OF SIGNIFICANCE FOR AGRICULTURAL RESOURCES

A SOCTIIP alternative would be considered to result in significant impacts related to agricultural resources if it:

- Converts Prime Farmland, Unique Farmland or Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program (FMMP) of the California Resources Agency (CRA), to non-agricultural use.

- Conflicts with existing zoning for agricultural use or a Williamson Act contract (agricultural preserve).

- Involves other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use.

In addition, the Caltrans Community Impact Assessment (CIA) Guidelines state that "The conversion of agricultural land to other uses may be a significant impact that cannot always be

mitigated. In those situations, to satisfy the requirements under CEQA, the decision makers would have to conclude that social or economic factors do not make it feasible to mitigate the conversion." (Source: Community Impact Assessment, Caltrans Environmental Handbook, Volume 4, June 1997, pp. 51.)

8.2 SIGNIFICANT IMPACTS TO LAND USE, MITIGATION MEASURES AND LEVEL OF SIGNFICANCE AFTER MITIGATION

8.2.1 SHORT TERM, CONSTRUCTION IMPACTS

The construction of the SOCTIIP build alternatives may require the acquisition or renting of land for temporary use during construction only. This may include land to accommodate construction staging, materials storage, equipment storage and other activities during construction only. At the completion of the construction of a SOCTIIP build alternative, these areas would no longer be needed for the SOCTIIP build alternative. Remainder parcels used for temporary construction purposes would be anticipated to be sold or retained in the right-of-way, as appropriate. The short term use of this land for the construction of the SOCTIIP build alternatives would not be an adverse impact.

Other potential short term impacts on existing and planned land uses near the SOCTIIP build alternatives could include air, noise and traffic impacts associated with construction of a SOCTIIP build alternative. Those potential impacts are discussed in detail in the air quality, traffic and noise technical reports.

8.2.2 SIGNIFICANCE OF LONG TERM IMPACTS TO LAND USE

Table 8-1 summarizes the potential long term land use impacts of the SOCTIIP alternatives and identifies the significance of those impacts as required under CEQA.

As of November 2002, preliminary information on the South NCCP was released regarding ten possible configurations for the South NCCP (South Orange County Coordinated Planning Process, http://pdsd.oc.ca.gov/soccpp/index.htm "Reserve Alternatives," (October 2002)). The configurations vary from small to large areas of development in the undeveloped part of the SOCTIIP study area. At the time of preparation of this technical report, information regarding these configurations was not available to assess whether or not any of the SOCTIIP build alternatives would impact the design of that planned NCCP. A Notice of Intent to prepare an Environmental Impact Statement (EIS)/EIR for the South NCCP was published August 23, 2001 in the Federal Register (66 F.R. 44372). The Notice did not provide detailed information regarding the proposed South NCCP. Therefore, no evaluation was made for the potential impacts of the SOCTIIP alternatives related to that threshold.

8.2.3 LEVEL OF SIGNIFICANCE OF LONG TERM IMPACTS TO LAND USE AFTER MITIGATION

Table 8-2 summarizes the potentially significant adverse land use impacts of the SOCTIIP alternatives, proposed mitigation and the level of significance after implementation of the identified mitigation measures.

8.3 SIGNIFICANT IMPACTS TO AGRICULTURAL RESOURCES, MITIGATION MEASURES AND LEVEL OF SIGNFICANCE AFTER MITIGATION

8.3.1 SHORT TERM, CONSTRUCTION IMPACTS

Short term impacts to agricultural resources are impacts due to construction that do not involve their permanent conversion. This may include land to accommodate construction staging, materials storage, equipment storage and other activities during construction only.

8.3.2 SIGNIFICANCE OF LONG TERM IMPACTS TO AGRICULTURAL RESOURCES

Table 8-1 summarizes the potential long term impacts of the SOCTIIP alternatives related to agricultural resources and identifies the significance of those impacts as required under CEQA.

8.3.3 LEVEL OF SIGNIFICANCE OF LONG TERM IMPACTS TO AGRICULTURAL RESOURCES AFTER MITIGATION

Table 8-2 summarizes the potentially significant adverse impacts of the SOCTIIP alternatives related to agricultural resources, proposed mitigation and the level of significance after implementation of the identified mitigation measures.

TABLE 8-1
SUMMARY OF THRESHOLDS AND SIGNIFICANT ADVERSE IMPACTS BY ALTERNATIVE

Alternative	Land Use Impacts			Agricultural Impacts		
	Conflicts with an adopted land use plan, plan policy or regulation of an agency with jurisdiction over the project, including but not limited to GPs, SPs, LCPs or ZOs) adopted for the purpose of avoiding or mitigating an environmental effect.	Conflicts with any applicable HCP or NCCP.	Physically divides an established community.	Converts Farmland, as shown on maps prepared pursuant to the FMMP of the CRA, to non-agricultural use.	Conflicts with existing zoning for agricultural use or a Williamson Act contract (agricultural preserve).	Involves other changes in the existing environment which, due to their location or nature, could result in conversion of "Farmland" to non-agricultural use.
FEC-I	Significant	Not Significant	Not Significant	Significant	Significant	Significant
FEC-U	Significant	Not Significant	Not Significant	Significant	Significant	Significant
FEC-CV-I	Significant	Not Significant	Not Significant	Significant	Significant	Significant
FEC-CV-U	Significant	Not Significant	Not Significant	Significant	Significant	Significant
FEC-AFV-I	Significant	Not Significant	Not Significant	Significant	Significant	Significant
FEC-AFV-U	Significant	Not Significant	Not Significant	Significant	Significant	Significant
FEC-OHV-I	Not Significant	Not Significant	Not Significant	Significant	Significant	Significant
FEC-OHV-U	Not Significant	Not Significant	Not Significant	Significant	Significant	Significant
FEC-APV-I	Not Significant	Not Significant	Not Significant	Significant	Significant	Significant
FEC-APV-U	Not Significant	Not Significant	Not Significant	Significant	Significant	Significant
FEC-TV-I	Significant	Not Significant	Significant	Significant	Significant	Significant
FEC-TV-U	Significant	Not Significant	Significant	Significant	Significant	Significant
FEC-W-I	Significant	Not Significant	Not Significant	Significant	Significant	Significant
FEC-W-U	Significant	Not Significant	Not Significant	Significant	Significant	Significant
FEC-M-I	Significant	Not Significant	Not Significant	Significant	Significant	Significant
FEC-M-U	Significant	Not Significant	Not Significant	Significant	Significant	Significant
CC-I	Significant	Not Significant	Significant	Significant	Significant	Significant
CC-U	Significant	Not Significant	Significant	Significant	Significant	Significant
CC-ALPV-I	Significant	Not Significant	Significant	Significant	Significant	Significant
CC-ALPV-U	Significant	Not Significant	Significant	Significant	Significant	Significant
CC-OHV-I	Not Significant	Not Significant	Not Significant	Significant	Significant	Significant
CC-OHV-U	Not Significant	Not Significant	Not Significant	Significant	Significant	Significant
A7C-I	Significant	Not Significant	Significant	Significant	Significant	Significant
A7C-U	Significant	Not Significant	Significant	Significant	Significant	Significant
A7C-7SV-I	Significant	Not Significant	Significant	Significant	Significant	Significant

TABLE 8-1
SUMMARY OF THRESHOLDS AND SIGNIFICANT ADVERSE IMPACTS BY ALTERNATIVE

Alternative	Land Use Impacts			Agricultural Impacts		
	Conflicts with an adopted land use plan, plan policy or regulation of an agency with jurisdiction over the project, including but not limited to GPs, SPs, LCPs or ZOs) adopted for the purpose of avoiding or mitigating an environmental effect.	Conflicts with any applicable HCP or NCCP.	Physically divides an established community.	Converts Farmland, as shown on maps prepared pursuant to the FMMP of the CRA, to non-agricultural use.	Conflicts with existing zoning for agricultural use or a Williamson Act contract (agricultural preserve).	Involves other changes in the existing environment which, due to their location or nature, could result in conversion of "Farmland" to non-agricultural use.
A7C-7SV-U	Significant	Not Significant	Significant	Significant	Significant	Significant
A7C-OHV-I	Not Significant	Not Significant	Not Significant	Significant	Significant	Significant
A7C-OHV-U	Not Significant	Not Significant	Not Significant	Significant	Significant	Significant
A7C-ALPV-I	Significant	Not Significant	Significant	Significant	Significant	Significant
A7C-ALPV-U	Significant	Not Significant	Significant	Significant	Significant	Significant
A7C-FECV-I	Significant	Not Significant	Significant	Significant	Significant	Significant
A7C-FECV-U	Significant	Not Significant	Significant	Significant	Significant	Significant
A7C-FECV-C-I	Significant	Not Significant	Significant	Significant	Significant	Significant
A7C-FECV-C-U	Significant	Not Significant	Significant	Significant	Significant	Significant
A7C-FECV-AF-I	Significant	Not Significant	Significant	Significant	Significant	Significant
A7C-FECV-AF-U	Significant	Not Significant	Significant	Significant	Significant	Significant
A7C-FEC-M-I	Significant	Not Significant	Not Significant	Not Significant	Significant	Significant
A7C-FEC-M-U	Significant	Not Significant	Not Significant	Not Significant	Significant	Significant
AIO	Significant	Not Significant	Significant[1]	Significant	Significant	Significant
AIP	Significant	Not Significant	Significant[1]	Significant	Significant	Significant
I-5	Significant	Not Significant	Significant[1]	Not Significant	Not Significant	Not Significant
No Action OCP	Significant	Not Significant	Not Significant	Not Significant	Not Significant	Not Significant
No Action RMV	Significant	Not Significant	Not Significant	Not Significant	Not Significant	Not Significant

[1] Even though physical barriers such as I-5 or major arterials such as Antonio Parkway already are in place, the expansion of these facilities would further physically divide existing communities as a result of wider roads, and associated ramps and interchanges.

TABLE 8-2
SUMMARY OF IMPACTS, MITIGATION MEASURES AND LEVEL OF SIGNFICANCE AFTER MITIGATION

PARAMETER	ADVERSE IMPACTS	MITIGATION MEASURES (1)	CEQA SIGNIFICANCE AFTER MITIGATION
FEC-INITIAL AND ULTIMATE ALTERNATIVES			
Land Use	Existing uses and leases on RMV would be directly affected.	LU-1 (Existing Uses) and LU-2 (TRW). See note 1, below.	Not significant.
	Uses in San Onofre State Beach Cristianitos Subunit would be impacted.	See note 1, below.	Significant.
Agriculture	51 hectares (ha, 127 acres (ac) (I) or 62 ha (153 ac) (U) of rated agricultural land will be impacted.	AG-1 through AG-3 (RMV Agricultural Operations) and AG-4 (Camp Pendleton Agricultural Operations).	Significant.
	178 ha (441 ac) (I) or 183 ha (452 ac) (U) of agricultural preserves will be impacted.	None.	Significant.
FEC-TV-INITIAL AND ULTIMATE ALTERNATIVES			
Land Use	Existing and planned land uses in RMV and the City of San Clemente would be directly impacted.	LU-1 (Existing Land Uses). See note 1, below.	Significant.
	Established communities in the City of San Clemente would be physically divided.	LU-1 (Existing Land Uses). See note 1, below.	Significant.
Agriculture	49 ha (120 ac) (I) or 59 ha (145 ac) (U) of rated agricultural land will be impacted.	AG-1 through AG-3 (RMV Agricultural Operations).	Significant.
	178 ha (441 ac) (I) or 183 ha (452 ac) (U) of agricultural preserves will be impacted.	None.	Significant.
FEC-CV-INITIAL AND ULTIMATE ALTERNATIVES			
Land Use	Existing uses and leases on RMV would be directly affected.	LU-1 (Existing Uses) LU-2 (TRW). See note 1, below.	Not significant.
	Uses in San Onofre State Beach Cristianitos Subunit and Camp Pendleton would be impacted.	See note 1, below.	Significant.
Agriculture	52 ha (129 ac) (I) or 62 ha (153 ac) (U) of rated agricultural land will be impacted.	AG-1 through AG-3 (RMV Agricultural Operations) and AG-4 (Camp Pendleton Agricultural Operations).	Significant.
	178 ha (441 ac) (I) or 183 ha (452 ac) (U) of agricultural preserves will be impacted.	None.	Significant.
FEC-AFV-INITIAL AND ULTIMATE ALTERNATIVES			
Land Use	Existing uses and leases on RMV would be directly affected.	LU-1 (Existing Uses) and LU-2 (TRW). See note 1, below.	Not significant.

TABLE 8-2
SUMMARY OF IMPACTS, MITIGATION MEASURES AND LEVEL OF SIGNFICANCE AFTER MITIGATION

PARAMETER	ADVERSE IMPACTS	MITIGATION MEASURES (1)	CEQA SIGNIFICANCE AFTER MITIGATION
	Uses in San Onofre State Beach Cristianitos Subunit and Camp Pendleton would be impacted.	See note 1, below.	Significant.
Agriculture	63 ha (155 ac (I) or 75 ha (185 ac) (U) of rated agricultural land will be impacted.	AG-1 through AG-3 (RMV Agricultural Operations) and AG-4 (Camp Pendleton Agricultural Operations).	Significant.
	178 ha (441 ac) (I) or 183 ha (452 ac) (U) of agricultural preserves will be impacted.	None.	Significant.
FEC-OHV-INITIAL AND ULTIMATE ALTERNATIVES			
Land Use	Existing uses and leases on RMV would be directly affected.	LU-1 (Existing Uses). See note 1, below.	Not significant.
Agriculture	20 ha (51 ac) (I) or 25 ha (61 ac) (U) of rated agricultural land will be impacted.	AG-1 through AG-3 (RMV Agricultural Operations).	Significant.
	75 ha (185 ac) (I) or 109 (270 ac) (U) of agricultural preserves will be impacted.	None.	Significant.
FEC-APV-INITIAL AND ULTIMATE ALTERNATIVES			
Land Use	Existing uses and leases on RMV would be directly affected.	LU-1 (Existing Uses) and LU-2 (TRW). See note 1, below.	Not significant.
Agriculture	49 ha (120 ac) (I) or 58 ha (144 ac) (U) of rated agricultural land will be impacted.	AG-1 through AG-3 (RMV Agricultural Operations).	Significant.
	178 ha (441 ac) (I) or 183 ha (452 ac) (U) of agricultural preserves will be impacted.	None.	Significant.
FEC-W-INITIAL AND ULTIMATE ALTERNATIVES			
Land Use	Existing uses and leases on RMV would be directly affected.	LU-1 (Existing Uses). See note 1, below.	Not significant.
	Uses in San Onofre State Beach Cristianitos Subunit would be impacted.	See note 1, below.	Significant.
Agriculture	34 ha (83 ac) (I) or 32 ha (85 ac) (U) of rated agricultural land will be impacted.	AG-1 through AG-3 (RMV Agricultural Operations) and AG-4 (Camp Pendleton Agricultural Operations).	Significant.
	109 ha (269 ac) (I) or 111 ha (275 ac) (U) of agricultural preserves will be impacted.	None.	Significant.
FEC-M-INITIAL AND ULTIMATE ALTERNATIVES			
Land Use	Existing uses and leases on RMV would be directly affected.	LU-1 (Existing Uses) and LU-2 (TRW). See note 1, below.	Not significant.

TABLE 8-2
SUMMARY OF IMPACTS, MITIGATION MEASURES AND LEVEL OF SIGNFICANCE AFTER MITIGATION

PARAMETER	ADVERSE IMPACTS	MITIGATION MEASURES (1)	CEQA SIGNIFICANCE AFTER MITIGATION
	Uses in San Onofre State Beach Cristianitos Subunit would be impacted.	See note 1, below.	Significant.
Agriculture	22 ha (56 ac) (I) or 25 ha (61 ac) (U) of rated agricultural land will be impacted.	AG-1 through AG-3 (RMV Agricultural Operations) and AG-4 (Camp Pendleton Agricultural Operations).	Significant.
	123 ha (304 ac) (I) or 133 ha (328 ac) (U) of agricultural preserves will be impacted.	None.	Significant.
CC-INITIAL AND ULTIMATE ALTERNATIVES			
Land Use	Existing and planned land uses in the City of San Clemente would be directly impacted.	LU-1 (Existing Land Uses). See note 1, below.	Significant.
	Established communities in the City of San Clemente would be physically divided.	LU-1 (Existing Land Uses).	Significant.
	Existing uses in the County of Orange would be directly impacted.	LU-1 (Existing Land Uses). See note 1, below.	Not significant.
Agriculture	18 ha (45 ac) (I) or 22 ha (55 ac) (U) of rated agricultural land will be impacted.	AG-1 through AG-3 (RMV Agricultural Operations).	Significant.
	84 ha (208 ac) (I) or 110 ha (272 ac) (U) of agricultural preserves will be impacted.	None.	Significant.
CC-ALPV-INITIAL AND ULTIMATE ALTERNATIVES			
Land Use	Existing and planned land uses in the City of San Clemente would be directly impacted.	LU-1 (Existing Land Uses). See note 1, below.	Significant.
	Established communities in the City of San Clemente would be physically divided.	LU-1 (Existing Land Uses).	Significant.
	Existing uses in the County of Orange would be directly impacted.	LU-1 (Existing Land Uses). See note 1, below.	Significant.
Agriculture	18 ha (45 ac) (I) or 22 ha (55 ac) (U) of rated agricultural land will be impacted.	AG-1 through AG-3 (RMV Agricultural Operations).	Significant.
	84 ha (208 ac) (I) or 110 ha (272 ac) (U) of agricultural preserves will be impacted.	None.	Significant.

TABLE 8-2
SUMMARY OF IMPACTS, MITIGATION MEASURES AND LEVEL OF SIGNFICANCE AFTER MITIGATION

PARAMETER	ADVERSE IMPACTS	MITIGATION MEASURES (1)	CEQA SIGNIFICANCE AFTER MITIGATION
CC-OHV-INITIAL AND ULTIMATE ALTERNATIVES			
Land Use	Existing uses and leases on RMV would be directly affected.	LU-1 (Existing Uses). See note 1, below.	Not significant.
Agriculture	10 ha (24 ac) (I) or 17 ha (42 ac) (U) of rated agricultural land will be impacted.	AG-1 through AG-3 (RMV Agricultural Operations).	Significant.
	59 ha (145 ac) (I) or 80 ha (199 ac) (U) of agricultural preserves will be impacted.	None.	Significant.
A7C-INITIAL AND ULTIMATE ALTERNATIVES			
Land Use	Existing and planned land uses within the City of San Clemente would be directly impacted.	LU-1 (Existing Land Uses). See note 1, below.	Significant
	Established communities in the City of San Clemente would be physically divided.	LU-1 (Existing Land Uses).	Significant
	Established uses the County of Orange would be directly impacted.	LU-1 (Existing Land Uses). See note 1, below.	Significant.
Agriculture	3 ha (8 ac) (I) or 4 ha (9 ac) (U) of rated agricultural land will be impacted.	AG-1 through AG-3 (RMV Agricultural Operations).	Significant.
	171 ha (423 ac) (I) or 183 ha (451 ac) (U) of agricultural preserves will be impacted.	None.	Significant.
A7C-7SV-INITIAL AND ULTIMATE ALTERNATIVES			
Land Use	Existing and planned land uses in the City of San Clemente would be directly impacted.	LU-1 (Existing Land Uses). See note 1, below.	Significant.
	Established communities in the City of San Clemente would be physically divided.	LU-1 (Existing Land Uses).	Significant.
	Existing and planned in uses in the County of Orange would be directly impacted.	LU-1 (Existing Land Uses). See note 1, below.	Significant.
Agriculture	3 ha (8 ac) (I) or 4 ha (9 ac) (U) of rated agricultural land will be impacted.	AG-1 through AG-3 (RMV Agricultural Operations).	Significant.
	171 ha (423 ac) (I) or 183 ha (451 ac) (U) of agricultural preserves will be impacted.	None.	Significant.
A7C-OHV-INITIAL AND ULTIMATE ALTERNATIVES			
Land Use	Existing uses and leases on RMV would be directly affected.	LU-1 (Existing Uses). See note 1, below.	Not significant.
Agriculture	2 ha (6 ac) (I) or 3 ha (7 ac) (U) of rated agricultural land will be impacted.	AG-1 through AG-3 (RMV Agricultural Operations).	Significant.

TABLE 8-2
SUMMARY OF IMPACTS, MITIGATION MEASURES AND LEVEL OF SIGNFICANCE AFTER MITIGATION

PARAMETER	ADVERSE IMPACTS	MITIGATION MEASURES (1)	CEQA SIGNIFICANCE AFTER MITIGATION
	77 ha (189 ac) (I) or 92 ha (228 ac) (U) of agricultural preserves will be impacted.	None.	Significant.
A7C-ALPV-INITIAL AND ULTIMATE ALTERNATIVES			
Land Use	Existing and planned land uses in the City of San Clemente and the County of Orange would be directly impacted.	LU-1 (Existing Land Uses). See note 1, below.	Significant.
	Established communities in the City of San Clemente would be physically divided.	LU-1 (Existing Land Uses).	Significant.
Agriculture	3 ha (8 ac) (I) or 4 ha (9 ac) (U) of rated agricultural land will be impacted.	AG-1 through AG-3 (RMV Agricultural Operations).	Significant.
	171 ha (423 ac) (I) or 183 ha (451 ac) (U) of agricultural preserves will be impacted.	None.	Significant.
A7C-FECV-INITIAL AND ULTIMATE ALTERNATIVES			
Land Use	Planned land uses in the City of San Clemente and existing and planned land uses in the County of Orange would be directly impacted.	LU-1 (Existing Land Uses). See note 1, below.	Significant.
	Established communities in the City of San Clemente and the County of Orange would be physically divided.	LU-1 (Existing Land Uses).	Significant.
	Uses within the San Onofre State Beach Cristianitos Subunit would impacted by this alternative.	See note 1, below.	Significant.
Agriculture	6 ha (14 ac) (I) or 6 ha (16 ac) (U) of rated agricultural land will be impacted.	AG-1 through AG-3 (RMV Agricultural Operations) and AG-4 (Camp Pendleton Agricultural Operations).	Significant.
	171 ha (423 ac) (I) or 183 ha (451 ac) (U) of agricultural preserves will be impacted.	None.	Significant.
A7C-FECV-C-INITIAL AND ULTIMATE ALTERNATIVES			
Land Use	Existing and planned land uses within the City of San Clemente and the County of Orange would be directly impacted.	LU-1 (Existing Land Uses). See note 1, below.	Significant.
	Uses in San Onofre State Beach Cristianitos Subunit would be impacted.	See note 1, below.	Significant.
	Established communities in the City of San Clemente and the County of Orange would be physically divided.	LU-1 (Existing Land Uses).	Significant.

TABLE 8-2
SUMMARY OF IMPACTS, MITIGATION MEASURES AND LEVEL OF SIGNFICANCE AFTER MITIGATION

PARAMETER	ADVERSE IMPACTS	MITIGATION MEASURES (1)	CEQA SIGNIFICANCE AFTER MITIGATION
	Established uses the County of Orange would be directly impacted.	LU-1 (Existing Land Uses). See note 1, below.	Significant.
Agriculture	6 ha (15 ac) (I) or 6 ha (15 ac) (U) of rated agricultural land will be impacted.	AG-1 through AG-3 (RMV Agricultural Operations) and AG-4 (Camp Pendleton Agricultural Operations).	Significant.
	171 ha (423 ac) (I) or 183 ha (451 ac) (U) of agricultural preserves will be impacted.	None.	Significant.
A7C-FECV-AF-INITIAL AND ULTIMATE ALTERNATIVES			
Land Use	Existing and planned land uses in the City of San Clemente and the County of Orange would be directly impacted.	LU-1 (Existing Land Uses). See note 1, below.	Significant.
	Uses in San Onofre State Beach Cristianitos Subunit would be impacted.	See note 1, below.	Significant.
	Established communities in the City of San Clemente and the County of Orange would be physically divided.	LU-1 (Existing Land Uses).	Significant.
Agriculture	17 ha (41 ac) (I) or 19 ha (48 ac) (U) of rated agricultural land will be impacted.	AG-1 through AG-3 (RMV Agricultural Operations) and AG-4 (Camp Pendleton Agricultural Operations).	Significant.
	171 ha (423 ac) (I) or 183 ha (451 ac) (U) of agricultural preserves will be impacted.	None.	Significant.
A7C-FEC-M-INITIAL AND ULTIMATE ALTERNATIVES			
Land Use	Existing uses and leases on RMV would be directly affected.	LU-1 (Existing Uses). See note 1, below.	Not significant.
	Uses in San Onofre State Beach Cristianitos Subunit would be impacted.	See note 1, below.	Significant.
Agriculture	3 ha (7 ac) (I) or 3 ha (7 ac) (U) of rated agricultural land will be impacted.	AG-1 through AG-3(RMV Agricultural Operations) and AG-4 (Camp Pendleton Agricultural Operations).	Significant.
	89 ha (220 ac) (I) or 92 ha (227 ac) (U) of agricultural preserves will be impacted.	None.	Significant.
AIO			
Land Use	Existing land uses in the County of Orange and the City of San Clemente would be directly impacted.	LU-1 (Existing Land Uses). See note 1, below.	Significant.

TABLE 8-2
SUMMARY OF IMPACTS, MITIGATION MEASURES AND LEVEL OF SIGNFICANCE AFTER MITIGATION

PARAMETER	ADVERSE IMPACTS	MITIGATION MEASURES (1)	CEQA SIGNIFICANCE AFTER MITIGATION
	Established communities in the County of Orange and the City of San Clemente would be physically divided.	LU-1 (Existing Land Uses).	Significant.
Agriculture	6 ha (14 ac) of rated agricultural land will be impacted.	AG-1 through AG-3 (RMV Agricultural Operations).	Significant.
	15 ha (37ac) of agricultural preserves will be impacted.	None.	Significant.
AIP			
Land Use	Existing land uses in the in the City of San Clemente, County of Orange and cities along I-5 would be directly impacted.	LU-1 (Existing Land Uses). See note 1, below.	Significant.
	Established communities in the County of Orange and the City of San Clemente would be physically divided.	LU-1 (Existing Land Uses).	Significant
Agriculture	6 ha (14 ac) of rated agricultural land will be impacted.	AG-1 through AG-3 (RMV Agricultural Operations).	Significant
	15 ha (37ac) of agricultural preserves will be impacted.	None.	Significant.
I-5			
Land Use	Existing and planned land uses along I-5 would be impacted.	LU-1 (Existing Land Uses). See note 1, below.	Significant.
	Established communities along I-5 would be physically divided.	LU-1 (Existing Land Uses).	Significant.
Agriculture	No impacts	None necessary.	Not significant.
NO ACTION-OCP			
Land Use	No Impacts.	None necessary.	Not significant.
Agriculture	No Impacts.	None necessary.	Not significant.
NO ACTION-RMV			
Land Use	No impacts.	None necessary.	Not significant.
Agriculture	No impacts.	None necessary.	Not significant.

(I) Initial Corridor.
(U) Ultimate Corridor.
(1) All temporary use and permanent acquisition of right-of-way for the build alternatives will be conducted consistent with the requirements of the Uniform Relocation and Assistance Real Property Acquisition Polices Act of 1970, as amended (California Government Code, Chapter 16, Section 7260, et. seq.). A mitigation measure regarding compliance with this Act for all temporary use and permanent acquisition of property for the build alternatives is included in the Socioeconomics and Growth Inducing Impacts Technical Report. That measure would also apply to the land use impacts of this alternative.

SECTION 9.0
GROWTH INDUCING IMPACTS

Land use and transportation are inherently related, as access is major component of land use planning and generally a component of the relative marketability of a parcel and its attendant land uses. Generally, growth inducing impacts are measured by actual or reasonably foreseeable changes in land uses. However, growth inducement is also affected by many other factors that are entirely independent of land use and transportation such as the local economy, demand for housing and other land uses, and other socioeconomic variables. The Socioeconomics and Growth Inducing Technical Report discusses the variables associated with the land use/transportation relationship and other variables associated with growth and potential growth inducement associated with the South Orange Transportation Infrastructure Improvement Project alternatives.

SECTION 10.0
CUMULATIVE IMPACTS RELATED TO LAND USE AND AGRICULTURAL RESOURCES

10.1 DEFINITION OF CUMULATIVE IMPACTS

Construction of the any of the South Orange County Transportation Infrastructure Improvement Project (SOCTIIP) build alternatives would result in the direct and indirect effects of that SOCTIIP alternative as well as the cumulative effects of the SOCTIIP project combined with other related past, present and reasonably foreseeable future actions. For this analysis of the potential cumulative effects of the SOCTIIP alternatives, the definition of cumulative impact in the Council on Environmental Quality (CEQ) regulations governing the implementation of the National Environmental Policy Act (NEPA) (40 CFR 1508.7) was used, as follows:

> "…the impact on the environment which results from the incremental impact of the action when added to other past, present and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time."

The analysis of the cumulative effects of the SOCTIIP alternatives also incorporates the suggestions in the CEQ's handbook titled "Considering Cumulative Effects Under the National Environmental Policy Act" (January 1997), which is intended as an informational document rather than formal agency guidance. In addition, the cumulative effects of the SOCTIIP alternatives were assessed in accordance with the Federal Highway Administration (FHWA) "Position Paper on Secondary and Cumulative Impact Assessment" (August 20, 1992). Based on the CEQ and FHWA discussions of cumulative effects, the following principles were applied to the assessment of cumulative effects of the SOCTIIP alternatives:

(1) Cumulative effects typically are caused by the aggregate effects of past, present and reasonably foreseeable 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.

(2) When other related actions are likely to affect a resource that is also affected by the proposed action, it does not matter who (federal, non-federal or private) has taken the related action(s).

(3) The scope of cumulative effects analyses can usually be limited to reasonable geographic bounds 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.

(4) 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).

Cumulative impacts as they relate to land use and agricultural resources in the SOCTIIP study area are centered on the potential for the cumulative projects to result in the development of currently undeveloped agricultural land. There are a variety of potential land use and agricultural resources impacts discussed for the SOCTIIP alternatives in Sections 5.0 (Impacts to Land Use) and 6.0 (Impacts to Agricultural Resources). However, the most important consideration related to cumulative impacts is the potential aggregate effects of the SOCTIIP alternatives and other cumulative projects in the SOCTIIP study area. This analysis considers the potential cumulative land use and agricultural effects, if any, that would result from construction of the proposed SOCTIIP Alternatives, combined with construction of other development projects.

10.2 REGIONAL SETTING AND BACKGROUND

10.2.1 Growth and Development of Orange County

As discussed in Section 3.0 (Existing Environment Related to Land Use), south Orange County has experienced relatively rapid growth over the last two decades. This period of rapid growth resulted in the conversion of undeveloped areas that have historically been used for livestock and ranching operations, crop production or other agricultural uses, to suburban and urban uses. The area below the foothills was rich with mineral resources and mining and extraction operations have historically taken place in southern Orange County. These operations have also been or are in the process of gradually being phased out as these areas are developed in suburban and urban uses.

Table 10-1 is a list of major developments that have been approved for development in the SOCTIIP study area. Table 10-2 summarizes impacts related to Land Use for these projects. Table 10-3 shows some additional, smaller projects proposed in the study area. The general locations of these projects in the SOCTIIP study area are shown on Figure 10-1. This growth is expected to continue as pressure for new housing increases with the relatively strong job market and economy that Orange County has experienced in recent years. The County of Orange General Plan and Orange County Projections-2000 ("OCP-2000," Center for Demographic Research, adopted June 22, 2001) forecast build out of Orange County by 2025. There are only two major areas left in Orange County that do not have some level of major development entitlements at this time:

- North Ranch Policy Plan area directly east of and in the future annexation area of the City of Orange. This area is owned by The Irvine Company.

- The South Ranch area on the 10,250 ha (25,000-acre) Rancho Mission Viejo (RMV) property immediately east of the Cities of Mission Viejo and San Juan Capistrano. This area is not designated for future annexation to any city.

These two parcels represent the last major growth areas in the Orange County. As discussed in Sections 3.0 and 4.0 (Methodology), the RMV Company has submitted development plans to the County of Orange for the South Ranch which proposes 14,000 dwelling units (dus) in this area.

10.2.2 Transportation Plans

As the County's development plans build out, so will the County's transportation network. The Master Plan of Arterial Highways (MPAH) is the county-wide plan for the traffic and transportation network, which is overseen by the Orange County Transportation Authority. The MPAH identifies existing and planned transportation facilities. For the SOCTIIP study area, some of the planned facilities already have full or partial funding and will be constructed in the near future. These "committed" facilities are listed in Table 10-4. The planned facilities that do not have funding or will be constructed when future development is constructed are the "non-committed" facilities listed in Table 10-5.

In addition, the California Department of Transportation (Caltrans) has a number of improvement projects in the SOCTIIP study area related to the operation of transportation systems that it controls, such as I-5. These projects are listed in Table 10-6. Some of these projects are close to completion and some are still being studied. Table 10-6 also provides the status of the environmental documentation prepared for each project listed and/or its stage of study.

10.3 CUMULATIVE IMPACTS ON LAND USE

10.3.1 CONVERSION OF VACANT AND UNDEVELOPED LAND

A transportation project alone would not necessarily, by itself, be considered to have potential for cumulative impacts on land use. The cumulative development projects discussed above and shown in Tables 10-1 and 10-3 would contribute to the conversion of some of the last remaining undeveloped land in south Orange County. Table 10-2 shows the impacts to land use and mitigation measures associated with those impacts as shown in environmental and planning documents for those projects.

Development of the RMV property is expected within the next 25 years. As of October 2002, proposed development plans for the property included only general information on the location and type of proposed development on the RMV. Detailed planning data and statistics for the RMV proposal have not been submitted to the County of Orange. In its preliminary announcements about this proposed development, the owner/developer stated a desire to preserve some of the original cattle ranch and ranching operations on the northwestern part of the 10,125 ha (25,000 acre) ranch. In addition, open space preserves associated with the County's forthcoming Natural Community Conservation Plan (NCCP) are also assumed to be provided on the RMV although no information on NCCP reserves are available at this time. What can be concluded at this time is that, even without specific information about these two major planning projects, conversion of some of the land on the RMV from undeveloped to urban uses is inevitable. The question of how much will be developed versus how much stay in open space has yet to be determined. Therefore, implementation of the SOCTIIP corridor alternatives,

because they traverse the RMV, would contribute to a cumulative land use impact as a result of converting currently undeveloped land to an urban road use. The Arterial Improvements Only (AIO) and Arterial Improvements Plus High Occupancy Vehicle (HOV) and Mixed Flow Lanes on Interstate 5 (I-5) (AIP) Alternatives would incrementally contribute to cumulative impacts on the conversion of undeveloped land, for those arterial highway segments widened beyond their MPAH designations. However, this is not considered to be an adverse impact for two reasons. First, except for the RMV property, the study area is either developed or planned for development (refer to Section 6.4.2.2 in Growth Inducing Impacts). Second, the conversion of land to a road use for the corridor alternatives would not change the overall balance of different land uses planned in the adopted forecast, OCP-2000. This is also consistent with the CMP and Growth Management Element requirements for the provision of infrastructure.

The I-5 Widening (I-5) Alternative would not contribute to the conversion of undeveloped land because there is very little undeveloped land along this corridor. There would not be cumulative impacts to land use related to the conversion of undeveloped land to urban and suburban land under the I-5 Alternatives and the No Action Alternatives. This is because these alternatives would not result in any construction of transportation improvements in currently undeveloped areas.

10.3.2 RESIDENTIAL USES

There is substantial existing development in the SOCTIIP study area, especially residential uses. Orange County in general suffers from a shortage of housing and, specifically, a shortage in affordable housing. The Southern California Association of Governments (SCAG) has identified a jobs-housing imbalance in this region, defined as when there are more jobs in an area than there is available housing to support those jobs. The SOCTIIP build alternatives that would result in the acquisition of existing housing or the acquisition of areas planned for housing would exacerbate this condition. Therefore, there would be an adverse impact on residential uses as a result of all the SOCTIIP build alternatives except for the Far East Corridor-Complete (FEC), the Far East Corridor-Cristianitos Variation (FEC-CV), the Far East Corridor-Agricultural Fields Variation (FEC-AFV), the Far East Corridor-Ortega Highway (FEC-OHV), the Far East Corridor-West (FEC-W), the Far East Corridor-Modified (FEC-M), the Alignment 7 Corridor-Ortega Highway Variation (A7C-OHV), Central Corridor-Ortega Highway Variation Alternative (CC-OHV), the Far East Corridor-Avenida Pico Variation Alternative (FEC-APV), Alignment 7 Corridor-Far East Crossover-Modified (A7C-FEC-M) Alternatives which are in areas that do not include existing or planned residential uses. However, it should be noted that residential uses continue to be developed throughout Orange County, in Planned Communities and infill/redevelopment projects. Therefore, the loss of housing associated with the SOCTIIIP alternatives is somewhat offset by the continued development of housing throughout the County.

The two No Action Alternatives would not have cumulative impacts on the housing shortage. The specific amounts of residential and commercial takes, and population displacement is quantified and discussed in the Relocation Impacts Technical Report.

10.3.3 CUMULATIVE IMPACTS TO OTHER MAJOR LAND USES IN THE SOCTIIP STUDY AREA

Cumulative impacts on San Onofre State Beach and Marine Corps Base (MCB) Camp Pendleton are discussed in the Recreation Resources and Military Impacts Technical Reports, respectively.

10.4 CUMULATIVE IMPACTS ON AGRICULTURAL RESOURCES

10.4.1 OVERVIEW

There would not be cumulative adverse impacts to agricultural resources in the study area of the I-5 Alternative because there are no defined agricultural resources that would be impacted along the I-5. There would be no impacts on agricultural resources under the two No Action Alternatives because these Alternatives do not proposed any SOCTIIP transportation improvements.

Agricultural resources have been lost throughout Orange County, including south County, as result of the conversion of agricultural land to urban and suburban uses. The depletion of agricultural resources throughout the region is an adverse impact that, in most cases, cannot be mitigated. Although California provides incentives to retain farmlands for agricultural purposes under the Williamson Act, the policy does not guarantee the long term preservation of agricultural lands. As described in Sections 3.0 and 6.0 (Impacts to Agricultural Resources), the County of Orange and MCB Camp Pendleton are the two agencies with land use authority over the agricultural resources in the SOCTIIP study area.

As discussed in Section 3.0, some of the last remaining agricultural resources in Orange County are in the SOCTIIP study area. In addition, highly productive agricultural activities are conducted on several leased parcels on MCB Camp Pendleton. The loss of agricultural resources in these areas as a result of SOCTIIP build alternatives would be an adverse impact.

10.4.2 HISTORY

In the past, Orange County was a rural county supported primarily by an agricultural economy, and was an agricultural community of statewide and national significance. Soil fertility and climate have contributed to successful agricultural production in the County. Fruits and vegetables grown in the County were shipped throughout the United States and abroad. The County's agricultural communities have experienced tremendous growth and decline over the years. Agriculture was the County's number one industry in the early 1900s and by 1925, Orange County was number six in the state on the basis of crop value.

The 1930s and 1940s were marked by radical agricultural change, with declines in some crop production, but citrus production peaked. This period also marked the temporary rise of cattle and poultry production. The long decline of agriculture in the County, which began in the mid-1940s, was stemmed briefly in the 1950s, but began again in the 1960s and 1970s with the rapid suburbanization of much of the County. Agricultural lands have continued to decrease over the last 30 years in the County. Growth projections through 2025 indicate the continued

urbanization of the County. This urban development is anticipated to continue to result in the conversion of agricultural acreage to more intensive land uses.

10.4.3 AGRICULTURAL PRESERVATION PROGRAMS

10.4.3.1 County of Orange

Major contributors to the decline of agricultural have included urban encroachment, rising costs of irrigation water, agricultural land tax rates, labor costs and damage from vandalism. Programs and policies such as the Williamson Act were developed to slow farmland conversion by assessing land for taxes at a lower rate than non-agricultural land. In exchange, landowners agree to limit the uses on the contracted land for at least ten years.

Two major landowners, The Irvine Company and RMV, have historically held the majority of their properties in Orange County in agricultural preserves under the Williamson Act. In 1987, the Irvine Company filed notice of non-renewal on all their remaining properties, covering approximately 7,695 ha (19,000 acres), for all the Williamson Act contracts on their property. Although RMV is expected to submit development plans for their property that are anticipated to include residential and commercial uses, the property owner has proposed preservation of some of the agricultural resources on the property and open space and parks. At this time, the RMV is the last large agricultural landholding in Orange County.

Although Orange County has identified goals, objectives and plans to encourage long term preservation of agricultural resources in the County, these are all based on voluntary participation. Therefore, they have no regulatory effect on property owners of agricultural resources. Despite agriculture being seen as a valuable resource as well as a link to the County's history, the County of Orange does not offer oversight or funding to implement any agricultural preservation programs. Therefore, agricultural resources are managed by private parties that balance the decision to develop with the decision to continue agricultural operations. Even with the preservation goals in County General Plan, it is recognized in the General Plan Resources Element that these efforts may be not be successful, as follows: "The amount of land in agricultural preserve status will continue to decrease as a result of non-renewal actions and city annexations."

10.4.3.2 MCB Camp Pendleton

Agricultural uses on MCB Camp Pendleton are described in Section 3.0. Like RMV, MCB Camp Pendleton supports the preservation of agricultural resources, but has no explicit policy or program to make such preservation obligatory. Several outleased parcels that are currently used for agriculture on MCB Camp Pendleton are considered economically valuable, as well as compatible with military uses on the Base. Soils, climate, access to water and proximity to the urban market are several reasons for the success of the agriculture in this area. (Pages 4-59 to 4-60, Integrated Natural Resource Management Plan (INRMP) for MCB Camp Pendleton, October 2001).

The Assistant Chief of Staff, Environmental Security is responsible for overseeing agricultural, grazing and seed collecting outleases on the Base. The MCB Camp Pendleton INRMP identifies the following goal for long term preservation of agricultural resources on the Base: "Evaluate the compatibility of the fair market value of the agriculture and grazing leases, in conjunction with the military mission and natural resource management." (Pages 3-30 to 3-33, INRMP for MCB Camp Pendleton, October 2001).

10.4.4 CONCLUSIONS

The entire southern California basin has seen dramatic declines in lands devoted to agriculture in recent years. The strong economy and population growth will most likely continue or exacerbate this trend. Because the agencies governing landowners' abilities to convert these resources have no explicit policies or programs to guarantee protection of agricultural production or leases, all the SOCTIIP build alternatives except the I-5 Alternative will contribute to cumulative adverse impacts on agricultural resources in southern California because these alternatives all cross the RMV site and would result in the permanent use of agricultural land or lands held in agricultural preserves for road purposes. The two No Action Alternatives and the I-5 Alternative do not propose improvements on RMV and would not contribute to cumulative adverse impacts related to agricultural resources.

The agricultural resources in the SOCTIIP study area that could be impacted by the SOCTIIP build alternatives and other development in south Orange County have historically been successful in agricultural production. This is directly related to, among other factors, the quality of the soils of these areas. Agricultural soils are an irretrievable non-renewable resource, and conversion of these lands to non-agricultural uses would contribute to an increasing cumulative loss of this resource as a result of the SOCTIIP build alternatives and other cumulative projects in the area.

The No Action Alternatives would not result in the conversion of agricultural land to non-agricultural uses because they would not result in the construction of any SOCTIIP transportation improvements in the study area.

TABLE 10-1
DESCRIPTION OF CUMULATIVE PROJECTS

ROLLING HILLS PLANNED COMMUNITY (THE PART OF THE TALEGA DEVELOPMENT IN UNINCORPORATED ORANGE COUNTY)	
Description of Project Land Uses	**Source/Reference**
772 ha (1,906 acres). 2,700 dwelling units (dus). Business and commercial uses. Public facilities.	"Final Environmental Impact Report Zone Change ZC 86-31P, Planned Community District Regulations, Feature Plan FP 88-1P, Rolling Hills, EIR No. 482" (County of Orange Environmental Management Agency, May 4, 1988).
TALEGA VALLEY SPECIFIC PLAN (CHAMPION HILLS; THE PART OF THE TALEGA DEVELOPMENT IN THE CITY OF SAN CLEMENTE)	
Description of Project Land Uses	**Source/Reference**
6,496 ha (1,604 acres). 2,265 dus. 357 ha (822 acres) open space. 66.8 ha (165 acres) golf course. 70.9 ha (175 acres) Rancho Mission Viejo Land Conservancy. Business and commercial uses. Public facilities.	"Draft Environmental Impact Report Talega Valley Specific Plan" (City of San Clemente, November 24, 2001).
CHIQUITA CANYON HIGH SCHOOL (NOW REFERRED TO AS TESORO HIGH SCHOOL)	
Description of Project Land Uses	**Source/Reference**
16.2 hectares (ha, 40 acres). 18,600 square meters (200,000 square feet) of buildings with 85 classrooms. Design capacity of 3,100 students.	"Final Environmental Impact Report for Chiquita Canyon High School" (Capistrano Unified School District, March 25, 1996).
PRIMA DESHECHA SANITARY LANDFILL GENERAL DEVELOPMENT PLAN (GDP)	
Description of Project Land Uses	**Source/Reference**
The GDP calls for continued landfilling through 2050 and the development of a regional park after the landfilling is terminated.	"Draft Environmental Impact Report No. 575 2001 Prima Deshecha General Development Plan: Landfill Component, Circulation Component and Recreation Component" (Orange County Integrated Waste Management Department, January 31, 2001).
WHISPERING HILLS PLANNED COMMUNITY	
Description of Project Land Uses	**Source/Reference**
193 single family dus and high school on 70.9 ha (175 acres) 73.3 ha (181 acres) open space	Whispering Hills Revised Draft EIR (City of San Juan Capistrano, November 2001). Project was approved April 2002.
FORSTER RANCH SPECIFIC PLAN AMENDMENT	
Description of Project Land Uses	**Source/Reference**
2,033 dus on 217.2 ha (536.2 acres). 11.3 ha (28 acres) mixed uses. 11.7 ha (29 acres) commercial. 23.4 ha (57.8 acres) public and roads. 153.9 ha (380 acres) open space and greenbelt.	"Subsequent Environmental Impact Report Forster Ranch Specific Plan Amendment" (City of San Clemente, September 23, 1997).
MARBLEHEAD COASTAL	
Description of Project Land Uses	**Source/Reference**
101.5 ha (250.6 acre) site. 358 du on 47.3 ha (116.7 acres). 6.16 ha (15.2 acres) commercial. 20.2 ha (49.9 acres) public and private open space. 5.5 ha (13.6 acres) roads.	"Final Environmental Impact Report for Marblehead Coastal General Plan Amendment 96-01, Specific 95-02 and Tentative Tract Map" (City of San Clemente, August 5, 1998).

TABLE 10-1
DESCRIPTION OF CUMULATIVE PROJECTS

PACIFIC POINT/SAN JUAN MEADOWS	
Description of Project Land Uses	**Source/Reference**
617 dus on 71.3 ha (176 acres). 10.2 ha (25 acres) research and development. 3.2 ha (7.8 acres) public and institutional. 32.4 ha (80 acres) open space, recreation and parks.	"Final Environmental Impact Report Pacific Point Amendment to Coastal Development Permit 81-1 (RZ 89-07) and General Plan Amendment GP 90-08" (City of San Juan Capistrano, August 1, 1991).
ANTONIO PARKWAY ROADWAY ALIGNMENT AND LAND USE PLAN (LADERA PLANNED COMMUNITY)	
Description of Project Land Uses	**Source/Reference**
Roadway Alignment Alignment of Antonio Parkway between Oso Parkway and Ortega Highway. Addition of a secondary arterial from Crown Valley to Antonio Parkway. Deletions of extensions of Avery Parkway and Trabuco Creek Parkway from the MPAH. Deletion of a Class II bikeway on Avery Parkway from the Bikeways Master Plan. Redesignation of Avery Parkway as a landscape corridor in the Master Plan of Scenic Highways (MPSH). Deletion of Trabuco Creek Road from the MPSH. Land Uses 968 ha (2,390 acres). 8,100 dus. 45 ha (111 acres) urban activity centers. 23.9 ha (59 acres) parks and public facilities. 10.1 ha (25 acres) commercial uses. 243 ha (600 acres) open space.	"Draft Environmental Impact Report No. 555 Antonio Parkway Roadway Alignment and Land Use Plan: Land Use Element Amendment 95-4, Transportation Element Amendment 95-3, Community Profile Amendment 95-2 and Zone Change 94-5" (County of Orange Environmental Management Agency, May 1995).
ARROYO TRABUCO GOLF COURSE	
Description of Project Land Uses	**Source/Reference**
17.4 ha (43 acres). 18 hole golf course and accessory facilities. 25.5 ha (63 acres) ungraded natural land.	"Draft Environmental Impact Report Arroyo Trabuco Golf Course" (County of Orange Planning and Development Services Department, May 2001).
RANCHO MISSION VIEJO DEVELOPMENT ENTITLEMENTS GENERAL PLAN AMENDMENT (GPA)/ZONE CHANGE (ZC)	
Description of Project Land Uses	**Source/Reference**
14,000 dus, 770,000 sf Urban Activity Center, 390,000 sf Neighborhood Center, 3,930,000 sf Business Park on 3,487 ha (8,610 acres) 5,330 ha (13,161 acres) open space incl. 20 ac. golf course 436 ha (1,079 acres) San Juan Creek Reg. Park. Undefined Gen. Plan and zoning Amendment(s)	Draft Rancho Mission Viejo Development Application (County of Orange Planning and Development Services Department, November 8, 2001). No environmental documents are available.
RANCHO MISSION VIEJO ORANGE COUNTY PROJECTIONS (OCP) - 2000	
Description of Project Land Uses	**Source/Reference**
21,000 dus projected for Rancho Mission Viejo buildout in 2025	OCP-2000 (Orange County Council of Governments, June 2000). No environmental documents available. No environmental documents are available.

TABLE 10-1
DESCRIPTION OF CUMULATIVE PROJECTS

SOUTH SUBREGION NATURAL COMMUNITY CONSERVATION PLAN/ HABITAT CONSERVATION PLAN (NCCP/HCP)	
Description of Project Land Uses	**Source/Reference**
Undefined Actions Undefined NCCP and SAMP.	Federal Register Notice of Intent to prepare an Environmental Impact Statement (United States Fish and Wildlife Service, August 23, 2001). No environmental documents are available.
MCB CAMP PENDLETON	
Description of Project Land Uses	**Source/Reference**
There are currently no substantial land use projects proposed in the currently undeveloped areas of Camp Pendleton in the study area based on the Master Plan. Refer to Table 2 for a listing of minor improvement projects on Camp Pendleton.	"Marine Corps Base Camp Pendleton, California Master Plan" (Southwest Division Naval Facilities Engineering Command, September 1992).
San Onofre State Beach Outlease <u>Land Uses:</u> Camp grounds Beach trails <u>Proposed:</u> 18-hole golf course Primitive trails Secondary access from Avenida La Pata Tourist Commercial	San Onofre State Beach General Plan (1988), Mitigation from San Onofre Nuclear Generating Station Parking Lot Mitigation and Marine Corps Base Camp Pendleton, California Mater Plan (September 1992).
REUSE OF THE MARINE CORPS AIR STATION (MCAS) EL TORO	
Description of Project Land Uses	**Source/Reference**
Civilian international airport, park/open space, residential, commercial, industrial and public uses on approximately 1,903.5 ha (4,700 acres), or "Great Park Plan" since passage of Measure W which includes parks museums, open space and tourist uses. Private sale may change use.	"Draft Environmental Impact Report No. 573 for the Civilian Reuse of MCAS El Toro and the Airport System Master Plan for John Wayne Airport and Proposed Orange County International Airport" (County of Orange, December 1999).
PROPOSED SADDLE CREEK/SADDLE CREST (FOOTHILL/TRABUCO AREA OF UNINCORPORATED ORANGE COUNTY)	
Description of Project Land Uses	**Source/Reference**
Proposed: Saddle Creek: 127dus on 196 ha (484 acres) Saddle Crest: 35 dus on 46 ha (113.5 acres) Plans are being revised, no previously approved plans.	Draft Area Plans 99-03 and 99-07 (County of Orange Planning Application, December 2000). No environmental documents available.
SADDLEBACK MEADOWS (FOOTHILL AREA OF UNINCORPORATED ORANGE COUNTY)	
Description of Project Land Uses	**Source/Reference**
Site is 90 ha (222 acres) Proposed: 299 single family residential units on 29.6 ha (73.1 acres) and open space on 60.3 ha (148.9 acres).	Saddleback Meadows Subsequent EIR 566 (County of Orange EIR 566 (1999) and Draft Subsequent EIR 566, April 2002).
RANCHO POTRERO LEADERSHIP ACADEMY (FOOTHILL/TRABUCO AREA OF UNINCORPORATED ORANGE COUNTY)	
Description of Project Land Uses	**Source/Reference**

TABLE 10-1
DESCRIPTION OF CUMULATIVE PROJECTS

Zone Change for a 90-bed juvenile detention facilities (173,300 sf) and new access road (approx. 5 km/3.2 miles long).	Rancho Potrero Leadership Academy EIR No. 576 (November 2000) and revised Draft EIR No. 576 (Certified December 2001).
DANA POINT HEADLANDS	
Description of Project Land Uses	**Source/Reference**
Proposed (site is 49 ha/121 acres): 125 single family residential units 40,000 sf commercial site 65-room inn, 30.3 acres conservation open space 31.7 acres recreation open space with 8,500 sf visitor serving recreation facilities. Project has been approved by City of Dana Point and is awaiting evaluation by the California Coastal Commission.	Project approved and Final EIR were certified January 22, 2002. (Source: City of Dana Point website www.danapoint.org/commdevelopment/ Headlands.htm. and personal communication with the City.)
OTHER DEVEOPMENT PROJECTS LISTED IN THE STUDY AREA	
Description of Project Land Use	**Source/Reference**
These include commercial and residential projects as summarized in Table 10-3.	Various.
MASTER PLAN OF ARTERIAL HIGHWAYS/REGIONAL TRANSPORTION PLAN FACILITIES AND IMPROVEMENTS	
Description of Project Land Uses	**Source/Reference**
Refer to Tables 10-4 and 10-5 for MPAH/RTP committed improvements and non-committed improvements.	SOCTIIP Traffic and Circulation Technical Report.
CALTRANS IMPROVEMENTS	
Description of Project Land Uses	**Source/Reference**
Refer to Table 10-6 for individual listing of Caltrans Projects	Various.
IRVINE RANCH WATER DISTRICT SAN DIEGO CREEK WATERSHED NATURAL TREATMENT SYSTEM PROGRAM	
Description of Project Land Uses	**Source/Reference**
Watershed treatment program for San Diego Creek with installation of BMPs and detention basins within the watershed to reduce non-point source pollutants in runoff, water courses and beaches.	Irvine Ranch Water District Notice of Preparation (February 20, 2002). Project includes areas of Irvine, Lake Forest, Tustin between the Lomas de Santiago Ridge and the coastal bluffs of Newport Coast.

TABLE 10-2
SUMMARY OF IMPACTS FOR CUMULATIVE PROJECTS RELATED TO LAND USE

ROLLING HILLS PLANNED COMMUNITY (THE PART OF THE TALEGA DEVELOPMENT IN UNINCORPORATED ORANGE COUNTY)	
Summary of Impacts	**Summary of Mitigation**
Conversion of 500 acres into suburban/urban uses.	77 percent to be retained as open space and recreation. Landscaping throughout to soften visual impacts.
TALEGA VALLEY SPECIFIC PLAN (CHAMPION HILLS; THE PART OF THE TALEGA DEVELOPMENT IN THE CITY OF SAN CLEMENTE)	
Summary of Impacts	**Summary of Mitigation**
Inconsistencies with the General Plan and local Park Requirements.	Preparation of a Comprehensive Local Park Implementation Plan. Intrusion of land uses and grading to be minimized to achieve consistency.
Development impacts.	Participation in the City's Annual Monitoring Report.
Land uses within SOCTIIP alternative alignments.	Sufficient right-of-way preserved along alignments.
Proposed densities require preservation of Lot B in open space.	Lot B shall be dedicated to the County for open space.
TALEGA DEVELOPMENT FEATURE PLAN AMENDMENT	
Summary of Impacts	**Summary of Mitigation**
No information provided.	--
CHIQUITA CANYON HIGH SCHOOL (NOW REFERRED TO AS TESORO HIGH SCHOOL)	
Summary of Impacts	**Summary of Mitigation**
No significant impacts to land use.	No mitigation is required.
PRIMA DESHECHA SANITARY LANDFILL GENERAL DEVELOPMENT PLAN (GDP)	
Summary of Impacts	**Summary of Mitigation**
Visibility of landfill areas from off site viewsheds and/or protected ridgelines.	Facilities to be sited to minimize visibility from beyond the site.
Landfill activity occurrence within the 200-foot ridgeline protection buffer.	Structures not permitted on or within the 200-foot protection zone designated in the San Juan Capistrano General Plan.
Future alignment of La Pata Avenue will be intersected at grade by hiking and riding trails until La Pata Avenue is constructed.	Crossings designed with signing and pavement markings consistent with County standards.
	At grade trail crossing on La Pata Avenue will be converted to a grade separated culvert.
	On street signing and pavement marking at this location to be removed and trail redesigned to direct trail users to the grade separate culvert.
Recreation facilities could be visible on key ridgelines in the Cities of San Juan Capistrano and San Clemente.	No permanent facilities other than at-grade trails are to be located on key ridgelines in these Cities.
OTHER PROJECTS LISTED IN THE LANDFILL GDP EIR	
Summary of Impacts	**Summary of Mitigation**
No information provided.	--
WHISPERING HILLS PLANNED COMMUNITY	
Summary of Impacts	**Summary of Mitigation**
Proposed Project/356 DU Encroach upon General Plan-designated ridgelines or within the required 200-foot buffer zone.	Ridgeline Exception.
High School/193 DU Alternative GPA/Zone Change	Mitigate impacts resulting from high school, as described in Sections of the EIR.

TABLE 10-2
SUMMARY OF IMPACTS FOR CUMULATIVE PROJECTS RELATED TO LAND USE

FORSTER RANCH SPECIFIC PLAN AMENDMENT	
Summary of Impacts	**Summary of Mitigation**
Significant decrease in diversity of uses and potential inconsistency with City directives for the Town Center Area.	Area plans in the Town Center Area subject to finding by City that land uses are consistent.
Open space requirements compromised.	8.5 acres to be provided for open space to meet General Plan.
MARBLEHEAD COASTAL	
Summary of Impacts	**Summary of Mitigation**
No significant impacts to land use.	No mitigation is required.
PACIFIC POINT/SAN JUAN MEADOWS	
Summary of Impacts	**Summary of Mitigation**
Deletion of Valle Road and Avenida Calita as commuter roads.	Amendment to the Circulation Element deleting both commuter roads.
No provision for affordable housing.	A Housing Opportunities Program to be prepared in accordance with the City's General Plan guidelines.
ANTONIO PARKWAY ROADWAY ALIGNMENT AND LAND USE PLAN (LADERA PLANNED COMMUNITY)	
Summary of Impacts	**Summary of Mitigation**
Conversion of almost 50 percent of the project study area from undeveloped and low intensity uses to high intensity urban uses.	Preservation of 1,600 acres for open space.
Removal of approximately 8 acres of prime farmland.	No mitigation measures available to reduce impacts to prime farmland.
ARROYO TRABUCO GOLF COURSE	
Summary of Impacts	**Summary of Mitigation**
No significant impacts to land use.	No mitigation is required.
REUSE OF THE MARINE CORPS AIR STATION (MCAS) EL TORO	
Summary of Impacts	**Summary of Mitigation**
Removal of considerable amounts of farmland.	Securing 40 acres of agricultural land and leasing agricultural land for interim use.
RANCHO POTRERO LEADERSHIP ACADEMY (FOOTHILL AREA OF UNICORPORATED ORANGE COUNTY)	
Summary of Impacts	**Summary of Mitigation**
No significant land use impacts have been identified.	No mitigation is required.
DANA POINT HEADLANDS	
Summary of Impacts	**Summary of Mitigation**
General Plan Amendment, Zoning Code and Zoning Map Amendments, creation of a Planned Development District, and Amendment of the Dana Point Local Coastal Program.	The Headlands Development and Conservation Plan, Project Design Features, applies design features to reduce land use impacts. No mitigation required.
SADDLEBACK MEADOWS	
Summary of Impacts	**Summary of Mitigation**
No significant impacts to land use.	No mitigation is required.

Note: The following projects did not have any environmental documentation available for evaluation at the time of preparation of this report and were not included in the table.

1. Talega Development Feature Plan.
2. Rancho Mission Viejo (RMV) Development Entitlements, General Plan Amendment (GPA)/Zone Change (ZC).
3. Rancho Mission Viejo (RMV) proposed development plans, de facto zoning of 600 residential units or OCP-2000 projections or 21,000 residential units for RMV.
4. South Subregion Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP).
5. MCB Camp Pendleton.
6. Saddle Creek/Saddle Crest.

TABLE 10-3
OTHER CUMULATIVE PROJECTS

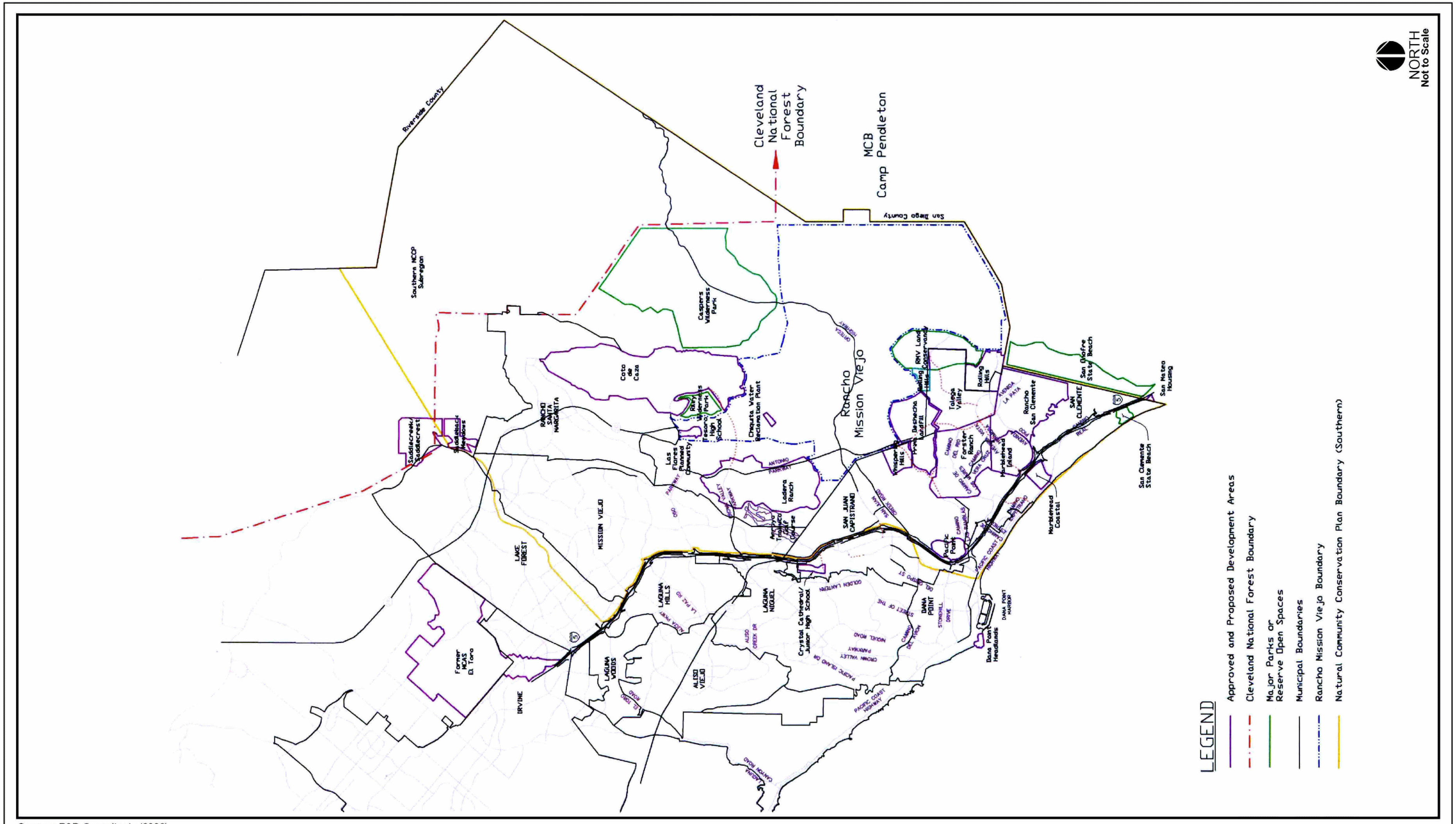
CITY OF SAN JUAN CAPISTRANO			
Reference No.	**Development**	**Quantity**	**Units**
1	Home Depot [1]		
	Hardware Center	106.7	TSF
	Garden Center	24.225	TSF
	Retail Building	35.062	TSF
2	Valle Road Self Storage	107.358	TSF
3	Capistrano Ford Dealership Site 2 - Auto Sales	4.9	Acres
4	San Juan Meadows		
	Single Family Residential	275	DU
	Senior Housing	165	DU
	Office	61.0	TSF
5	Glendale Federal parcels "C" and "D"		
	Single Family Residential	52	DU
	Condominiums	286	DU
6	Glendale Federal Area "H" (TT 13726)		
	Single Family Residential	63	DU
7	Concorde Development - Single Family Residential	79	DU
8	Pacific Point		
	Single Family Residential	617	DU
	R&D Office	25.0	Acres
9	Fluidmaster Manufacturing Facility	183.046	TSF
10	Calle Perfecto Business Park - Industrial	82.7	TSF
11	Calle Perfecto Business Park II		
	Industrial Development	133.685	TSF
12	TT 15771 - Single Family Residential	28	DU
13	Capistrano Volkswagen (Valle Rd. San Juan Creek Rd.)		
	Auto Sales	16.8	TSF
14	San Juan Meadows Equestrian Stables	3	TSF
15	El Parador Hotel (San Juan Creek at Valle Rd.)	300	Rms
16	Alipaz Village - Residential	150	DU
17	Weseloh Chevrolet/Honda (Camino Capistrano)		
	Auto Sales	23.4	TSF
18	Serra Plaza Offices (Del Obispo at Paseo Adelanto)	45.5	TSF
CITY OF DANA POINT			
19	Hillside Village South (PCH south of Crown Valley Parkway)	48	DU
	Residential		
20	Capo by the Sea - Residential	48	DU
21	Holtz Hill – Residential	13	DU
22	Dana Point Harbor Expansion		
	Office	28.5	TSF
	Hotel	42	Rms
	Quasi Institutional (Marine Institute)	50,700	TSF
	Boat Storage (dry)	471	Stalls
	Boat Storage (docked)	18	Slips
23	St. Regis Hotel Offices (Monarch Beach)	70	TSF

TABLE 10-3
OTHER CUMULATIVE PROJECTS

24	South Coast Water District Business Park		
	Office	83.1	TSF
	Research and Development	164.221	TSF
	Research and Development-Multi-Use Tenant	275.734	TSF
	Storage	142.758	TSF
CITY OF SAN CLEMENTE			
25	Plaza Pacifica Commercial Site (Rancho San Clemente)	460	TSF
26	Avenida Vista Hermosa Interchange	n/a	
27	Talega Subdivisions (269.1 gross acres)		
	TT 16148 Area B-1A Village 3		
	Single Family	245	DU
	Multiple Family	2	Lots
	TT 16216 Area B-1B "Z" Lot - Single Family	91	DU
	TT 16215 Area B-1B Triplex - Multiple Family	144	DU
	TT 16252 Area A-2 Hammerhead - Single Family	76	DU
MCB CAMP PENDLETON			
28	San Mateo Point Housing	120	DU

Sources:
1. Draft Program Environmental Impact Report" (Orange County IWMD, January 31, 2001).
2. Updated with information from the Home Depot Project Draft EIR (September 20, 2001).
3. Updated with information from City of San Clemente City Council Agendas from 2002.

TSF: Thousand square feet.
DU: Dwelling units.



Source: P&D Consultants (2002).

General Locations of Cumulative Projects in the SOCTIIP Area

TABLE 10-4
COMMITTED MASTER PLAN OF ARTERIAL HIGHWAYS/REGIONAL TRANSPORTATION PLAN FACILITIES AND IMPROVEMENTS

Facility	**Jurisdiction**	Improvement	**Source**
Alipaz St (north of Cm Del Avion)	San Juan Capistrano	Widen to four lanes	8
Antonio Pkwy (Oso Pkwy to southern boundary of Ladera Ranch)	County	Widen to six lanes	1
Avd La Pata (Avd Pico to Avd Vista Hermosa)	San Clemente	Construct as a six-lane major arterial	2
Avd Talega (east of Avd Vista Hermosa)	San Clemente	Extend as a four-lane secondary arterial	3
Avd Vista Hermosa (Cm Vera Cruz to north of Avd La Pata)	San Clemente	Construct as a four-lane primary arterial	2
Avd Vista Hermosa (Calle Frontera to I-5)	Caltrans/San Clemente	Construct as a four-lane primary arterial with an interchange at I-5	4
Cm Capistrano (south of Oso Rd to San Juan Capistrano city limits)	San Juan Capistrano	Widen to four lanes	8
Cm Capistrano (south of San Juan Creek Rd)	San Juan Capistrano	Widen to four lanes	8
Cm Vera Cruz (west of Avd Vista Hermosa)	San Clemente	Construct as a four-lane secondary arterial	2
Crown Valley Pkwy (I-5 to east of Trabuco Creek bridge)	County/Mission Viejo	Widen to eight lanes	5
Del Obispo St (Aguacate Rd to Paseo De La Paz)	San Juan Capistrano	Widen to four lanes	8
I-5 (Oso Pkwy to Crown Valley Pkwy)	Caltrans	Construct northbound auxiliary lane	6
Junipero Serra Rd (Cm Capistrano to Rancho Viejo Rd)	San Juan Capistrano	Widen to four lanes	8
Ortega Hwy (Via Cordova to San Juan Capistrano city limits)	San Juan Capistrano	Widen to four lanes	7,8
Ortega Hwy (San Juan Capistrano city limits to Antonio Pkwy)	County	Widen to four lanes	6,7
Rancho Viejo Rd (south of Junipero Serra Rd)	San Juan Capistrano	Widen to four lanes	8

TABLE 10-4
COMMITTED MASTER PLAN OF ARTERIAL HIGHWAYS/REGIONAL TRANSPORTATION PLAN FACILITIES AND IMPROVEMENTS

SR-73 (north of I-5)	TCA/Caltrans	Widen to provide four general purpose lanes in each direction and one high occupancy vehicle (HOV) lane in each direction	9
SR-241 (Oso Pkwy to Santa Margarita Pkwy)	TCA/Caltrans	Widen to provide three general purpose lanes in each direction and one HOV lane in each direction	9
SR-241 (north of Santa Margarita Pkwy)	TCA/Caltrans	Widen to provide four general purpose lanes in each direction and one HOV lane in each direction	9

Sources: 1 – Conditioned for implementation with development of Ladera Ranch.
2 – Implemented through the City of San Clemente Regional Circulation Financing and Phasing Program (RCFPP).
3 – Conditioned for implementation with development of Talega.
4 – Improvement under construction by Caltrans and the City of San Clemente.
5 – Conditioned for implementation with development of Las Flores.
6 – Caltrans improvement.
7 – County of Orange improvement project.
8 – Implemented through the City of San Juan Capistrano Reimbursement Agreement and Nexus Fee Program.
9 – Transportation Corridor Agency Capital Improvement Plan (CIP).

(Note: From Austin-Foust Associates March 2002)

TABLE 10-5
NON COMMITTED MASTER PLAN OF ARTERIAL HIGHWAYS/REGIONAL TRANSPORTATION PLAN FACILITIES AND IMPROVMENTS

Facility	Jurisdiction	Improvement	Source
Alipaz St (north of Del Obispo St to Oso Rd)	San Juan Capistrano	Construct as four-lane secondary arterial	MPAH
Antonio Pkwy (south of Ladera Ranch to Ortega Hwy/SR-74)	County	Widen to six lanes	MPAH
Avd La Pata (south of Ortega Hwy/SR-74)	County	Widen to four lanes	MPAH
Avd La Pata (south of Ortega Hwy/SR-74 to San Clemente city limits)	County	Construct as a four-lane primary arterial	MPAH
Avd La Pata (San Clemente city limits to Avd Vista Hermosa)	San Clemente	Construct as a six-lane major arterial	MPAH
Cm De Los Mares (east of Cm Del Rio to Cm Las Ramblas)	San Clemente	Construct as four-lane secondary arterial	MPAH
Cm Del Rancho (I-5 to Avd Pico)	San Clemente	Construct as a four-lane primary arterial	MPAH
Cm Las Ramblas (current termination east to Avd La Pata)	San Juan Capistrano/ San Clemente	Construct as four-lane secondary arterial	MPAH
Cm Los Padres (east of St of the Golden Lantern to Cm Capistrano)	San Juan Capistrano	Construct as four-lane primary arterial	MPAH
Crown Valley Pkwy (Antonio Pkwy to Oso Pkwy)	County	Construct as six-lane major arterial east of Antonio Pkwy and as four-lane primary arterial west of Oso Pkwy	MPAH
I-5 (Oso Pkwy to Crown Valley Pkwy)	Caltrans	Add SB auxiliary lane	CT-RCR
I-5 (Pacific Coast Hwy/SR-1 to Avd Pico)	Caltrans	Add NB and SB HOV lanes	CT-RCR /RTP
I-5 (south of Basilone Rd)	Caltrans	Add NB and SB HOV lanes	Caltrans/ SANDAG
La Novia St (north of San Juan Creek Rd)	San Juan Capistrano	Widen to four lanes	MPAH

TABLE 10-5
NON COMMITTED MASTER PLAN OF ARTERIAL HIGHWAYS/REGIONAL TRANSPORTATION PLAN FACILITIES AND IMPROVMENTS

	Facility	Jurisdiction	Improvement	Source
	Marguerite Pkwy (Avery Pkwy to Mission Viejo city limits)	Mission Viejo	Widen to four lanes	MPAH
	Olympiad Rd (Alicia Pkwy to La Paz Rd)	Mission Viejo	Widen to four lanes	MPAH
	Ortega Hwy/SR-74 (east of Antonio Pkwy/Avd La Pata to Orange County line)	County	Widen to four lanes	MPAH
	Oso Rd (Alipaz St to Cm Capistrano)	San Juan Capistrano	Widen to four lanes	MPAH
	Pacific Coast Hwy/SR-1 (north of Doheny Park Rd to Selva Rd)	Dana Point	Widen to six lanes	MPAH
	Rancho Viejo Rd (north of Junipero Serra Rd to San Juan Capistrano city limits)	San Juan Capistrano	Widen to four lanes	MPAH
	San Juan Creek Rd (Cm Capistrano to San Juan Capistrano city limits)	San Juan Capistrano	Widen to four lanes	MPAH
	San Juan Creek Rd (San Juan Capistrano city limits to Avd La Pata)	San Juan Capistrano	Construct as four-lane secondary arterial	MPAH

Abbreviations: MPAH – Master Plan of Arterial Highways.
RTP – Regional Transportation Plan.
CT-RCR – Caltrans Route Concept Report.
SANDAG – San Diego Association of Governments.
TCA – Transportation Corridor Agency.
HOV – high occupancy vehicle.
NB – northbound.
SB – southbound.

(Note: From Austin-Foust Associates March 2002)

TABLE 10-6
SUMMARY OF CALTRANS IMPROVEMENTS

CALTRANS INTERSTATE 5 IMPROVEMENTS			
Map Reference No.	**Description of Project**	**Status of Project**	**Environmental Compliance**
1	EA# 0E6000 Avenida Mendocino On Ramp to NB 5 Improvements. This project proposes to add a lane to the existing on ramp, increase the lane drop taper length, and construct a retaining wall. The existing ramp alignment will be maintained. The proposed SOCTIIP project will relocate this on ramp.	Construction.	Categorical Exclusion (CE) issued on 9/18/00.
2	EA# 0A3900 Realign N/B Stonehill On Ramp to NB 5 This project will realign the existing on ramp to improve horizontal sight distance and add storage length. The existing ramp will be relocated to the east towards the existing slope which will require a retaining wall. The proposed SOCTIIP project will require realignment on this ramp.	Construction.	CE/Categorical Exemption (CE) issued on 11/15/00.
3	EA# 0A4000 Construct Separation Barrier between SB 5 and Camino Capistrano This safety project proposes to construct a concrete barrier that will provide separation between the frontage road (Camino Capistrano) and SB 5. The barrier will be constructed at the existing R/W line. The proposed SOCTIIP I-5 alignment will relocate the existing R/W line.	Completed.	CE issued on September 1999.
4	I-5/SR 74 Interchange Project This project in the PSR stage. Several alternatives have been proposed by the consultants (Parson) that will improve operations in the 5/74 interchange area. The ramps will be reconfigured concurrently with the realignment of Del Obispo. A roundabout at the intersection of Del Obispo and the 74 has also been proposed. The SOCTIIP proposal incorporates one of the original alternatives that was proposed by Parsons (cloverleaf ramp layout). This will probably not be selected. The are also proposing to add an off ramp at Camino Capistrano at Stonehill to divert some of the southbound traffic to Dan a Point away from the 5/74 area. The proposed SOCTIIP project will realign I-5 at this location.	PSR in progress Environmental document will be prepared by the City of San Juan Capistrano which is the lead agency.	To be determined.

TABLE 10-6
SUMMARY OF CALTRANS IMPROVEMENTS

CALTRANS INTERSTATE 5 IMPROVEMENTS			
Map Reference No.	**Description of Project**	**Status of Project**	**Environmental Compliance**
5	SB off-ramp Camino Capistrano (0E570K) - • Widen to 3 lanes hook ramp • Add auxiliary lane.	PSR completed. Anticipated environmental document would be an is/ea probably leading to an ND/FONSI.	To be prepared.
5a	Avenida Pico (0E740K)- • Widening SB off-ramp to 2 lanes and aux. lane. ($2 million) • Widen Pico and n/b off ramp.	PSR completed. Anticipated environmental document would be a CE/CE.	To be prepared.
6	I-5/SR-74 Interchange Improvements - major construction at the interchange. Parsons Transportation Group is doing the study of alternatives.	PSR in progress. Environmental document will be prepared by the City of San Juan Capistrano.	To be determined.
7	SB off-ramp Oso Parkway (EA 0E070K) • Widen to 2 lanes off and open to 4 lanes at the terminus. • Add auxiliary lanes and retaining wall.	PSR completed. Anticipated environmental document would be a CE/CE.	To be prepared.
8	I-5 at La Paz Road (EA 0A070K) • Major construction at the interchange • Alternatives study involves in widening La Paz, reconstruct bridge and realign ramps.	PSR in progress. Environmental document is not yet determined.	To be determined.
9	SB I-5 El Toro Road (EA 09800K) • Propose new 3 lanes off-ramp with retaining wall.	PSR in progress. Anticipated environmental document would be an IS/EA leading to a ND/FONSI.	To be prepared.
10	I-5 at El Toro Road (EA 09800K) • Two new hook ramps to the Laguna Hill Mall • New Intersection	PSR in progress. Anticipated environmental document would be an IS/EA leading to a ND/FONSI.	To be prepared.
11	I-5 San Mateo Creek Bridge • The bridge piers will be stabilized with cast in shell piles around the footings of piers 1-4. Permanent sheet piling will be placed around pier 5. Abatements have suffered moderate to severe erosion. They'll be cleared of vegetation compacted and have RSP with filter fabric placed on the surface.	Environmental document was completed.	CE/CE was completed.

TABLE 10-6
SUMMARY OF CALTRANS IMPROVEMENTS

CALTRANS INTERSTATE 5 IMPROVEMENTS			
Map Reference No.	**Description of Project**	**Status of Project**	**Environmental Compliance**
12	The project did not incorporate the proposed on/off ramps on I-5 at Avenida De La Carlota, north of Los Alisos Blvd. Furthermore; there are operational concerns on the proposed reconfigured El Toro Road on/off ramps and their connectivity with Bridger Road and Avenida De La Carlota.	PSR in progress. Anticipated environmental document would be an IS/EA leading to a ND/FONSI.	To be prepared.
13	San Clemente I-5 SB off ramp at Ave Pico • SB I-5 widen to two, construct auxiliary lane.	PSR completed. Anticipated environmental document would be a CE/CE.	To be prepared.
14	In San Clemente at Ave Pico • Widen Ave Pico and NB off ramp to 3 lanes (2 right turn lanes), widen curb returns SB off ramp, widen Pico and relocate signals.	PSR completed. Anticipated environmental document would be a CE/CE.	To be prepared.
15	In San Clemente and Dana Point (0F060K) • Widen S/B offramp and Bridge overpass at Camino De Estrella	Anticipated environmental document would be a CE/CE.	To be prepared.
16	In San Juan Capistrano (0E030K) • Dowel retrofit truck lanes both directions.	Environmental document is not yet determined.	To be determined.
17	In San Juan Capistrano • Widening Route 5 S/B off ramp at Camino Capistrano and widen a segment of Camino Capistrano south of the I-5.	PSR completed. Anticipated environmental document would be an IS/EA probably leading to an ND/FONSI.	To be prepared.
18	In San Juan Capistrano on Route 5 at San Juan Creek Bridge • Scour mitigation	Environmental document is not yet determined.	To be determined.
19	Reconstruct undercrossing at Avery for local street widening.	Project will be completed by the City of San Juan Capistrano. Environmental document is not yet determined.	To be determined.
20	In Irvine (0E020K) • Grind all lanes except HOV. Dowel retrofit #3 and #4 truck lanes both directions. Rehab ramps.	Environmental document prepared.	CE/CE issued on 8/25/00.
21	In Mission Viejo at Oso Parkway (0E070K) • Widen NB Oso Parkway Loop on ramp. SB off ramp and add auxiliary lane from La Paz to Oso.	PSR completed. Anticipated environmental document would be a CE/CE.	To be prepared.

TABLE 10-6
SUMMARY OF CALTRANS IMPROVEMENTS

CALTRANS INTERSTATE 5 IMPROVEMENTS			
Map Reference No.	**Description of Project**	**Status of Project**	**Environmental Compliance**
22	In Laguna Hills and Mission Viejo on I-5 at La Paz Road • Reconstruct undercrossing at La Paz.	PSR in progress. Environmental document is not yet determined.	To be determined.
23	In Laguna Hills at Alicia (0E620K) • Add auxiliary lane from Alicia SB off ramp to SB on ramp.	PSR completed. Anticipated environmental document would be an IS/EA probably leading to an ND/FONSI.	To be prepared.
24	In Laguna Hills SB on & off ramps; El Toro Road RM 18.7; Avenue de La Carlota, Los Alisos • Relocate SB I-5 on & off ramps; realign Frontage Road; Install signal.	PSR completed. Anticipated environmental document would be an IS/EA probably leading to an ND/FONSI.	To be prepared.
25	In San Clemente at Avenue Mendocino NB on ramp. • Widen the NB Route 5 on ramp at Avenue Mendocino.	Construction.	Categorical Exclusion issued on 9/18/00.
26	In San Juan Capistrano • Construct outer barrier/separation barrier and retaining wall.	Completed.	CE issued on September 1999.
27	In San Juan Capistrano at Camino Capistrano on ramp. Realign ramp; extend ramp meter limits.	PSR completed. Anticipated environmental document would be an IS/EA probably leading to an ND/FONSI.	To be prepared.
28	At Avenida Vista Hermosa (Reeves Ranch Overcrossing.) • Construct interchange.	This project has been completed by the City of San Clemente.	CE was completed by City of San Clemente.
29	Camino de Estrella/Via California (00108K) • Soundwalls	Completed.	CE/CE issued on 7/10/00.
30	In Orange County in Laguna Niguel, Laguna Hills, Mission Viejo and Lake Forest • Construct HOV lanes.	Environmental document is not yet determined.	To be determined.
31	From Crown Valley Parkway Orange County to Oso Parkway Orange County • Construct NB auxiliary lane, widen CV on ramp, Oso Ramps and widen BR	Completed.	CE/CE was issued on 4/7/98.
32	On Route 5 from El Toro Road to Alton Parkway and on Route 405 form Route 5 to Irvine Center Drive (ORA 405 1.2/1.0) in Lake Forest • Widen and reconstruct Freeway.	Completed.	ND was approved on April 10, 1990 and FONSI on 5/29/90.

TABLE 10-6
SUMMARY OF CALTRANS IMPROVEMENTS

CALTRANS INTERSTATE 5 IMPROVEMENTS			
Map Reference No.	**Description of Project**	**Status of Project**	**Environmental Compliance**
33	In Mission Viejo, Laguna Hills and Lake Forest • Restripe 1 of 2 HOV lanes to a mixed flow lane.	Completed.	ND/ Programmatic CE.
34	In San Clemente at • Widen the ramp and relocate the limit line of Avenue Palizada on ramp on the NB Route 5.	Construction.	CE/CE issued Aug 2002.
35	In Dana Point (0A4401) • Widen NB Camino De Estrella on ramp and convert to two-metered lanes and reconstruct metering system.	Construction.	CE/CE issued on 3/7/01.
36	On Route 5 at Junipero Serra NB & SB ramps. • Install traffic signals at the intersections of Junipero Serra Road and the I-5 NB and SB ramps. • Improve I-5 intersections at Junipero Serra and reconstruction curb and gutter (0A6400).	Construction.	Categorical Exclusion issued on 7/24/00.
37	In San Clemente Avenue Vista Hermosa • Remove dirt	This project is being completed by the City of San Clemente.	CE was prepared.
38	In Mission Viejo at La Paz • Widening La Paz off ramp terminal from three lanes to four lanes on SB Route 5.	PSR in progress. Environmental document is not yet determined.	To be determined.
39	On I-5 Irvine and Lake Forest • Convert EB El Toro, Tustin Road and NB Jeffrey on ramps to two metered (mixed flow lanes)	Environmental document was prepared.	CE/CE issued in July 2002.
40	In Mission Viejo at Alicia Parkway • Modify NB 5 Crown Valley Parkway & SB Alicia Parkway on ramps.	Environmental document not determined.	To be determined.
52	Relocate HOV lane star from Alicia Parkway to El Toro Road and realign existing general purpose lanes (0E6700).	Completed.	ND/Programmatic CE.
OTHER CALTRANS PROJECTS			
41	In San Juan Capistrano from I-5/East City limit (Ortega Highway). • Construct new interchange.	PSR in progress Environmental document will be prepared by the City of San Juan Capistrano.	To be determined.
42	On Route 74 from I-5 to Antonio Parkway (Ortega Highway). • Widen roadway	PSR completed. Anticipated environmental document is an IS/EA leading to a ND/FONSI (anticipated date Dec 2005).	To be prepared.

TABLE 10-6
SUMMARY OF CALTRANS IMPROVEMENTS

CALTRANS INTERSTATE 5 IMPROVEMENTS			
Map Reference No.	**Description of Project**	**Status of Project**	**Environmental Compliance**
43	From Riverside County line to 4.8 km westerly (Ortega Highway). Project Study Report approved for alternatives (043200). • Widen roadway	PSR completed. Anticipated environmental document is an IS/EA July (anticipated date 2004).	To be prepared.
44	On Route 74 near Route 5/74 separation (Ortega Highway). • Extend right turn lanes.	In PSR stage. Environmental document not determined.	To be determined.
45	Near San Juan Capistrano from 0.5 mile east of Ave Siega to 0.1 mile east of La Pata (Ortega Highway) (031813). • Replace bridge/realign approaches.	Completed.	CE
FUTURE CALTRANS IMPROVEMENTS			
49	I-5 (Oso to Crown Valley) • Southbound auxiliary Lane.	Environmental document not determined.	To be determined.
50	I-5 (Pacific Coast Highway SR1 to Avenida Pico • North and southbound auxiliary HOV lanes.	Environmental document not determined.	To be determined.
51	I-5 (South of Basilone Road) • North and southbound auxiliary HOV lanes.	Environmental document not determined.	To be determined.

Source: Caltrans District 12 list of projects proposed by Caltrans, October 15, 2001 and status of environmental documents provided September 16, 2002.

SECTION 11.0
REFERENCES

11.1 PERSONAL COMMUNICATIONS

Email between Romi Archer, P&D Consultants, and Laura Coley-Eisenberg, Rancho Mission Viejo, regarding status of leases, numerous dates between 2/01 and 8/01.

Phone conversation between Romi Archer, P&D Consultants, and Holly McKee, Lennar Homes regarding updated status of development of Coto de Caza, 4/16/01.

Phone conversation between Ann Reynolds, P&D Consultants, and Jay Bullock, Planning Solutions regarding updates to the Annual Monitoring Report for Ladera Planned Community, 4/17/01.

Phone conversation between Ann Reynolds, P&D Consultants, and Javier Minjares, Southern California Association of Governments (SCAG) regarding SCAG land use inventory and mapping, 4/17/01.

Email between Ann Reynolds, P&D Consultants, and Erica Szlosek, United States Department of Agriculture Natural Resources Conservation Service (NRCS) regarding request for NRCS Farmland Conversion Impact Rating Form (AD-1006), 4/23/01.

Phone conversation between Ann Reynolds, P&D Consultants, and Agnula Burdan, MCB Camp Pendleton Real Estate regarding outleased land on MCB Camp Pendleton, 4/26/01.

Phone conversation between Ann Reynolds, P&D Consultants, and David Pryor, State of California Department of Parks and Recreation regarding general information about San Onofre State Beach, 4/26/01.

Email between Romi Archer, P&D Consultants, and Larry Rannals, MCB Camp Pendleton regarding the Natural Resources Management Plan for MCB Camp Pendleton, 4/26/01.

Email between Romi Archer, P&D Consultants, and Larry Rannals, MCB Camp Pendleton regarding outleased land on MCB Camp Pendleton, 4/26/01.

Phone conversation between Ann Reynolds, P&D Consultants, and Randy Lee, County of Orange Assessor's Office regarding agricultural preserves on Rancho Mission Viejo, 5/2/01.

Email between Romi Archer, P&D Consultants, and Agnula Burdan, MCB Camp Pendleton Real Estate regarding outleased land on MCB Camp Pendleton, 6/13/01.

Email between Ann Reynolds, P&D Consultants, and Laura Coley-Eisenberg, Rancho Mission Viejo regarding agricultural resources, 7/11/01.

Phone conversation between Ann Reynolds, P&D Consultants, and Augustine Resendiz, City of San Juan Capistrano regarding Planned Communities in the City, 7/16/01.

Email between Ann Reynolds, P&D Consultants, and Sheldon Ah Sing, City of San Clemente regarding Planned Communities in the City, 7/17/01.

Email between Ann Reynolds, P&D Consultants, and William Ramsey, City of San Juan Capistrano regarding Planned Communities in the City, 7/23/01.

Email between Ann Reynolds, P&D Consultants, and Douglas Dumhart, City of San Juan Capistrano regarding the City's Central Redevelopment Project, 7/24/01.

Email between Ann Reynolds, P&D Consultants, and William Ramsey, City of San Juan Capistrano regarding agricultural in the City, 8/15/01.

11.2 CONTACTS

11.2.1 CITIES

Mission Viejo
Jackie Alexander, Information Technology Manager

San Clemente
Larry Longnecker, Planning and Zoning
Sheldon Ah-Sing, Planning and Zoning
Jim Peches, Coastal/Advance Planning

San Juan Capistrano
William Ramsey, AICP, Planning Department
Augustine Resendiz, Planning Department
Douglas Dumhart, Planning Department

11.2.2 AGENCIES

County of Orange Planning & Development Services Department (PDSD)
Tim Neely, Manager, Environmental Planning Services Division
Trish McNally, Environmental Planning Services Division
Harry Persaud, Environmental Planning Services Division
Chuck Shoemaker, Environmental Planning Services Division
James Thue, Current Planning Services Division

County of Orange Assessor's Office
Ron Terranova, Appraiser II

Orange County Transportation Authority (OCTA)
Shirley Hsaio, Senior Transportation Analyst

Southern California Association of Governments (SCAG)
Javier Minjares, GIS/Data Base

Center for Demographic Research (CDR) California State University at Fullerton
Bill Gayk, Director

California Department of Parks and Recreation
Michael Tope, Orange County District Superintendent
David Pryor, Resource Ecologist, Orange Coast District
Richard Rozzelle, Technical Services Manager, Orange Coast District

Camp Pendleton
Larry Rannals, Camp Pendleton Liaison Office
Agnula Burdan, Real Estate

United States Army Corps of Engineers
Fari Tabatabai, Senior Regulatory Project Manager
Erik Larsen, Ecologist/Project Manager

United States Fish and Wildlife Service (USFWS)
David Zoutendyk, Biologist

11.2.3 OTHER CONTACTS

Jay Bullock, Planning Solutions, Ladera Planned Community Annual Monitoring Report.

Roger Green, Carmen Vali, Hogle Ireland, Laguna Woods Interim General Plan.

Holly McKee, Lennar Homes, Coto de Caza Specific Plan Annual Monitoring Report.

11.3 SOURCE DOCUMENTS

Camp Pendleton Draft Final Integrated Natural Resource Management Plan (INRMP) (May 2001).

Camp Pendleton Master Plan (1996).

Camp Pendleton Draft Strategic Plan (2001).

Federal Highway Administration "Finding of No Significant Impact for Proposed Bake Parkway and I-5/I-405 Confluence Improvements in Orange County" (May 1990).

Orange County Transportation Authority "Fast Forward" (July 1998).

San Onofre State Beach Revised General Plan, State of California Resources Agency Department of Parks and Recreation (1984).

General Plans

City of Irvine (August 1993).
City of Lake Forest (May 2000).
City of Mission Viejo (October 1990).
City of Dana Point (July 1991).
City of San Juan Capistrano (December 1999).
City of San Clemente (May 1993).
City of Laguna Hills (June 1994).
City of Laguna Woods (Interim General Plan, January 2001).
City of Laguna Niguel (August 1992).
County of Orange (2000).
City of Rancho Santa Margarita (Draft 2002)

Planned Communities and Specific Plans:

Talega Specific Plan (Rolling Hills and Champion Hills) (1992).
Forster Ranch Planned Community (September 1997).
Ladera Ranch Planned Community (October 1995 and as amended June 1999).
Rancho San Clemente Planned Community (April 1996).

Zoning Documents

City of Mission Viejo Official Zoning Map (September 1999).
City of San Clemente Precise Zoning Plan (February 1996).
City of San Juan Capistrano Official Zoning Map (September 2000).
County of Orange Zoning Code (February 2000).

Annual Monitoring Reports

Coto de Caza Annual Monitoring Report (1999).
2000 Annual Monitoring Report Ladera Planned Community (June 2000).
Rolling Hills Planned Community 1999 Annual Monitoring Report and as amended June 2000.
Las Flores Annual Monitoring Report (May 1998)

Other References:

"2001 Prima Deshecha General Development Plan Draft Program Environmental Impact Report No. 575" SCH No. 99041035, County of Orange Integrated Waste Management Division (January 2001).

"Antonio Parkway Roadway Alignment and Land Use Plan (Ladera) Final EIR No. 555" SCH No. 94031075, County of Orange Environmental Management Agency, (October 1995).

"Arroyo Trabuco Golf Course Draft EIR No. 580" SCH No. 2000021095, County of Orange Planning & Development Services Department (May 2001).

Chiquita Canyon High School Final EIR" SCH No. 93111024, Capistrano Unified School District (March 1996).

Community Impact Assessment, Caltrans Environmental Handbook Volume 4 (June 1997).

"Community Impact Assessment OCP-2000."

"Council on Environmental Quality Executive Office of the President: Considering Cumulative Effects Under the National Environmental Policy Act" (Non-regulatory Handbook, January 1997).

Federal Register, Volume 66, Notice of Intent to Prepare an Environmental Impact Report/Statement for the South Orange County Subregion Natural Community Conservation Plan/Habitat Conservation Plan, County of Orange, California (August 23, 2001).

Final EIR Foothill Transportation Corridor Oso Parkway to Interstate 5, prepared for Foothill/Eastern Transportation Corridor Agency by Michael Brandman Associates (October 1991).

"Forster Ranch Specific Plan Amendment" Final EIR, SCH No. 90010597 City of San Clemente, (February 1992).

"Forster Ranch Specific Plan Amendment Final Subsequent EIR, SCH No. 94051067" City of San Clemente, (February 1998).

"Home Depot Project EIR" SCH No. 2000101118 City of San Juan Capistrano, (September 2001).

"Land Use Impacts of Transportation: A Guidebook" National Cooperative Research Program Transportation Research Board National Research Council, Parsons Brinckerhoff, Quade & Douglas (May 1998).

"Marblehead Coastal Final EIR" SCH No. 95091037 City of San Clemente (August 1998).

"MCAS El Toro Community Reuse Plan Draft Supplemental Analysis Final EIR No. 563" SCH No. 96041043 (February 1999).

Orange County Projections (OCP) 2000, Center for Demographic Research California State University, Fullerton, adopted by Orange County Council of Governments (June 22, 2001).

"Our Built and Natural Environments" US Environmental Protection Agency, (January 2001).

"Pacific Point Final EIR, Amendment to Community Development Plan (CDP) 81-1 (RZ 89-07 Forster Canyon Planned Community)" SCH No. 89010046 City of San Juan Capistrano, (August

1991).

Regional Comprehensive Plan and Guide, Southern California Association of Governments (March 1996).

"Rolling Hills Final EIR No. 482" SCH No. 87111111 County of Orange Environmental Management Agency Environmental and Special Projects Division, (May 1988).

"Talega Valley Specific Plan Final EIR 84-02" SCH No. 84100322 City of San Clemente, (August 1988).

Transportation Corridor Agencies (TCA) Final Environmental Impact Report (EIR) No. 3 (Final EIR Foothill Transportation Corridor Oso Parkway to Interstate 5, MBA, October 1991)

"United States Department of Transportation Federal Highway Administration Technical Advisory T 6640.8A: Guidance for Preparing and Processing Environmental and Section 4(f) Documents" (October 30, 1987).

Internet Sites

California Department of Conservation website,
http://www.consrv.ca.gov/dlrp/FMMP/fmmp_categories.htm (August 28, 2001).

City of Irvine website, http://www.cityofirvine.org (July 2001).

SECTION 12.0
LIST OF PREPARERS

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