STATE ROUTE 11 AND THE OTAY MESA EAST PORT OF ENTRY

OTAY MESA, SAN DIEGO, CALIFORNIA
DISTRICT 11–SD–ROUTE 11
PM 0.0/2.7 EA056300

DRAFT
PROGRAM ENVIRONMENTAL IMPACT REPORT/ PHASE I ENVIRONMENTAL IMPACT STATEMENT

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STATE ROUTE 11 CORRIDOR LOCATION AND ROUTE ADOPTION AND LOCATION IDENTIFICATION OF THE OTAY MESA EAST PORT OF ENTRY ON OTAY MESA IN THE COUNTY OF SAN DIEGO, CALIFORNIA

DRAFT PROGRAM ENVIRONMENTAL IMPACT REPORT/ PHASE I ENVIRONMENTAL IMPACT STATEMENT

Submitted Pursuant to: (State) Division 13, California Public Resources Code
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U.S. DEPARTMENT OF TRANSPORTAION
Federal Highway Administration

and

STATE OF CALIFORNIA
Department of Transportation

COOPERATING AGENCIES
U.S. Department of State
U.S. General Services Administration
U.S. Fish and Wildlife Service
U.S. Environmental Protection Agency
U.S. Customs and Border Protection

RESPONSIBLE AGENCIES
California Transportation Commission

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January 9, 2008
Date of Approval

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Abstract: The proposed action represents Phase I of a two-phase process. Phase I would identify the locations for the future implementation of State Route 11 (SR-11) and the Otay Mesa East Port of Entry (POE), both of which would be entirely new facilities. Phase I objectives include adoption of an SR-11 corridor, receipt of a Presidential Permit for the POE, and possible acquisition of right of way (R/W) for the two facilities. Any acquisition of R/W by the California Department of Transportation (Caltrans) at this stage would be undertaken solely with non-FHWA funds. Two alternative SR-11 corridors and corresponding POE locations are evaluated in this Project Environmental Impact Report/Phase I Environmental Impact Statement (PEIR/PEIS). The Western SR-11 Corridor would be 2.1 miles long and the Central SR-11 Corridor would be 2.5 miles long. The Western and Central POE sites would each be 100 acres in size. Alternative designs and operating characteristics for each facility would be identified and studied under a separate future Phase II environmental process. Potential benefits of Phase I would include the reservation of land for SR-11 and the Otay Mesa East POE prior to buildout of the East Otay Mesa area, and possible acquisition of such land at current prices. Please send your comments on this document to Caltrans, Attention: Kelly Finn at the above address by March 3, 2008.

GENERAL INFORMATION ABOUT THIS DOCUMENT

What's in this document:

The California Department of Transportation (Caltrans), in cooperation with the Federal Highway Administration (FHWA), has prepared this Program Environmental Impact Report/Phase I Environmental Impact Statement (PEIR/PEIS), which examines the potential environmental impacts of the alternatives being considered for the proposed program located on East Otay Mesa in San Diego, California. The document describes why the program is being proposed, identifies corridor and site alternatives for the program, the existing environment, the potential impacts from each of the program-level corridor/site alternatives, and the proposed avoidance, minimization and/or compensation measures. Since this is a program-level/Phase I EIR/EIS, there are no ground-disturbing activities proposed.

The purpose of this document is to provide decision-makers and the public sufficient information to identify a corridor for future State Route 11 (SR-11) and the future Otay Mesa East Port of Entry (POE). It is important to note that no ground-disturbing activities would result from the action of the identification of the preferred alternative for the future program. This document does identify possible future impacts of the implementation of Phase II.

Due to the undeveloped nature of east Otay Mesa, there are few impacts anticipated. However, critical laws and regulations exist that may compel identifying an alternative that avoids or minimizes harm to protected resources such as threatened or endangered species and wetlands. The identification of the preferred SR-11 corridor and POE site may impact previously approved and planned land uses on East Otay Mesa. Regardless of the corridor identified, it is anticipated that there would be no discernible differences in traffic volumes, or impacts to air quality, water quality, aesthetics, community character and cohesion, hazardous waste, paleontological resources, cultural resources, or noise levels.

At a future date, a project level EIR/EIS would be prepared which would address project-specific impacts and would propose specific avoidance, minimization and/or compensation measures.

What you should do:

Please read this PEIR/PEIS. Additional copies of this document, as well as supporting technical studies, are available for review at the Caltrans District Office and following locations:

Caltrans District Office
4050 Taylor Street
San Diego CA 92110

Otay Mesa Chamber of Commerce
9163 Siempre Viva Road, Suite I-2
San Diego, CA 92154

San Diego County Library – Imperial Beach Branch
810 Imperial Beach Blvd.
Imperial Beach, CA 91932

San Diego County Library – Bonita-Sunnyside Branch
4375 Bonita Road
Bonita, CA 91902

San Diego County Library – Otay Mesa-
Nestor Branch
3003 Coronado Avenue
San Diego, CA 92154

Attend the public hearing. A public hearing will be scheduled in February 2008.

We welcome your comments. If you have any comments regarding the proposed program, please attend the public meeting and/or send your written comments to Caltrans by the deadline.

Submit comments via postal mail to:
Kelly Finn
Environmental Branch Chief
California Department of Transportation
4050 Taylor Street, MS 242
San Diego, CA 92110

Submit comments by the deadline: March 3, 2008

What happens next:

After comments are received from the public and reviewing agencies, Caltrans, as assigned by FHWA, may undertake additional environmental and/or engineering studies. A Final PEIR/PEIS will be circulated; the Final PEIR/PEIS will include responses to comments received on the Draft PEIR/PEIS and will identify the preferred corridor and POE alternative. Following circulation of the Final PEIR/PEIS, if the decision is made to approve the program, a Notice of Determination will be published in compliance with the California Environmental Quality Act and a Record of Decision will be published in compliance with the National Environmental Policy Act. If the program is given environmental approval and funding is appropriated, Caltrans could begin project-level studies for SR-11 and the U.S. General Services Administration could begin project-level studies for the POE.

For individuals with sensory disabilities, this document is available in Braille, large print, on audiocassette, or computer disk. To obtain a copy in one of these alternate formats, please call or write to Caltrans District 11, Attn: Kelly Finn, Environmental Analysis Branch A, 4050 Taylor Street, MS 242, San Diego, CA 92110; (619) 688-0229 Voice, or use the California Relay Service TTY number, (619) 688-3214, or (800) 735-2929.

It should be noted that at a future date, Caltrans, acting through FHWA or another federal agency, may publish a notice in the Federal Register, pursuant to 23 USC §139(l), indicating that a final action has been taken on this program by Caltrans or another federal agency. If such notice is published, a lawsuit or other legal claim will be barred unless it is filed within 180 days after the date of publication of the notice (or within such shorter time period as is specified in the Federal laws pursuant to which judicial review of the federal agency action is allowed). If no notice is published, then the lawsuit or claim can be filed as long as the periods of time provided by other Federal laws that govern claims are met.

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SUMMARY

SUMMARY

The California Department of Transportation (Caltrans), in cooperation with the Federal Highway Administration (FHWA), proposes to evaluate alternative locations with the goal of identifying a corridor for future State Route (SR-) 11, and an associated site for future development of the Otay Mesa East Port of Entry (POE) in San Diego County (Figure S-1). The identification of a preferred corridor and site constitute Phase I of the SR-11 and Otay Mesa East program (program) analyzed in this document.

S-1 OVERVIEW OF PROGRAM AREA

The proposed SR-11 and Otay Mesa East POE would be located in the unincorporated community of East Otay Mesa, within the Otay Subregional Planning Area, in the southernmost portion of San Diego County (County). Beginning approximately 5.6 miles east of the I-805/SR-905 interchange, at the east side of the approved SR-125/SR-905 junction, SR-11 would extend approximately 2.1 to 2.5 miles east and south to the proposed Otay Mesa East POE at the U.S.-Mexico international border. The proposed program alternatives would traverse the southeastern edge of the City of San Diego and the southern sections of Subareas 1 and 2 of the East Otay Mesa Specific Plan (EOMSP) area of the County (Figure S-2).

Major actions proposed by other governmental agencies in the Otay Mesa area include: construction of SR-905 by Caltrans, including an interchange with the recently opened SR-125 toll facility; U.S. General Services Administration (GSA)/U.S. Customs and Border Protection (CBP) operational improvements to the U.S. Cargo Import Facility at the existing Otay Mesa POE, as well as expansion of the San Ysidro POE and Interstate 5 (I-5) in cooperation with Caltrans/FHWA; improvements to Lone Star Road and widening of Otay Mesa Road by the County; and Otay Water District Capital Improvement Projects including pipelines in Alta Road, Airway Road and north of the prison facilities, as well as a 4-million gallon reservoir also located north of the prison facilities, and a potable production well planned near the foot of Otay Mountain, east of Alta Road and north of Otay Mesa Road.

S-2 PURPOSE AND NEED

The SR-11 and Otay Mesa East POE facilities are interdependent projects in that their locations and designs must be compatible, and neither could proceed independently of the other. These projects ultimately would be designed and built by different agencies, however, with Caltrans/FHWA responsible for SR-11 and GSA responsible for the POE. The two facilities are therefore being studied under a two-phase process. Under Phase I, this Program Environmental Impact Report/Phase I Environmental Impact Statement (PEIR/PEIS) addresses the two projects at a programmatic level to identify the preferred facility locations and allow for the following decisions/actions: (1) route adoption by the California Transportation Commission (CTC); (2) consideration and approval of a Presidential Permit for the POE by the U.S. Department of State (DOS); and (3) possible future designation and acquisition of right-of-way (R/W) for each facility (Federal-aid Highway funds would not participate in such transactions, with the exception of potential hardship or protective acquisitions carried out pursuant to 23 CFR Part 710). Caltrans and GSA could then proceed independently with the design and environmental processing of their respective projects under Phase II, with mutual knowledge that the overall program has been approved. Identification and analysis of design and operational alternatives for the POE and SR-11 would also occur during Phase II.

The new POE is needed because the capacities of the existing POEs in the region are currently being exceeded at peak times of the day and the year, causing excessive border wait times for those engaged in commercial and personal vehicle trips. Between 1996 and 2006, the number of primary inspections (commercial and non-commercial) at the existing Otay Mesa POE increased over 80 percent, and is projected to climb an additional 50 percent by 2025. At the San Ysidro POE, it is anticipated that the total number of primary inspections will increase by approximately 28 percent during the same period, with a similar percentage increase at the Tecate POE. Recent studies have concluded that wait times for personal trips averaged 45 minutes at the Otay Mesa POE and 75 minutes at the San Ysidro POE during peak periods, while approximately 10 percent of people waited as long as one hour at the Otay Mesa POE and two hours at the San Ysidro POE. Trade and travel in this area is forecasted to continue to grow, and border delays are expected to increase correspondingly. Transportation and land use planning agencies on both sides of the border have identified the longer-term need for a third border crossing and associated transportation facilities in the San Diego/Tijuana area. The on-going update of the Otay Mesa Community Plan (OMCP) by the City of San Diego (City) assumes the completion of SR-11 and the Otay Mesa East POE, and the emergence of new border businesses as well as the migration of existing border businesses to Otay Mesa East.

There is no need for SR-11 without the POE; with implementation of the POE, however, SR-11 becomes a critical facility to connect the POE with the existing and planned regional highway system via SR-905 and SR-125 north of the U.S.-Mexico border. On the Mexico side, the new POE (called Otay II), would be connected to the Tijuana-Rosarito corridor with direct links to the Tijuana-Tecate toll and free roads and the Tijuana-Ensenada toll and free roads, thus providing binational regional mobility through the new POE.

Given the ultimate need for the Otay Mesa East POE and SR-11, there is a need to preserve the R/W for these facilities. Land on both sides of the border in this area is rapidly urbanizing, and mounting development pressure has resulted in escalating land prices. On the U.S. side, employment in the census tract surrounding the program study area is projected to more than tripled by 2030 compared to 2000 levels, while population is projected to increase grow by 1,942 percent (SANDAG 2007). Real estate prices in the Otay Mesa area have increased substantially over the past 10 years, and are expected to continue to rise as the San Diego region's last large potential supply of buildable industrial, commercial and office land is developed. In this climate of rapid development and escalating land prices, corridor/site preservation and R/W acquisition is critical to ensuring the availability of appropriate land areas for the proposed projects, and limiting the ultimate cost and impact of implementing a new POE and associated transportation facilities.

S-3 PROPOSED ACTION

The proposed program would identify the locations for the future implementation of SR-11 and the Otay Mesa East POE, both of which would be entirely new facilities. No existing roadway facilities are included within the proposed program, although the western terminus of the proposed alternative SR-11 corridors would overlap with the disturbance limits for the Enrico Fermi Drive off-ramp from the SR-905/SR-125 Interchange that has previously been approved as part of the SR-905 project.

Two alternative corridors and corresponding 100-acre POE sites have been identified for consideration in this PEIR/PEIS, referenced herein as the Western and Central Alternatives. An Eastern Alternative was previously studied and eliminated based on anticipated impacts to sensitive biological and cultural resources. The No Action Alternative is also considered in this

PEIR/PEIS. These alternatives address only the location and boundaries for the two future interdependent facilities shown on Figure S-2.

The Western and Central Alternatives specify corridor locations and boundaries for future SR-11 and the Otay Mesa East POE at a sufficient level of detail to support the current California Environmental Quality Act (CEQA) program-level/National Environmental Policy Act (NEPA) Phase I stage of environmental review. The identified corridors are expected to be sufficient to accommodate up to four standard-width main lanes, shoulders and a median of standard width, standard sight distances, temporary construction impacts, and potential long-term drainage/retention facilities. Specifics of highway geometrics, interchanges, drainage/retention facilities, construction staging and other facility design, construction, and operational details would be determined during Phase II of the program and addressed during a later project-level/Phase II CEQA/NEPA review; such specifics are not considered within this PEIR/PEIS.

It is assumed that the identified POE alternative sites would be sufficient to accommodate all the federal agency and security functions currently anticipated to be necessary for the long-term effective operation of an international POE. They would not accommodate the functions associated with California's commercial vehicle inspection requirements. Any necessary improvements to the existing Commercial Vehicle Enforcement Facility (CVEF) and/or siting of an additional CVEF, as well as necessary roadway connections to such facilities, would be undertaken separately from the proposed program, and would be the subject of an independent development and environmental review process.

The Western Alternative includes the Western Corridor for SR-11 and the Western POE Site. These facility locations are discussed separately below, but are interdependent and would both be required to implement the Western Alternative. Similarly, the Central Alternative includes the Central Corridor for SR-11 and the Central POE Site.

Western Alternative

State Route 11 – Western Corridor

The 2.1-mile long Western SR-11 Corridor would extend eastward from Harvest Road at the future SR-125/SR-905 interchange, passing south of Otay Mesa Road and north of Airway Road, and curving southward to connect with the northern edge of the Western POE Site. Most of the corridor would be 400 to 500 feet wide, although there would be a narrower segment passing between existing buildings east of Sanyo Avenue, and there would be two areas wider than 450 feet to accommodate potential local interchanges with existing Enrico Fermi Drive and future Siempre Viva Road. The area of the corridor provided for the future Enrico Fermi Drive interchange also would include space to the south for possible future improvements to Enrico Fermi Drive to accommodate the interchange.

It is estimated that the Western SR-11 Corridor would require up to approximately 112 acres of new R/W (not including the POE site). A financial feasibility study prepared in 2006 for SR-11 (SANDAG/Caltrans 2006a) estimated SR-11 capital costs, including R/W acquisition and construction costs, to be approximately $208.6 million (in Fiscal Year [FY] 2006 dollars escalated to FY 2012 dollars) for the Western SR-11 Corridor. This estimate included construction of a standard four-lane highway, two interchanges, an overpass, and associated drainage/retention facilities. Annual operating and maintenance expenses for the Western SR-11 Corridor were estimated at between $300,000 and $400,000.

Port of Entry - Western Site

The 100-acre Western POE Site would be located adjacent to the U.S.-Mexico international border, about 1.6 miles east of the existing Otay Mesa POE. The eastern half of the site would be situated directly across the border from the western portion of the Otay II POE site proposed by the Mexican government. The SR-11 financial feasibility study (SANDAG/Caltrans 2006a) estimated the Western POE capital costs, including R/W acquisition and construction, to be between $245 million and $300 million (in FY 2006 dollars escalated to FY 2012 dollars). Annual operating and maintenance expenses for the Western POE were estimated at between $13.7 million and $40.9 million.

Central Alternative

State Route 11 - Central Corridor

The Central SR-11 Corridor would be approximately 2.5 miles long, extending from Harvest Road at the eastern side of SR-125/SR-905 interchange, easterly along the same alignment as the Western SR-11 Corridor up to the eastern side of the Enrico Fermi Drive Interchange. At this point, instead of turning southward, the Central Corridor would continue due east approximately 0.8 mile before beginning to curve gently toward the southeast and continuing approximately 0.5 mile through the area tentatively identified for a future Siempre Viva Road interchange, terminating in the middle of the northern edge of the proposed Central POE Site. The Central Corridor would generally be 400 to 500 feet wide, with the exception of a narrower segment passing between the existing buildings east of Sanyo Avenue; a wider segment to accommodate the Enrico Fermi Drive Interchange, and a potential future interchange at Siempre Viva Road, which would be in a different location than the interchange for the Western SR-11 Corridor noted above.

The Central SR-11 Corridor is estimated to require up to approximately 136 acres of R/W. The financial feasibility study prepared in 2006 for SR-11 (SANDAG/Caltrans 2006a), estimated Central SR-11 Corridor capital costs, including R/W acquisition and construction costs, at between $246.6 million and $264.4 million (in FY 2006 dollars escalated to FY 2012 dollars), assuming the construction of a standard four-lane highway, two interchanges, an overpass, and associated drainage/retention facilities. Annual operating and maintenance expenses for the Central SR-11 Corridor were estimated at $300,000 to $400,000.

Port of Entry - Central Site

The Central POE Site is a slightly irregular parcel. It would consist of approximately 100 acres abutting an existing Sempra Energy easement on the east. The site would be located adjacent to the U.S.-Mexico international border, about 1.8 miles east of the existing Otay Mesa POE, centered directly across the border from the Otay II POE site proposed by the Mexican government.

The SR-11 financial feasibility study (SANDAG/Caltrans 2006a), estimated the Central POE capital costs, including R/W acquisition and construction costs, at between $245 million and $300 million (in FY 2006 dollars escalated to FY 2012 dollars). Annual operating and maintenance expenses for the Central POE were estimated at between $13.7 million and $40.9 million.

No Action Alternative

Under the No Action Alternative, the proposed Program would not be implemented. A corridor would not be identified for future construction of SR-11, and no route would be adopted by the CTC. A Presidential Permit would not be granted, and a site would not be reserved for the Otay Mesa East POE. R/W for an SR-11 corridor and POE site would not be designated or purchased at this time. On-going binational efforts to pursue a third international border crossing in the San Diego/Tijuana region would experience a setback.

An SR-11 corridor would likely still be shown conceptually on the circulation elements of the EOMSP and the County General Plan, and the Otay Mesa East POE would likely continue to be indicated conceptually on the land use plan for Subarea 1 of the EOMSP. The areas currently shown for these facilities on the adopted East Otay Mesa Specific Plan correspond approximately to the Western Alternative addressed in this PEIR/PEIS, although the area shown for the POE site is smaller than the 100 acres currently proposed.

Under the No Action Alternative, the existing San Ysidro and Otay Mesa POEs would remain the only POEs serving the San Diego/Tijuana metropolitan area for the near future, and these existing POEs would have to accommodate increasing numbers of crossings by personal vehicles and pedestrians. Growing cross-border traffic would result in increased delays at the POEs. This could also result in increased traffic congestion on local streets used to access the existing POEs.

S-4 JOINT CEQA/NEPA DOCUMENT

The proposed program is a joint program by Caltrans and the FHWA and is subject to state and federal environmental review requirements. This PEIS/PEIR, therefore, has been prepared in compliance with both CEQA and NEPA. Caltrans is the lead agency under CEQA and the FHWA is lead agency under NEPA. Some impacts determined to be significant under CEQA may not lead to a determination of significance under NEPA.

The Draft PEIR/PEIS will be circulated for public review. After comments are received from the public and reviewing agencies, all comments will be considered and Caltrans and the FHWA may undertake additional environmental and/or engineering studies. A Final PEIR/PEIS will be circulated; the Final PEIR/PEIS will respond to comments received on the Draft PEIR/PEIS, identify the preferred location alternative, and make the final determination regarding the effect of the subject program on the environment. In accordance with CEQA, Caltrans will certify that the PEIR/PEIS complies with CEQA, prepare findings for all significant impacts identified, prepare a Statement of Overriding Considerations for any impacts that will not be mitigated below a level of significance, and certify that the findings and Statement of Overriding Considerations have been considered prior to program approval. Caltrans will then file a Notice of Determination with the State Clearinghouse that will identify whether the subject program will have significant impacts, and whether mitigation measures were included as conditions of program approval, findings were made and a Statement of Overriding Considerations was adopted. Similarly, FHWA will document and explain its decision regarding the alternative identified as preferred, as well as the associated impacts and mitigation measures, in a Record of Decision in accordance with NEPA.

S-5 PROGRAM IMPACTS

This PEIR/PEIS is the first document in a two-phase process that addresses the proposed SR-11 and Otay Mesa East POE facilities. For each environmental issue addressed in Chapter 3 of this PEIR/PEIS, the regulatory setting and affected environment are described, and the impacts expected to occur are evaluated. Impacts for the current Phase I action are described first, followed by a discussion of potential future Phase II impacts that would be addressed by the lead agencies in future environmental documentation.

Proposed actions under Phase I include adoption of an SR-11 corridor and POE alternative, acquisition of a Presidential Permit, and possible land acquisition. Based on the administrative nature of Phase I activities, none of these actions or decisions would be considered irreversible. A particular route adoption could be rescinded, and acquired R/W could be sold. In addition, Phase I would not include any ground-disturbing activities and would not address specific design/operational characteristics of SR-11 or the POE. Therefore, no direct or indirect impacts would occur to resources from Phase I, although identification of a preferred alternative in Phase I could influence the amount, type, location, or timing of development on Otay Mesa. Such effects are not expected to be substantial in Phase I. These conclusions are based on the analysis presented for each environmental issue in Chapter 3.

Implementation of Phase I under either alternative would, however, commit the adopted SR-11 corridor and the associated POE site to potential future development under Phase II, including associated construction and operation impacts. This Phase I document therefore provides general, program-level discussion of potential impacts resulting from Phase II, in order to facilitate a comparison of potential future impacts, determine whether such future impacts should influence the Phase I identification of a preferred SR-11 Corridor and POE site, and provide guidance for the future Phase II analysis. In addition, as required by NEPA, measures to avoid, minimize or mitigate impacts would be identified during Phase II, and potential measures that may be considered are provided in this Phase I document. Specific Phase II impacts would be evaluated in greater detail during the Phase II environmental process, following identification of specific design/operational alternatives for SR-11 and the Otay Mesa East POE. Existing land uses and resources that could potentially be affected by the program in Phase II are listed in Table S-1.

An off-ramp from the SR-905/SR-125 interchange extending eastward to Enrico Fermi Drive was previously evaluated within the SR-905 EIS/EIR (Caltrans 2004a) and approved, including the identification of development impacts and minimization requirements. A Biological Opinion for the SR-905 has been issued by the U.S. Fish and Wildlife Service. Because the SR-905 project has been previously evaluated and approved, and the Enrico Fermi Drive off-ramp could be implemented at this time independently of the subject SR-11/Otay Mesa East POE program, this PEIR/PEIS focuses on the additional impacts (including cumulative impacts) that would occur along this off-ramp area as a result of the SR-11 corridor, beyond those improvements and impacts previously identified for the SR-905 project. Because the SR-905 off-ramp has been previously evaluated and approved in this location, the analysis in Chapter 3 assumes that the off-ramp will be implemented prior to implementation of SR-11, although the off-ramp has not been implemented as of this writing.

Under the No Action Alternative, for all environmental issues, it is assumed that none of the identified Phase I actions associated with the Western or Central Alternative would be implemented, and no associated impacts would occur. The potential impacts of not identifying an SR-11 corridor and POE site at this time are assessed.

Based on the analysis presented in Chapter 3, land use and biological resources are the primary environmental issues that differentiate the program alternatives. Therefore, these issues have received the greatest emphasis in Chapter 3. For all other issues, the differences between the two action alternatives were so minor as to not be relevant for the identification of a preferred alternative. The Central Alternative is approximately 0.4 miles longer, which would result in incrementally greater cost for R/W acquisition, construction, fuel usage, and air pollution generation, but these differences are not sufficient to influence the identification of a preferred alternative, compared with the differences associated with land use and biological resources. Based on initial analysis, it became apparent that for certain issues, substantial impacts would not be expected during Phase I and are also unlikely to occur during Phase II. These issues are Farmland, Community Character and Cohesion, Relocations, and Environmental Justice; they are summarized briefly in the beginning of Chapter 3, but are not addressed further in this PEIR/PEIS. More information on these issues is provided in the Community Assessment Existing Conditions Report (November 2007) prepared for this program.

Where appropriate, measures are provided to avoid, minimize or mitigate program impacts. No such measures are required under NEPA and CEQA for the No Action Alternative; such measures are therefore not discussed with respect to that alternative.

For more detailed information regarding the impacts of the program, including potential future impacts of Phase II, please see Chapter 3 of this PEIR/PEIS.

Cumulative Impacts

The cumulative analysis in Chapter 4.0 of this PEIR/PEIS documents that no cumulative impacts to resources are anticipated in Phase I, because Phase I would not include any ground-disturbing activities, and would not address specific design/operational characteristics of SR-11 or the POE. The potential for the identification of a preferred alternative in Phase I, plus on-going implementation of SR-905 and the SR-905/SR-125 interchange, to cumulatively influence the location, rate and timing of development in Otay Mesa is also noted in Chapter 4.0. The potential for cumulative impacts to environmental resources during Phase II was also recognized, but depends on the anticipated cumulative development at the time that Phase II is implemented. The issue of cumulative impacts to all environmental resources in the cumulative study area would be further evaluated during the Phase II environmental review process.

S-6 COORDINATION WITH PUBLIC AND OTHER AGENCIES

The following permits, reviews and approvals would be required for the current Phase I Program implementation:

Agency	Permit/Approval	Status
U.S. Department of State	Presidential Permit	Pending
U.S. General Services Administration	Approval of preferred POE site alternative	Pending
California Transportation Commission	SR-11 Route Adoption	Pending

Table S-1 SUMMARY OF EXISTING RESOURCES AND LAND USES POTENTIALLY AFFECTED BY PHASE II OF PROGRAM			
	Western Corridor/POE	**Central Corridor/POE**	**No Action**
HUMAN ENVIRONMENT			
Land Use			
Surrounding Land Uses	Mostly undeveloped or graded	Mostly undeveloped or graded	Mostly undeveloped or graded
Land Uses Within SR-11 Corridors/POE Sites			
Developed or Graded Land Converted to SR-11	16.4 acres	16.3 acres	0 acres
Temporary Use Land Converted to SR-11	5.2 acres	8.7 acres	0 acres
Industrial Land Converted to SR-11	5.3 acres	5.3 acres	0 acres
Undeveloped Land Converted to SR-11	94.2 acres	119.0 acres	0 acres
Undeveloped Land Converted to POE	99.5 acres	100.0 acres	0 acres
Consistency with Land Use Plans			
4(f)	No 4(f) resources affected	No 4(f) resources affected	No 4(f) resources affected
RCP	Consistent	Consistent	Consistent
2003 Revenue-Constrained Mobility 2030 RTP	Consistent	Consistent	Consistent
2006 RTIP	Consistent	Consistent	Consistent
County General Plan	Consistent	Consistent	Consistent
Otay Subregional Plan	Consistent	Consistent	Consistent
EOMSP	Consistent	Consistent	Consistent
City General Plan	Consistent	Consistent	Consistent
City Otay Mesa Community Plan	Consistent	Consistent	Consistent
Growth	Potential to increase capacity for transport of people, goods and services across the border; potential for associated stimulation of the economy. Potential impacts to planned and/or approved developments.	Potential to increase capacity for transport of people, goods and services across the border; potential for associated stimulation of the economy. Potential impacts to planned and/or approved developments.	Strong existing growth pressure. Numerous active development proposals within the area, which will likely proceed with or without SR-11 corridor and POE site.
Energy	Future energy use due to increased use of materials in highway and POE construction, and increased post-construction vehicle travel; balanced by reduced energy use associated with traffic congestion and inefficient energy use by vehicles waiting at the existing POEs.	Central SR-11 Corridor approximately 2,000 feet longer than the Western SR-11 Corridor, with corresponding increase in energy use due to increased use of construction materials and increased vehicle travel.	Continued long wait times to cross the border, with associated traffic congestion and inefficient energy use by vehicles waiting.

Table S-1 (cont.) SUMMARY OF EXISTING RESOURCES AND LAND USES POTENTIALLY AFFECTED BY PHASE II OF PROGRAM			
	Western Corridor/POE	**Central Corridor/POE**	**No Action**
HUMAN ENVIRONMENT (cont.)			
Utilities	Water pipelines in Enrico Fermi Drive, Alta Road, and Airway Road; 30-inch diameter gas pipeline in Via de la Amistad.	Water pipelines in Enrico Fermi Drive and Alta Road; 30-inch diameter gas pipeline in Via de la Amistad.	No impacts.
Traffic and Transportation/Pedestrian and Bicycle Facilities	Potential to generate impacts due to construction of new roadways and alteration of existing roadways; redistribution of traffic on local roads; construction of the POE or any other traffic-generating use; or creation of new demand for pedestrian, transit or bicycle facilities. Anticipated that the new POE would relieve traffic at the existing Otay Mesa and San Ysidro POEs, and increase traffic on local existing and future roadways.	Potential to generate impacts due to construction of new roadways and alteration of existing roadways; redistribution of traffic on local roads; construction of the POE or any other traffic-generating use; or creation of new demand for pedestrian, transit or bicycle facilities. Anticipated that the new POE would relieve traffic at the existing Otay Mesa and San Ysidro POEs, and increase traffic on local existing and future roadways.	Continued long wait times to cross the border, with associated traffic congestion.
Visual/Aesthetics	Currently area has rural appearance; over time, area will be built out and will take on an industrial appearance, with or without program. Details of SR-11 and POE design appearance unknown at this time.	Currently area has rural appearance; over time, area will be built out and will take on an industrial appearance, with or without program. Details of SR-11 and POE design appearance unknown at this time.	Currently area has rural appearance; over time, area will be built out and will take on an industrial appearance, with or without program.
Cultural Resources	Three cultural sites in SR-11 corridor and four cultural sites in POE site with no further research potential; no survey work determined to be necessary. Potential for adverse effects to unknown cultural resources beneath the ground surface during Phase II grading and construction would be determined.	Six cultural sites in SR-11 corridor and three cultural sites in POE site with no further research potential; no further survey work determined to be necessary. Potential for adverse effects to unknown cultural resources beneath the ground surface during Phase II grading and construction would be determined.	No effects to cultural resources.

Table S-1 (cont.) SUMMARY OF EXISTING RESOURCES AND LAND USES POTENTIALLY AFFECTED BY PHASE II OF PROGRAM			
	Western Corridor/POE	**Central Corridor/POE**	**No Action**
PHYSICAL ENVIRONMENT			
Hydrology and Floodplain	Mapped by FEMA as Zone X, or areas determined to be outside the 500-year (and therefore the 100-year) floodplain.	Mapped by FEMA as Zone X, or areas determined to be outside the 500-year (and therefore the 100-year) floodplain.	No effects to hydrology and floodplains.
Water Quality and Storm Water Runoff	Potential adverse effects from construction-related contaminants and sedimentation, and long-term surface runoff from proposed facilities, to be addressed through regulatory compliance and appropriate Best Management Practices.	Potential adverse effects from construction-related contaminants and sedimentation, and long-term surface runoff from proposed facilities, to be addressed through regulatory compliance and appropriate Best Management Practices.	No effects to water quality and storm water runoff.
Geology/Soils/Seismic/Topography	Potential adverse effects from Otay Formation soils within the study area that may be subject to manufactured slope failure under certain conditions; expansive (shrink-swell) soils; and corrosive soils.	Potential adverse effects from Otay Formation soils within the study area that may be subject to manufactured slope failure under certain conditions; expansive (shrink-swell) soils; and corrosive soils.	Potentially susceptible to manufactured slope failure under certain conditions; expansive (shrink-swell) behavior; and alluvium and colluvium with corrosive characteristics.
Paleontology	Potential effects to mid- to high-sensitivity formations.	Potential effects to mid- to high-sensitivity formations.	No effects to paleontology.
Hazardous Waste/Materials	Overall potential for hazardous waste issues/materials is low. Residual soil or groundwater contamination resulting from an unauthorized release or mismanagement of hazardous materials may be encountered during subsurface highway construction activities.	Overall potential for hazardous waste issues/materials is low. Residual soil or groundwater contamination resulting from an unauthorized release or mismanagement of hazardous materials may be encountered during subsurface highway construction activities.	No effects to hazardous waste/materials.
Air Quality	Potential to benefit or adversely affect air quality, depending on the specific design, construction and operational characteristics of the Phase II alternatives.	Potential to benefit or adversely affect air quality, depending on the specific design, construction and operational characteristics of the Phase II alternatives.	Potential to adversely affect air quality, due to increasing congestion at the border crossings over time.

Table S-1 (cont.) SUMMARY OF EXISTING RESOURCES AND LAND USES POTENTIALLY AFFECTED BY PHASE II OF PROGRAM			
	Western Corridor/POE	**Central Corridor/POE**	**No Action**
PHYSICAL ENVIRONMENT (cont.)			
Noise and Vibration	Currently no sensitive receptors nearby. Phase II noise impacts would depend on the characteristics of the design/operational alternatives and any changes in the affected environment by the time that Phase II is initiated.	Currently no sensitive receptors nearby. Phase II noise impacts would depend on the characteristics of the design/operational alternatives and any changes in the affected environment by the time that Phase II is initiated.	No effects from noise and vibration.
BIOLOGICAL ENVIRONMENT			
Natural Communities			
*Basin with Fairy Shrimp**	0	0.01 acre	0
Mule Fat Scrub-Disturbed	0.25 acre	0.25 acre	0
Emergent Wetland	0	0.25 acre	0
Freshwater Marsh	0	0.03	0
Disturbed Wetland	0	0.05 acre	0
Diegan Coastal Sage Scrub	0	5.85 acre	0
Diegan Coastal Sage Scrub-Disturbed	0	5.56 acre	0
Native Grassland	<0.01 acre	0	0
Non-Native Grassland	159.01 acre	175.32 acre	0
Eucalyptus Woodland	0	0.04 acre	0
Wetlands and Other Waters			
ACOE Jurisdictional Wetlands			
Freshwater Marsh	0	0.03 acre (135 linear ft)	0
Emergent Wetland	0	<0.01 acre (40 linear ft)	0
Disturbed Wetland	0	0.05 acre (175 linear ft)	0
ACOE Non-Wetland WUS			
Ephemeral and Intermittent Drainage	0.21 acre (3,828 linear ft)	0.14 acre (3,370 linear ft)	0
CDFG Jurisdictional Areas			
Mule fat scrub-disturbed	0.25 acre	0.25 acre	0
Freshwater Marsh	0	0.03 acre	0
Emergent Wetland	0	<0.01 acre	0
Disturbed Wetland	0	0.05 acre	0
Streambed	0.28 acre	0.18 acre	0

Table S-1 (cont.) SUMMARY OF EXISTING RESOURCES AND LAND USES POTENTIALLY AFFECTED BY PHASE II OF PROGRAM			
	Western Corridor/POE	**Central Corridor/POE**	**No Action**
BIOLOGICAL ENVIRONMENT (cont.)			
Sensitive Plant Species	Small-flowered morning glory, San Diego marsh-elder and other species not observed, but with potential to occur.	California adolphia, variegated dudleya, San Diego barrel cactus, San Diego County viguiera, small-flowered morning glory, San Diego marsh-elder, Otay tarplant and other species not observed, but with potential to occur,	No effects to sensitive plant species.
Sensitive Animal Species	Burrowing owl, loggerhead shrike, red-diamond rattlesnake, California horned lark, grasshopper sparrow, northern harrier, San Diego black-tailed jackrabbit, white-tailed kite, two-striped garter snake, coastal western whiptail and other species not observed, but with potential to occur.	Burrowing owl, loggerhead shrike, red-diamond rattlesnake, white-tailed kite, California horned lark, northern harrier, San Diego black-tailed jackrabbit, coastal western whiptail, grasshopper sparrow, western spadefoot toad and other species not observed, but with potential to occur.	No effects to sensitive animal species.
Federally Listed Threatened and Endangered Species	Quino checkerspot butterfly and other species not observed, but with potential to occur. Critical habitat for Quino and San Diego fairy shrimp present within alternative.	Otay tarplant, San Diego fairy shrimp, Riverside fairy shrimp and other species not observed but with potential to occur. Critical habitat for Quino, San Diego fairy shrimp and Otay tarplant present within alternative. Critical habitat for coastal California gnatcatcher adjacent. Indirect impacts to coastal California gnatcatcher would occur.	No effects to listed plant and animal species.
Invasive Species	Numerous invasive plant species, as well as cabbage white butterfly and European starling	Numerous invasive plant species, as well as cabbage white butterfly and European starling	No effects with respect to invasive species.

*Basin that is not a vernal pool, but is included as a vegetation community because it supports federally endangered San Diego and Riverside fairy shrimp.

It is anticipated that the following permits, reviews and approvals would be required at the future Phase II project level of implementation; additional permits may be identified during Phase II analysis:

Agency	Permit/Approval
U. S. General Services Administration	Approval of preferred design/operational characteristics for POE
U.S. Fish and Wildlife Service	Endangered Species Act Section 7 Consultation for Threatened and Endangered Species Review and Comment on Clean Water Act 404 Permit
U.S. Army Corps of Engineers	Clean Water Act Section 404 Permit for filling waters of the United States
California Regional Water Quality Control Board	NPDES Permits; Clean Water Act Section 401 Water Quality Certification or Waiver
California Department of Fish and Game	California Fish and Game Code 1602 Agreement for Streambed Alteration Section 2080.1 Agreement for Threatened and Endangered Species
County of San Diego City of San Diego	Freeway Agreement

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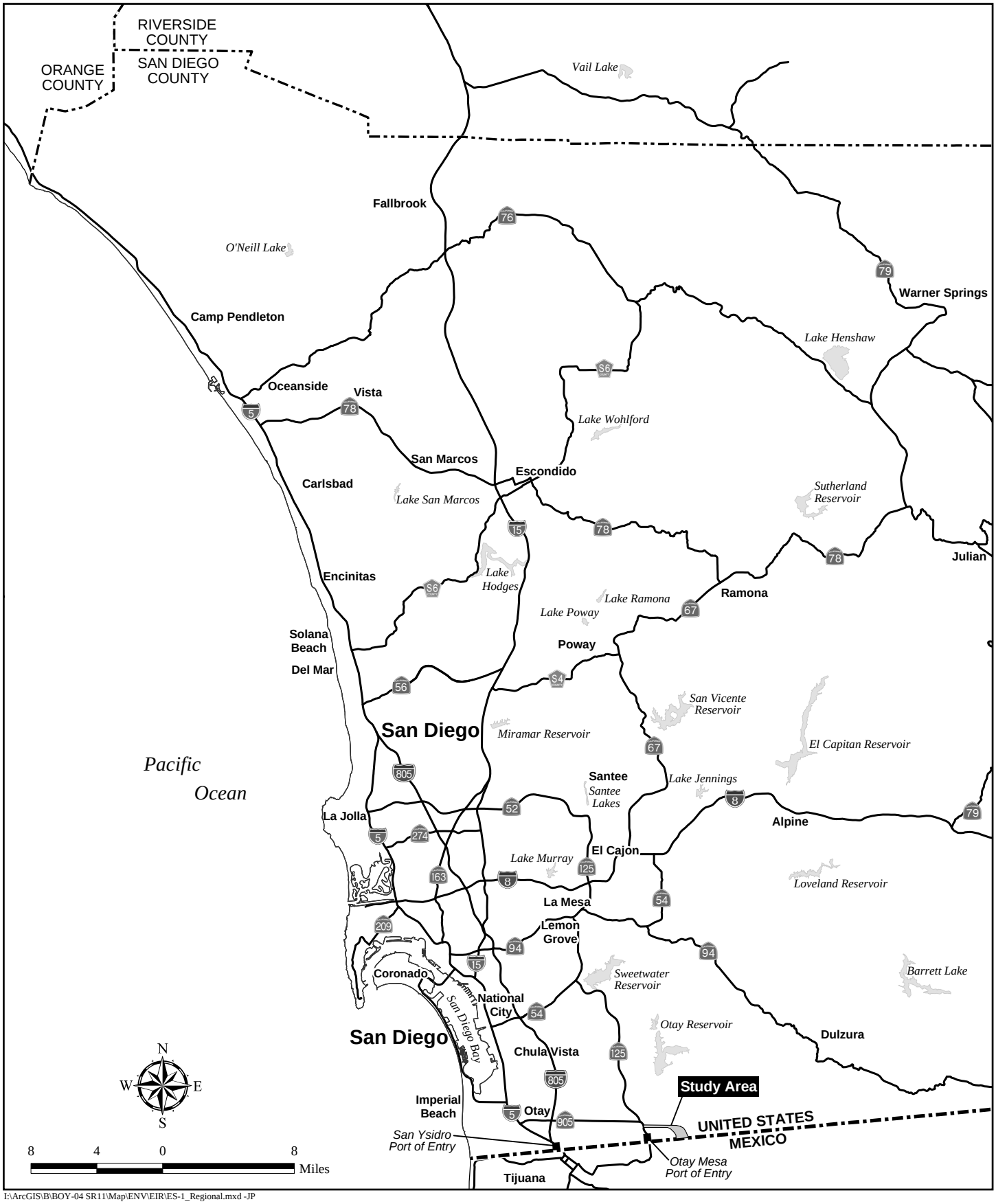

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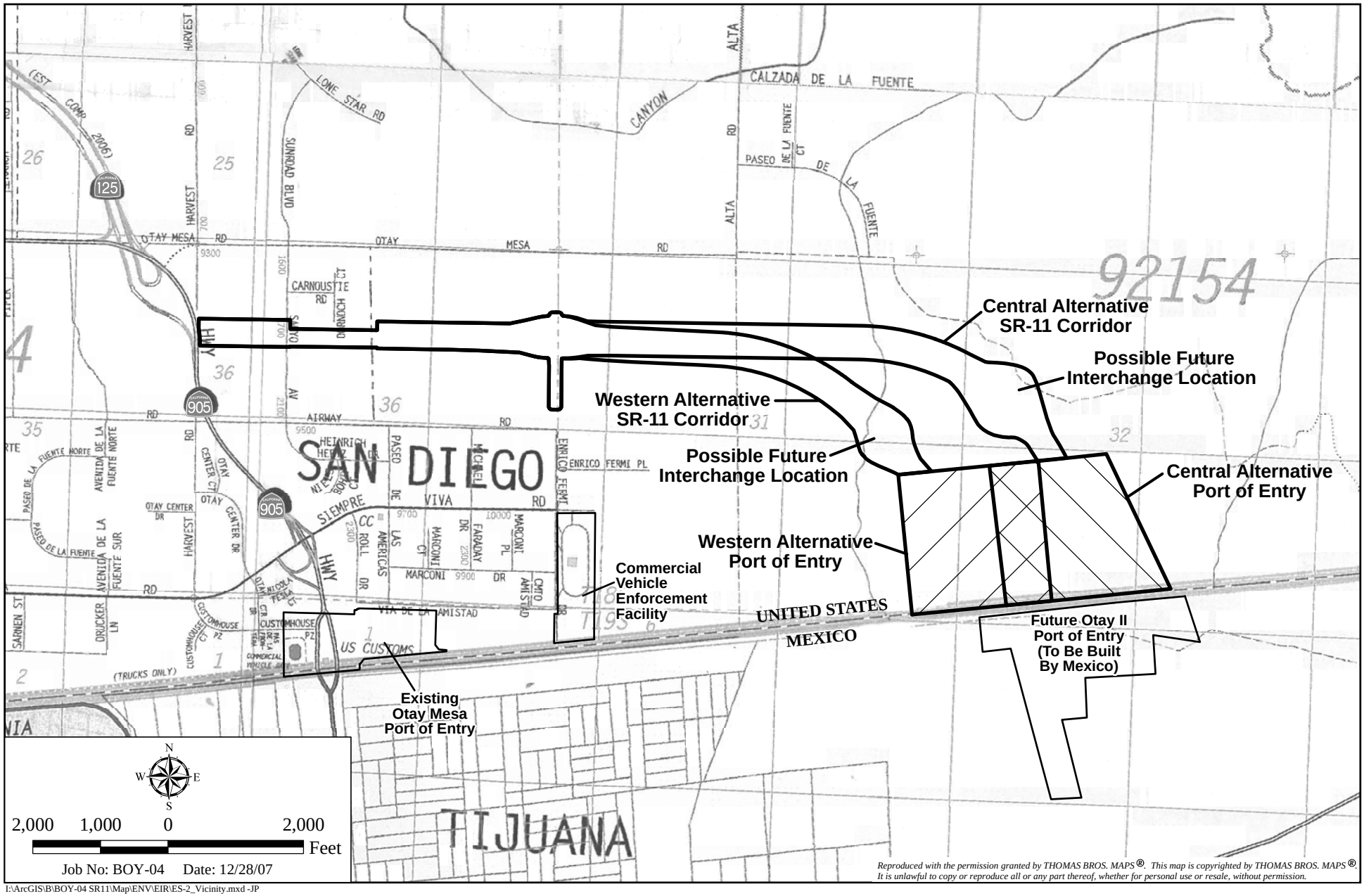
Regional Location Map

STATE ROUTE 11 AND OTAY MESA EAST PORT OF ENTRY PEIR/PEIS

Figure S-1



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Vicinity Map

STATE ROUTE 11 AND OTAY MESA EAST PORT OF ENTRY PEIR/PEIS

Figure S-2

Chapter 1.0

PURPOSE AND NEED FOR THE PROGRAM

CHAPTER 1.0 – PURPOSE AND NEED FOR THE PROGRAM

1.1 INTRODUCTION

The California Department of Transportation (Caltrans), in cooperation with the Federal Highway Administration (FHWA), proposes to evaluate alternative locations with the goal of identifying a preferred corridor for future State Route (SR-) 11, and an associated site for future development of the Otay Mesa East Port of Entry (POE) in San Diego County (Figure 1-1). The identification of a preferred corridor and site constitute the program (program) analyzed in this document.

Future SR-11 would begin approximately at the SR-905/SR-125 interchange on east Otay Mesa, extending east and then south approximately 2.1 to 2.5 miles to a new POE at the United States (U.S.) - Mexico border (Figure 1-2). The SR-11 and Otay Mesa East POE facilities are interdependent projects in that their locations and designs must be compatible, and neither could proceed independently of the other. These projects ultimately would be designed and built by different agencies, however, with Caltrans/FHWA responsible for SR-11 and the U.S. General Services Administration (GSA) responsible for the POE. The two facilities are therefore being studied under a two-phase process. Under Phase I, this Program Environmental Impact Report/Phase I Environmental Impact Statement (PEIR/PEIS) addresses the two projects at a programmatic level, to identify the preferred facility locations and allow for: (1) route adoption by the California Transportation Commission (CTC); (2) consideration and approval of a Presidential Permit for the POE by the U.S. Department of State (DOS); and (3) possible future designation and acquisition of right-of-way (R/W) for each facility (Federal-aid Highway funds would not participate in such transactions, with the exception of potential hardship or protective acquisitions carried out pursuant to 23 CFR Part 710). Caltrans and GSA could then proceed independently with the design and environmental processing of their respective projects under Phase II, with mutual knowledge that the overall program has been approved. Identification and analysis of design and operational alternatives for the POE and SR-11 would also occur during Phase II.

The Project Study Report (PSR; Caltrans 2000) for SR-11 was completed in 2000. SR-11 is included in the San Diego Association of Governments' (SANDAG) 2030 Revenue Constrained Regional Transportation Plan (RTP; SANDAG 2007a); the 2006 Regional Transportation Improvement Plan (RTIP; SANDAG 2006a), which covers Fiscal Years 2007 through 2011; and the SAFETEA-LU[1] List of High Priority Projects in San Diego, which covers the five-year period ending 2008/2009. It is shown conceptually on the circulation elements of the East Otay Mesa Specific Plan (EOMSP) and the County of San Diego County General Plan. The Otay Mesa East POE is also conceptually indicated on the County's land use plan for Subarea 1 of the EOMSP.

1.2 PURPOSE OF THE PROGRAM

Two international POEs, San Ysidro and Otay Mesa, currently link San Diego and Tijuana, while a third POE is located east of the San Diego metropolitan area at Tecate. Together, these three POEs serve as the gateway for all pedestrian traffic and vehicular movement of people and

[1] The Federal Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), passed in August 2005, authorizes the Federal surface transportation programs for highways, highway safety and transit for the 5-year period 2005-2009.

goods between the San Diego region and Baja California, Mexico. As described above, the proposed program would constitute the first phase of the development of a new POE in the San Diego/Tijuana region, along with development of the associated roadway (SR-11) that would connect the new POE to the existing and planned roadway system in the area. The purpose of the Phase I program is to:

- Identify a corridor for future SR-11, providing for route adoption by CTC;
- Identify a site for the future Otay Mesa East POE;
- Support Presidential Permit acquisition for the POE;
- Allow for the designation and/or purchase of R/W for each project;
- Facilitate land use and circulation planning in the EOMSP area, which is largely dependent on the locations of the proposed projects; and,
- Comply with international agreements to pursue the development of a new Otay Mesa East POE

1.3 NEED FOR THE PROGRAM

As noted above, this environmental document analyzes only Phase I of the program. The ultimate need for the SR-11 and Otay Mesa East POE projects underlies the need for Phase I. Both the ultimate need for the projects and the need for Phase I are discussed in this section.

1.3.1 Ultimate Need for the Projects

The need for SR-11 is linked to the need for the new Otay Mesa East POE. There is no need for SR-11 without the POE; with implementation of the POE, however, SR-11 becomes a critical facility to connect the POE with the regional highway system north of the border via SR-905 and SR-125.

The new POE is needed because the capacities of the existing POEs in the region are currently being exceeded at peak times of the day and the year, causing excessive border wait times for those engaged in commercial and personal vehicle trips. Trade and travel in this area are forecasted to continue to grow, and border delays are expected to increase correspondingly. The Otay Mesa area is covered by two Community Plans, the EOMSP in the County of San Diego portion of the mesa and the Otay Mesa Community Plan in the City of San Diego portion of the mesa. Both plans designate much of the remaining undeveloped land on the mesa for industrial or residential development. As development occurs, demand for transportation infrastructure in the area, including SR-11, is projected to increase.

The San Diego and Tijuana region is the largest urban border area along the entire U.S. - Mexico border, with a combined population of over four million people. This combined population is anticipated to grow to over 5.5 million by the year 2020 (SANDAG/Caltrans 2006a). The communities of San Diego and Tijuana are connected by the existing POEs at San Ysidro and Otay Mesa, which play a major role in the exchange of goods, services and people between the U.S. and Mexico. The San Ysidro POE handles passenger vehicle, bus, rail (limited use), and pedestrian traffic only, and is the busiest land crossing in North America, with over 47,000 northbound vehicle crossings per day (SANDAG/Caltrans 2006). The Otay Mesa POE is the third busiest commercial POE between the two countries (in terms of dollar value of goods), and the busiest along the California-Mexico segment of the border. This POE handles 96 percent of all the commercial truck traffic in the region, as well as passenger vehicle, bus and pedestrian traffic. In 2006, the Otay Mesa POE was the gateway for $28.6 billion in freight

transported in more than 1.4 million truck trips. The remaining commercial traffic in the San Diego County - Baja California region, over 140,000 truck trips carrying $1.2 billion in goods, passed through the POE at Tecate (SANDAG 2007). Due to recent changes in the enforcement of length restrictions on trucks traveling on the eastern portion of SR-94 to the Tecate POE, many truck trips have now been diverted from the Tecate POE to the existing Otay Mesa POE, placing additional pressure on this POE.

The need for a third POE in the San Diego/Tijuana area is well established,[2] and is based on recent and projected increases in trade and personal travel beyond the capacities of the existing POEs. Trade between the U.S. and Mexico has increased substantially since the signing of the North American Free Trade Agreement (NAFTA) in 1994, and totaled over $332 billion by 2006 (U.S. Department of Transportation 2007a). Over 80 percent of merchandise moves across the border by trucks (U.S. Department of Transportation 2007b), with a smaller portion exchanged by rail, water and air. Pedestrian and passenger car border crossings between the U.S. and Mexico have also risen dramatically in the past decade, reaching over sixty million people in 2006 in the San Diego County/Baja California border area alone (SANDAG/Caltrans 2006). Between 1996 and 2006, the number of primary inspections (commercial and non-commercial) at the existing Otay Mesa POE increased over 80 percent, and is projected to climb an additional 50 percent by 2025. At the San Ysidro POE, it is anticipated that the total number of primary inspections will increase by approximately 28 percent during the same period, with a similar percentage increase at the Tecate POE (Caltrans/GSA 2007). This explosion in trade and travel, in combination with recent increases in U.S. security requirements, has resulted in infrastructure-related challenges. Current transportation infrastructure was not designed to handle the large traffic volumes stimulated by NAFTA and other economic growth.

The increase in local population and international trade have resulted in corresponding increases in both local and cross-border traffic along the southern U.S. border, placing an increased strain on the POEs and related local and regional transportation infrastructure. The existing San Ysidro and Otay Mesa POEs have become a bottleneck in the system of interchange between the two countries, increasingly restricting the free movement of people and goods at peak times. Recent studies have concluded that wait times for personal trips averaged 45 minutes at the Otay Mesa POE and 75 minutes at the San Ysidro POE during peak periods, while approximately 10 percent of people waited as long as 1 hour at the Otay Mesa POE and 2 hours at the San Ysidro POE. The average processing and wait time for commercial freight crossings at the Otay Mesa POE has been reported as typically 1.5 to 2 hours (without U.S. secondary inspection), with 10 percent of commercial border crossers waiting as much as 4 hours (SANDAG/Caltrans 2006b).

According to a January 2006 SANDAG/Caltrans study entitled *Economic Impacts Of Wait Times At The San Diego – Baja California Border*, border delays discourage cross-border personal trips, and result in increased transportation costs and interruptions in the manufacture and delivery of goods. In an economy increasingly based on “just-in-time” delivery of inputs and products, unpredictable border wait times for trucks act as a barrier to trade, inhibiting cross-border economic investment opportunities. The study concludes that:

> “Inadequate infrastructure capacity, which is failing to keep up with the increase in trade and security requirements at the principal border crossings between San Diego County and Baja California, currently creates traffic congestion and delays that cost the U.S. and

[2] See Caltrans 2004a; Joint Working Group 2004; SANDAG 2005a and 2007b; SANDAG/Caltrans 2006a and 2006b; Caltrans/GSA 2007; and U.S. Department of Transportation 2007a and 2007b.

Mexican economies an estimated US$6 billion in gross output in 2005. An estimated 51,325 jobs are sacrificed because of the reduction in output."

The study indicates that border delays will increase and the economic losses incurred by the regional and national economies will more than double in the next ten years, unless significant improvements in border crossing and transportation infrastructure and management take place.

Numerous improvements to the existing San Ysidro, Otay Mesa and Tecate POEs have been studied, and in many cases have been implemented or are planned for implementation to reduce border delays. The existing 43-acre Otay Mesa POE was last upgraded and expanded in 1994. It is surrounded on the north and west by commercial development, including warehouses and brokerage offices, and on the south by the Mexican POE facilities and adjacent dense residential, commercial and industrial development. An adjoining, privately owned 13-acre parcel on the east could potentially be acquired to allow some expansion on the U.S. side of the existing Otay Mesa POE (Caltrans/GSA 2007), although this would not address constraints on the Mexican side of the border.

A 2004 Caltrans study (Caltrans 2004b) identified a number of recommendations for improvements in the flow of vehicles and the operational efficiency of the existing Otay Mesa and San Ysidro POEs. For the northbound flow at Otay Mesa, the report suggested potential operational improvements and increasing the number of lanes leaving the Mexican export facilities. For the southbound flow at Otay Mesa, recommendations focused on improving access leading to the U.S. export facilities, re-routing empty commercial trucks within the Mexican import facilities, and improving unsignalized intersections.

At the San Ysidro POE, the report recommended expansion of the SENTRI lanes[3] (completed in June 2007), signalization of an intersection, enforcement of no parking zones, restriping lanes, rerouting traffic, extending the pedestrian bridge and grade separation (completed in Fall 2006), expansion of bicycle facilities (completed in Spring 2007), and other improvements. The San Ysidro POE is currently in the master planning stage of a project that would include demolition and new construction of most of the POE. The new facility will consist of 225,000 square feet of building space, primary and secondary inspection areas, 29 inbound vehicle lanes, two bus lanes, and six outbound vehicle lanes (GSA/CBP 2007). In addition, a new southbound roadway will be constructed to connect with Mexico's El Chaparral facility. Even with these improvements, northbound delays are expected to continue to exceed 60 minutes. The Tecate POE has recently been expanded on the U.S. side, but operational and access constraints have limited the effective capacity of this POE.

Overall, while these short-term solutions can enhance the flow of goods and people, growth is outstripping capacity at the existing POEs, particularly on the Mexican side of the border where the two existing POEs are surrounded by dense development. Transportation and land use planning agencies on both sides of the border have identified the long-term need for a third border crossing and associated transportation facilities in the San Diego/Tijuana area, in addition to completing planned improvements to the existing POEs. Local, regional and bi-national land use studies have identified the eastern side of Otay Mesa as the preferred general location of the new POE, and a corresponding POE site has been identified on the Mexico side of the border. Diplomatic notes have been exchanged between the U.S. and Mexican

[3] The SENTRI (Secure Electronic Network for Travelers Rapid Inspection) program consists of dedicated commuter lanes where prescreened applicants and vehicles are allowed to cross the border northbound into the US, usually more quickly and efficiently than in the open-access lanes.

governments agreeing that a new port is in their best interests. Additional binational support for the new POE is also evidenced by:

- Completion of a roadway plan for a new Otay II POE entitled, "Estado de Integración Vial Para El Puerto Fronterizo Otay Este II, En La Ciudad de Tijuana, B.C.," 2002, from the Municipality of Tijuana and the Secretariat of Social Development of the Mexican Federal Government;
- Identification by the Mexican Government Secretariat of Communication and Transportation (SCT) of the need for additional capacity for commercial traffic in the Tijuana region in the document, "Análisis de las Necesidades de Ampliación de la Capacidad de la Infraestructura de Transporte en los Puertos Fronterizos de Carga de Tijuana, B.C.," October 2002;
- The diplomatic note sent on May 17, 2006 from the Mexican Federal Government to the U.S. Department of State indicating the Mexican government's interest in conducting the necessary feasibility studies on both sides of the border.
- Reservation of the land needed for the Otay II POE by the Municipality of Tijuana through the State of Baja California. The act was published in the Periodico Oficial (similar to the U.S. Federal Register) on May 19, 2006 (#21 – Section 1). Although this land reservation will expire on May 19, 2011, it can be extended based upon project status at that time.
- The Conceptual Master Plan, Cost/Benefit Studies and Financial Feasibility (Feasibility Study) for a new crossing at Otay Mesa East ("Elaboración del Plan Maestro Conceptual, Estudios de Costo Beneficio y Factibilidad Financiera para el Nuevo Cruce Internacional de Mesa de Otay II, en el Estado de Baja California"), being conducted by the SCT, scheduled for completion by the end of December 2007.
- Approval of the Otay Mesa/Mesa de Otay Binational Corridor Strategic Plan by the SANDAG Board of Directors on September 28, 2007 and the Tijuana City Council on October 5, 2007.

SR-11 would be needed to provide access to and from the new POE, through a currently undeveloped area. Planned County Circulation Element Roads in the area would not be adequate to carry the personal and commercial vehicle traffic expected to flow through the new POE. Future SR-11 would provide a direct connection from the existing and planned highway system in the area to the new Otay Mesa East POE. On the Mexico side, the new POE (called Otay II) would be connected to the Tijuana-Rosarito corridor, with direct links to the Tijuana-Tecate toll and free roads and the Tijuana-Ensenada toll and free roads, thus providing binational regional mobility through the new POE. The PSR (Caltrans 2000) determined that the construction of a conventional highway or expressway would provide substantially less mobility than would a freeway for interregional cross-border traffic, and may not adequately handle the anticipated high volume of truck traffic, particularly at intersections. Local traffic circulation and access to local businesses would potentially be disrupted, as currently occurs due to queuing associated with congestion at the existing Otay Mesa POE. Emissions associated with such congestion would likely also be higher.

1.3.2 Need for Phase I of the Program

Given the ultimate need for the Otay Mesa East POE and SR-11, as described above, there is a need to preserve the R/W for these facilities. Land on both sides of the border in this area is rapidly urbanizing, and mounting development pressure has resulted in escalating land prices.

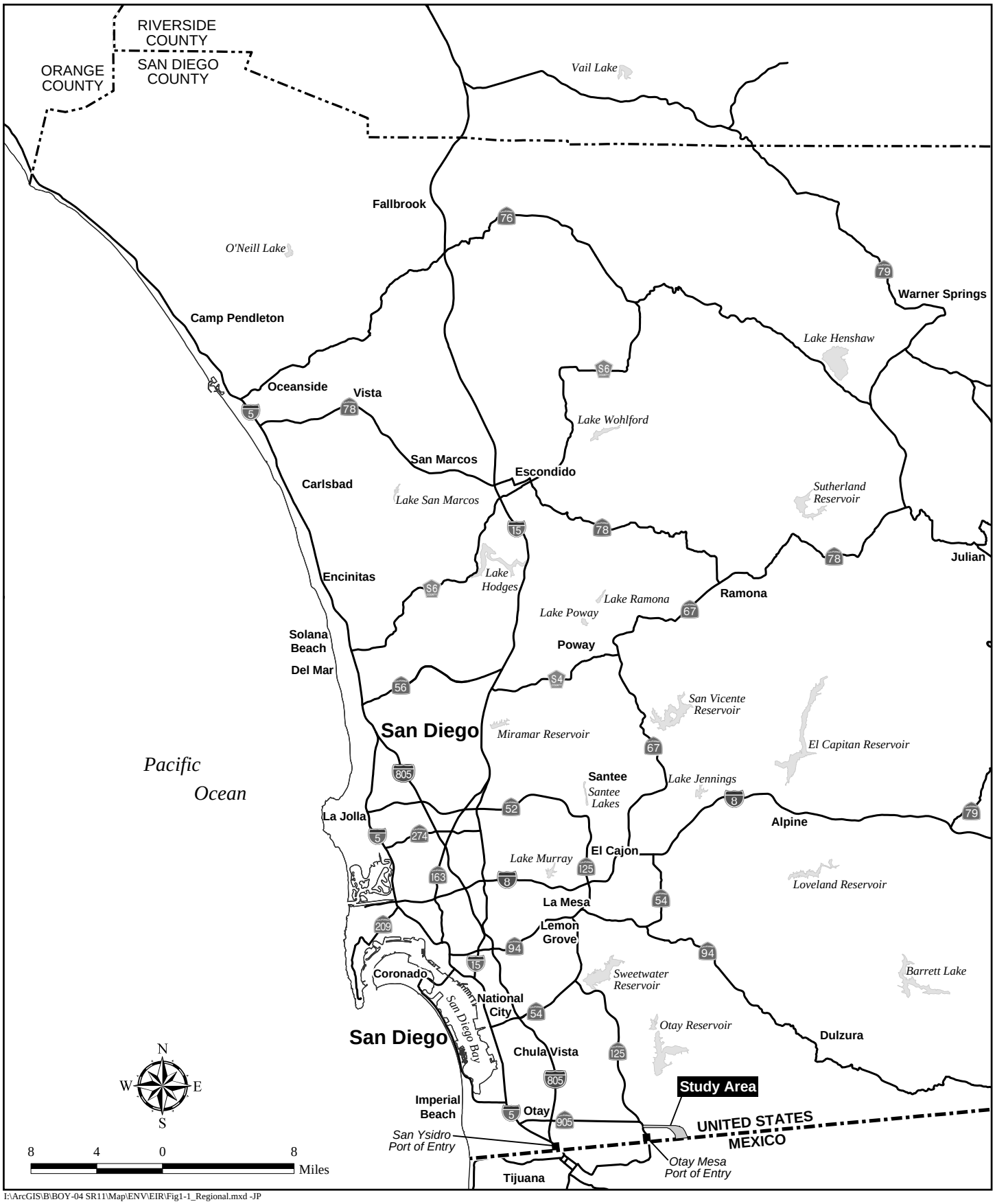
On the U.S. side, employment in the census tract surrounding the program study area is projected to more than quadruple by 2030 compared to 2000 levels, while population is projected to increase nearly 71 fold in the same time period (SANDAG 2007). Additional socioeconomic data for the Otay Mesa area is provided in Appendix A of this PEIR/PEIS. Real estate prices in the Otay Mesa area have increased substantially over the past 10 years, and are expected to continue to rise as the San Diego region's last large potential supply of buildable industrial, commercial and office land is developed.

The County of San Diego has recently updated its EOMSP and has several active development applications within and adjacent to the program study area. Pressure is mounting from private developers and the County to identify the R/W location for SR-11 and the Otay Mesa East POE site so that land use planning and development in the area can proceed accordingly. If Caltrans and GSA do not participate in this planning process, private development may proceed in a manner that would result in greater disruption of sensitive resources and developed lands associated with implementation of SR-11 and the POE in the future. The identification of a preferred corridor for SR-11 and a site for the POE would allow for the complementary planning and development of the surrounding roadway infrastructure and land uses, including appropriate interchange locations.

The costs of land purchase and development/mitigation for SR-11 and the POE will likely continue to increase as the surrounding land use and infrastructure constraints increase. In this climate of rapid development and escalating land prices, corridor/site preservation and R/W acquisition is critical to ensuring the availability of appropriate land areas for the proposed projects, and limiting the ultimate cost of implementing a new border crossing and associated transportation facilities.

Similar development pressures are occurring in the areas of northeastern Tijuana near the proposed POE, where potential undeveloped sites for the Otay II POE on the Mexico side of the border have all but disappeared, due to industrial development and increasing encroachment by low income, high density, unregulated residential settlements. Accordingly, Mexican transportation and land use agencies at the state and local levels have reserved a 91-acre site for the Otay II POE (See Figure 1-2) that corresponds closely to the study area for the Otay Mesa East POE in the U.S. Concurrently, these agencies initiated studies of potential alternative links between the Otay II POE and Baja California regional transportation network. Under Mexican law, however, the reservation that has been placed on the POE site must be released by May 2011, if it is not purchased for use as a POE by that time. This situation contributes to the urgency of identifying a definite location for SR-11 and the Otay Mesa East POE on the U.S. side of the border.

Finally, it is noted that implementation of the POE is dependent on the approval of a Presidential Permit by the U.S. Department of State through a process that requires consultation with many other affected U.S. agencies and Mexico, as well as compliance with the National Environmental Policy Act. The current Phase I process is a necessary step in the Presidential Permit application process.



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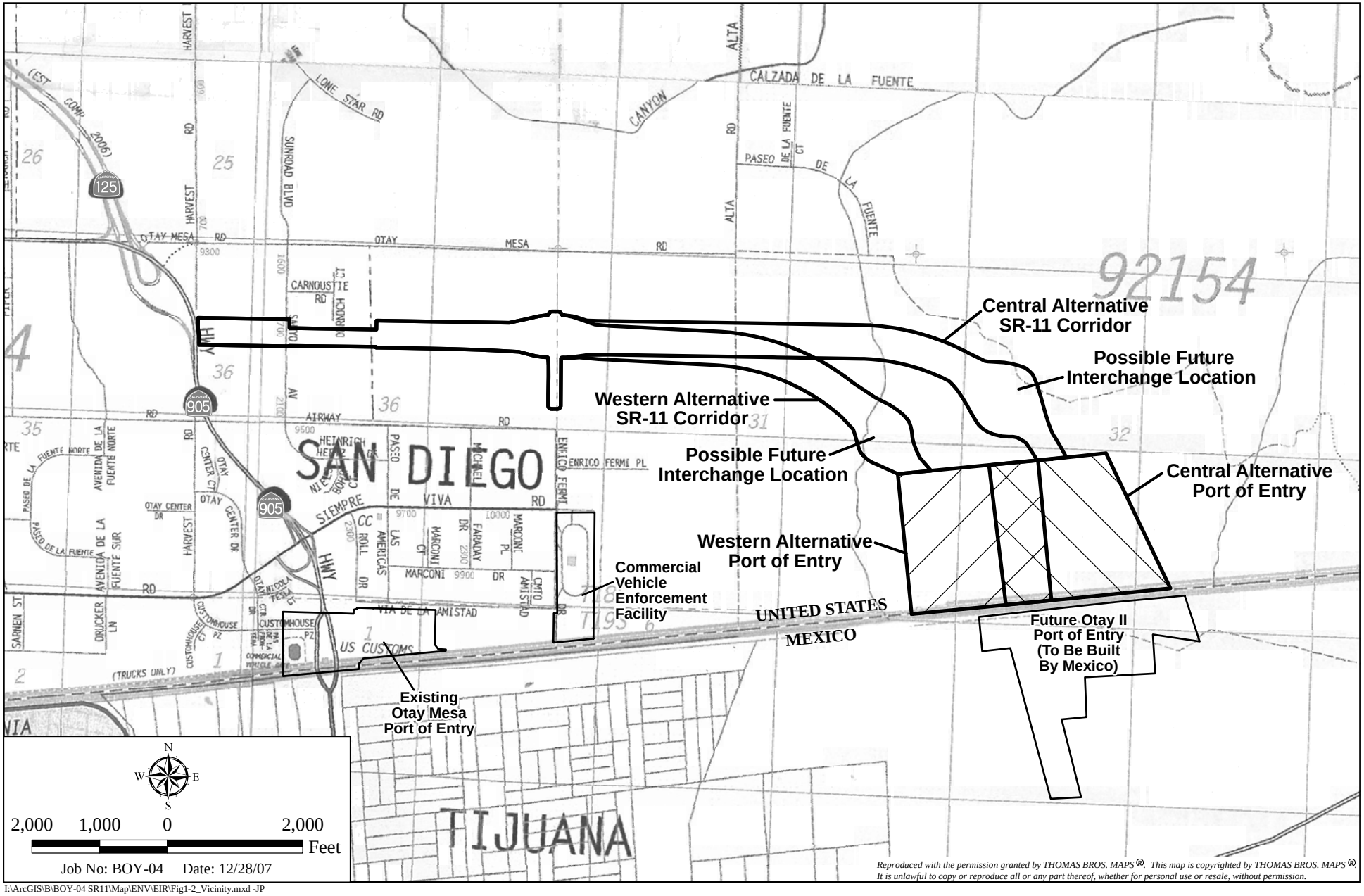
Regional Location Map

STATE ROUTE 11 AND OTAY MESA EAST PORT OF ENTRY PEIR/PEIS

Figure 1-1



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Vicinity Map

STATE ROUTE 11 AND OTAY MESA EAST PORT OF ENTRY PEIR/PEIS

Figure 1-2

CHAPTER 2.0

PROGRAM ALTERNATIVES

CHAPTER 2.0 – PROGRAM ALTERNATIVES

2.1 PROGRAM DESCRIPTION

This section describes the Phase I alternatives for the proposed SR-11 and Otay Mesa East POE program. The alternatives addressed in this PEIR/PEIS include the Western, Central and No Action Alternatives. The Western and Central Alternatives were developed by a multi-disciplinary team to achieve the program purpose and need, while avoiding or minimizing environmental impacts. An Eastern Alternative was previously studied and eliminated based on anticipated impacts to sensitive biological and cultural resources.

The proposed SR-11 and Otay Mesa East POE would be located in the unincorporated community of East Otay Mesa, within the Otay Subregional Planning Area, in the southernmost portion of San Diego County. Beginning approximately 5.6 miles east of the I-805/SR-905 interchange, at the east side of the approved SR-125/SR-905 junction, SR-11 would extend approximately 2.1 to 2.5 miles to the proposed Otay Mesa East POE at the U.S.-Mexico international border. The proposed program alternatives would traverse the southeastern edge of the City of San Diego and the southern sections of Subareas 1 and 2 of the EOMSP area of the County of San Diego. Refer to Figures 1-1 and 1-2 in Chapter 1.0 for a Regional Location Map and Vicinity Map, respectively.

The Western and Central Alternatives specify locations and boundaries for future SR-11 and the Otay Mesa East POE at a sufficient level of detail to support the current California Environmental Quality Act (CEQA) program-level/ National Environmental Policy Act (NEPA) Phase I stage of environmental review. Design and operational alternatives for these facilities would be addressed during a later Phase II level of CEQA/NEPA review, and are not considered within this PEIR/PEIS. The purpose of the proposed program is to identify the preferred corridor for future SR-11 and a corresponding preferred future development site for the Otay Mesa East POE in order to: 1) support Presidential Permit acquisition for the POE; 2) support adoption of SR-11 as an official state route; 3) allow for the identification and/or purchase of R/W for SR-11 and the POE; 4) facilitate land use and circulation planning in the EOMSP area, which is largely dependent on the future SR-11 and Otay Mesa East POE locations; and 5) comply with international agreements to pursue the development of a new Otay Mesa East POE.

2.2 ALTERNATIVES

The proposed program would identify the preferred locations for the future implementation of SR-11 and the Otay Mesa East POE, both of which would be entirely new facilities. No existing roadway facilities are included within the proposed program, although an approved off-ramp from future SR-905 is located in the extreme western segment of the proposed SR-11 corridors. Two alternative corridors and corresponding POE sites have been identified for consideration in this PEIR/PEIS, referenced herein as the Western and Central Alternatives. The No Action Alternative is also described and analyzed.

Criteria used for alternative evaluation will include: potential impacts to the human, physical and biological environments; considerations regarding existing parcels and existing/planned land use; cross-border concerns related to the connectivity of the U.S. POE site with the corresponding Mexico POE site; and anticipated program costs.

2.2.1 Program Alternatives

This section describes the characteristics of the Western and Central Phase I alternatives for the SR-11 Corridor and Otay Mesa East POE Site. These alternatives address only the location and boundaries for the two future interdependent facilities, which are also shown on Figure 2-1. Project design and operational characteristics would be determined at a later time and would then be evaluated at a NEPA Phase II level and a CEQA project level. The design and operational features defined during Phase II may require modified widths and POE site dimensions, compared to those described at in this Phase I document. Adjustments would be made during Phase II and addressed through the Phase II CEQA/NEPA review process, including modifications to accommodate land use, biological or other constraints, where feasible.

An off-ramp from the SR-905/SR-125 interchange extending eastward to Enrico Fermi Drive was previously evaluated within the SR-905 EIS/EIR (Caltrans 2004a) and approved, including the identification of development impacts and minimization requirements. A Biological Opinion for this project has been issued by the U.S. Fish and Wildlife Service. Because the SR-905 project has been previously evaluated and approved, and the Enrico Fermi Drive off-ramp could be implemented at this time independently of the subject SR-11/Otay Mesa East POE program, this PEIR/PEIS focuses on the additional impacts (including cumulative impacts) that would occur along this off-ramp area as a result of the SR-11 corridor, beyond those improvements and impacts previously identified for the SR-905 project.

Western Alternative

The Western Alternative includes the Western Corridor for SR-11 and the Western POE Site. These facility locations are discussed separately below, but are interdependent and would both be required to implement the Western Alternative.

State Route 11 - Western Corridor

The 2.1-mile long Western SR-11 Corridor would extend eastward from Harvest Road at the future SR-125/SR-905 interchange, passing south of Otay Mesa Road and north of Airway Road, and curving southward to connect with the northern edge of the Western POE Site. The east and west ends of the corridor would generally be 400 feet wide and the central portion would be 500 feet wide (to accommodate potential future drainage facilities that are most likely to be needed along this segment of the corridor). A narrower 260-foot-wide segment would extend for approximately 1,285 feet eastward from Sanyo Avenue between existing buildings. The 260-foot-wide corridor through this area is 25 feet from the two closest existing buildings. This area is part of the approved SR-905 project from the SR-905/SR-125 off-ramp to Enrico Fermi Drive. The SR-11 Corridor west of Enrico Fermi Drive lies entirely within the approved impact footprint for the SR-905, with the exception of two areas. One area is an approximately 43-foot-wide strip of developed land along the south side of the SR-11 Corridor within the 1,285-foot long area between the buildings east of Sanyo Avenue. The other area is along the west side of Enrico Fermi Drive, south of future SR-11, where improvements to accommodate a potential future interchange at Enrico Fermi Drive during Phase II of the SR-11 program (refer to Figure 2-2) would be required.

The corridor also includes two areas wider than 500 feet, to accommodate potential local interchanges with existing Enrico Fermi Drive, and with future Siempre Viva Road, further to the east. The area of the corridor provided for the future Enrico Fermi Drive interchange also

includes space to the south for possible future improvements to Enrico Fermi Drive to accommodate the interchange.

The Western SR-11 Corridor shown on Figure 2-1 encompasses approximately 112 acres and is the best estimate of the future project limits for SR-11 available at this time. It is possible that not all 112 acres would be needed for the SR-11 R/W. A portion of the SR-11 R/W between Harvest Road and Enrico Fermi Drive has been approved for a local access ramp, as part of the SR-905 project, but has not yet been purchased. Although the specific design for SR-11 under this alternative has not yet been determined, the 400- to 500-foot width shown for most of the SR-11 corridor is expected to be sufficient to accommodate up to four standard-width main lanes, shoulders and a median of standard width; standard sight distances; temporary construction impacts; and potential long-term drainage/retention facilities. Specifics of highway geometrics, interchanges, drainage/retention facilities, construction staging, and other facility design and construction details would be determined during Phase II of the program. It is expected that the narrower corridor width that is proposed in the area east of Sanyo Avenue to avoid direct impacts to the adjacent buildings, could be accommodated during Phase II design by utilizing other areas to the east and west of this segment of SR-11 for construction staging, other temporary construction requirements and any required drainage retention facilities. Specifics would be determined during Phase II.

The spacing between the future SR-125/SR-905 interchange and the SR-11/Enrico Fermi Drive interchange proposed under this alternative would be approximately one mile. While the specific location of the Siempre Viva Road interchange has yet to be determined, the spacing between this second interchange and the proposed SR-11/Enrico Fermi Drive interchange is also expected to be approximately one mile (Western Corridor).

It is estimated that the Western SR-11 Corridor would require up to approximately 112 acres of new R/W (not including the POE site). A financial feasibility study prepared in 2006 for SR-11 (SANDAG/Caltrans 2006a) estimated SR-11 capital costs, including R/W acquisition and construction costs, to be $208.6 million (in Fiscal Year [FY] 2006 dollars escalated to FY 2012 dollars) for the Western SR-11 Corridor. This estimate included construction of a standard four-lane highway, two interchanges, an overpass, and associated drainage/retention facilities. Annual operating and maintenance expenses for the Western SR-11 Corridor were estimated at between $300,000 and $400,000.

Port of Entry - Western Site

The approximately 100-acre Western POE Site would be located adjacent to the U.S.-Mexico international border, about 1.6 miles east of the existing Otay Mesa POE. The eastern half of the site would be situated directly across the border from the western portion of the Otay II POE site proposed by the Mexican government.

It is assumed that the 100-acre site would be sufficient to accommodate all of the federal agency and security functions currently anticipated to be necessary for the long-term effective operation of an international POE. The POE site would not accommodate the functions associated with California's commercial vehicle inspection requirements. A Commercial Vehicle Enforcement Facility (CVEF), operated by the California Highway Patrol (CHP), is located approximately 0.9 mile east of the proposed Western POE Site. Any necessary improvements to the existing CVEF or siting of additional CVEF facilities, as well as necessary roadway connections to such facilities, would be undertaken separately from the proposed program, and would be the subject of independent design and environmental review processes.

The Western POE Site would be accessed from the north by the Western SR-11 Corridor. From the south, entry would be through the proposed Otay II POE on the Mexican side of the border, which, in turn, would be connected to the Tijuana-Rosarito Corridor, with direct links to the Tijuana-Tecate toll and free roads and the Tijuana-Ensenada toll and free roads, thus providing binational regional mobility through the new POE.

The SR-11 financial feasibility study (SANDAG/Caltrans 2006a) estimated the Western POE capital costs, including R/W acquisition and construction costs, to be between $245 million and $300 million (in FY 2006 dollars escalated to FY 2012 dollars). Annual operating and maintenance expenses for the Western POE were estimated at between $13.7 million and $40.9 million.

Central Alternative

The Central Alternative includes the Central SR-11 Corridor and the Central POE Site. These facility locations are discussed separately below, but are interdependent and would both be required to implement the Central Alternative.

State Route 11 - Central Corridor

The Central SR-11 Corridor would be approximately 2.5 miles long, extending from Harvest Road at the eastern side of SR-125/SR-905 interchange, easterly along the same alignment as the Western SR-11 Corridor up to the eastern side of the Enrico Fermi Drive Interchange. At this point, instead of turning southward, the Central Corridor would continue due east approximately 0.8 mile before beginning to curve gently toward the southeast and continuing approximately 0.5 mile through the area tentatively identified for a future Siempre Viva Road interchange, terminating in the middle of the northern edge of the proposed Central POE Site. Like the Western SR-11 Corridor, the Central Corridor would generally be 400 feet wide, with four exceptions. The Central Corridor would include the same 260-foot-wide, 1,285-foot-long segment passing between the existing buildings east of Sanyo Avenue. The Central Corridor would also widen to include the same area as the Western Corridor for the Enrico Fermi Drive Interchange, and a potential future interchange at Siempre Viva Road, which would be in a different location than the interchange for the Western Corridor. Finally, the Central Corridor would be 500 feet wide between the two potential future interchange locations to accommodate potential drainage facilities within this central portion of future SR-11. The Central Corridor would essentially overlap with the Western Corridor up to the eastern side of the Enrico Fermi Drive Interchange (including the area already approved as part of the SR-905 project, with the same exceptions as noted for the Western Corridor). East of Enrico Fermi Drive, the Western Corridor would begin to curve southeastward, as described above.

The Central SR-11 Corridor shown on Figure 2-1 would encompass approximately 136 acres. As described above, a portion of the anticipated SR-11 R/W has been previously approved for the SR-905 project. Although the specific design for SR-11 under this alternative has not yet been determined, the 400- to 500-foot width that is shown for most of the corridor is expected to be sufficient to accommodate up to four standard-width main lanes, shoulders and a median of standard width; standard sight distances; temporary construction impacts; and potential drainage/retention facilities. Specifics of highway geometrics, interchanges, drainage/retention facilities, construction staging, and other facility design and construction details would be determined during Phase II of the program.

As described above, the precise location of the Siempre Viva Road interchange and the configuration of the Enrico Fermi Drive interchange would be determined during detailed project design in Phase II, but these two interchanges are expected to be approximately 1.3 miles apart, and the distance between the future SR-125/SR-905 interchange and the SR-11/Enrico Fermi Drive interchange proposed under this alternative would be approximately one mile.

The Central SR-11 Corridor is estimated to require up to approximately 136 acres of R/W. The financial feasibility study prepared in 2006 for SR-11 (SANDAG/Caltrans 2006a) estimated Central SR-11 Corridor capital costs, including R/W acquisition and construction costs, at between $246.6 million and $264.4 million (in FY 2006 dollars escalated to FY 2012 dollars), assuming the construction of a standard four-lane highway, two interchanges, an overpass, and associated drainage/retention facilities. Annual operating and maintenance expenses for the Central SR-11 Corridor were estimated at $300,000 to $400,000.

Port of Entry - Central Site

The Central POE Site is a slightly irregular parcel, consisting of approximately 100 acres and would abut an existing Sempra Energy easement on the east. The site would be located adjacent to the U.S.-Mexico international border, about 1.8 miles east of the existing Otay Mesa POE, centered directly across the border from the Otay II POE site proposed by the Mexican government.

It is assumed that the Central POE Site would be sufficient to accommodate all the federal agency and security functions currently anticipated to be necessary for the long-term effective operation of an international POE. Any necessary improvements to the CHP's existing CVEF or siting of additional CVEF facilities, as well as necessary roadway connections to such facilities, would be undertaken separately from the proposed program, and would be the subject of independent design and environmental review processes.

The Central POE Site would be accessed from the north by the Central SR-11 Corridor. As described above, entry from the south would be through the proposed Otay II POE on the Mexican side of the border, which, in turn, would be connected to the Tijuana-Rosarito Corridor, with direct links to the Tijuana-Tecate toll and free roads and the Tijuana-Ensenada toll and free roads, thus providing binational regional mobility through the new POE.

The SR-11 financial feasibility study (SANDAG/Caltrans 2006a) estimated the Central POE capital costs, including R/W acquisition and construction costs, at between $245 million and $300 million (in FY 2006 dollars escalated to FY 2012 dollars). Annual operating and maintenance expenses for the Central POE were estimated at between $13.7 million and $40.9 million.

2.2.2 No Action Alternative

Under the No Action Alternative, the proposed program would not be implemented. A corridor for future construction of SR-11 would not be adopted by the CTC. A Presidential Permit would not be granted and a site would not be reserved for the Otay Mesa East POE. R/W for an SR-11 corridor and POE site would not be designated nor purchased at this time. On-going binational efforts to pursue a third international border crossing in the San Diego/Tijuana region would experience a setback.

An SR-11 corridor would likely still be shown conceptually on the circulation elements of the East Otay Mesa Specific Plan and the County of San Diego General Plan (County General Plan), and the Otay Mesa East POE would likely continue to be indicated conceptually on the land use plan for Subarea 1 of the EOMSP. The areas currently shown for these facilities on the adopted EOMSP correspond approximately to the Western Alternative addressed in this PEIR/PEIS, although only approximately 21 acres are indicated for the POE site, instead of the 100 acres identified for the program alternatives within this PEIR/PEIS.

As SR-905 and SR-125 are completed and the necessary transportation infrastructure to support additional development in the East Otay Mesa area becomes available, it is expected that development would proceed in this area, with or without the identification of preferred locations for SR-11 and the Otay Mesa East POE. Several tentative map applications have been received by the County of San Diego for industrial development within and surrounding the Western and Central Alternatives. Without evidence of progress toward site identification for the future SR-11 and Otay Mesa East POE projects, the County could potentially process the tentative maps, likely reserving R/W for SR-11 and the POE, commensurate with the conceptual locations shown within the referenced plans, or anticipated facility limits specified by Caltrans. There is no guarantee, however, that sufficient R/W would be reserved. Land use and circulation planning and development in the EOMSP area could proceed without the benefit of a preferred location for SR-11 and the new Otay Mesa East POE.

Under Mexican law, the land currently reserved by the Mexican government for a new POE would have to be released for other uses by 2011, if it is not purchased by that time. This land, therefore, might be developed with other uses under the No Action Alternative.

It is possible that the No Action Alternative would only delay implementation of the Otay Mesa East POE. If development proceeds on the U.S. and/or Mexico sides of the border in the East Otay Mesa area, a situation could develop wherein acquisition of developed property would be necessary to implement SR-11 and the Otay Mesa East POE in the future. Mitigation costs could also be greater if development leaves only the most environmentally constrained land available for these facilities and the facilities must be constructed in close proximity to existing development with associated visual and noise mitigation required.

Under the No Action Alternative, the existing San Ysidro and Otay Mesa POEs would remain the only POEs serving the San Diego/Tijuana metropolitan area for the near future, and these existing POEs would have to accommodate increasing numbers of crossings by personal vehicles and pedestrians. The existing Otay Mesa POE, in combination with the Tecate POE further east, would have to accommodate rising numbers of cross-border commercial vehicle/truck trips. As described in Chapter 1, Purpose and Need, growing cross-border traffic would result in increased delays at the POEs, exceeding current peak period delays for personal trips averaging 45 minutes at the Otay Mesa POE and 75 minutes at the San Ysidro POE, as well as average delays for commercial freight crossings at the Otay Mesa POE of 1.5 to 2 hours (without U.S. secondary inspection), with resulting continued lost revenues. This could also result in increased traffic congestion on local streets used to access the existing POEs.

2.3 COMPARISON OF ALTERNATIVES

Table 2-1 below summarizes the characteristics of the program alternatives.

Table 2-1
SUMMARY OF PROGRAM ALTERNATIVES CHARACTERISTICS

Features	Western Alternative	Central Alternative	No Action Alternative
SR-11 Length	2.1 miles	2.5 miles	NA
SR-11 Area	112 acres	136 acres	NA
POE Area	100 acres	100 acres	NA
Estimated SR-11 Construction Costs (millions; FY 2006 dollars)	$208.6	$246.6 to $264.4	$0[1]
Estimated POE Construction Costs (millions; FY 2006 dollars)	$245 to $300	$245 to $300	$0
Environmental Issues	See Table S-1	See Table S-1	See Table S-1

[1] Does not include potential long-term costs associated with possible delayed implementation of SR-11/Otay Mesa East POE.
TBD = To Be Determined
NA = Not Applicable

2.4 ALTERNATIVES CONSIDERED BUT ELIMINATED FROM FURTHER DISCUSSION

In addition to the Western and Central program alternatives and the No Action Alternative, the PSR for SR-11 (Caltrans 2000) considered the Eastern Alternative and the Local Road Alternative. These alternatives were considered during the process of developing the proposed program alternatives analyzed in this PEIR/PEIS, but were eliminated from further consideration for reasons described below.

2.4.1 Eastern Alternative

The Eastern Alternative would have included an approximately 2.8-mile-long SR-11 corridor, from the approved SR-125/SR-905 interchange to the northern edge of a proposed Eastern POE Site. Similar to the Western and Central SR-11 corridors, it would have extended eastward from the future SR-125/SR-905 interchange at Harvest Road between Otay Mesa Road and Airway Road, through the Enrico Fermi and Siempre Viva interchanges, terminating at the northern edge of an Eastern POE site. Refer to Figure 2-3 for an illustration of the location of the Eastern Alternative relative to the currently proposed Western and Central Alternatives.

The PSR (Caltrans 2000) assumed that the Eastern SR-11 Corridor would have accommodated four standard-width main lanes, shoulders and a median of standard width; standard sight distances; an overpass; associated long-term drainage/retention facilities; and temporary construction impacts. It estimated that the Eastern Alternative would have required approximately 141 acres of new R/W, plus 99 acres for the Eastern POE site, and would have traversed a developed Sempra Energy utility easement. The PSR for the Eastern SR-11 Corridor (Caltrans 2000) estimated R/W acquisition costs at $42 million for SR-11, plus $20 million for the Eastern POE site. The construction cost for the Eastern Alignment was estimated to be between $157 million and $187 million in FY 2006. Although a more recent estimate is not

available, it is expected that current actual costs would be much higher, due to the rapid rise in land value and materials costs over the past seven years. This rate of increase in costs was not anticipated in 2000. Construction costs for the POE were not included in the PSR estimate.

Biological resources, cultural resources and hazardous materials studies were conducted within a study area that included the Western, Central and Eastern Alternatives in 2000 and 2002. Based on these studies, it was determined that the Eastern Alternative would have substantially greater impacts to sensitive biological resources (e.g., protected habitat, wetlands/waters of the U.S. and associated species listed as rare, threatened or endangered by the U.S. Fish and Wildlife Service). This would include impacts to Diegan coastal sage scrub, southern riparian scrub, potential vernal pools, and sensitive plants and animals, including the federally listed as endangered Otay tar plant and Quino checkerspot butterfly.[1] In addition, the Eastern Alternative would have impacted a significant cultural resource site that was found to be an intact quarry/lithic workshop containing over 1,000 pieces of debitage, cores and lithic tools. No substantial hazardous materials issues were identified for any of the three corridors.

Based on the potential for much greater impacts to biological and cultural resources and greater R/W and construction costs associated with the Eastern Alternative, compared to the Western and Central Alternatives, as well as potential complications associated with impacting an existing Sempra Energy utility easement, the Eastern Alternative was eliminated from further consideration.

2.4.2 Local Road Alternative

The Local Road Alternative would have provided for a limited-access and non-controlled-access facility, expanding and extending an existing road. Three variations of this alternative were identified in the PSR (Caltrans 2000), utilizing Otay Mesa Road, Airway Road or Siempre Viva Road. Each Local Road Alternative could have connected with any of the three alternative POE sites associated with the Western, Central and Eastern Alternatives described above, as illustrated in Figure 2-4. In each case, the existing road would have been extended eastward beyond Alta Road, and a north-south connection to the POE (not currently identified in the Circulation Element of the County General Plan) would have been provided to link the extended road to a proposed POE. Long-term drainage/retention facilities were not considered in these alternatives. The variations based on Airway Road and Siempre Viva Road would have included no interchanges; the Otay Mesa Road variation would have included an interchange configuration for the intersection at Enrico Fermi Drive.

The PSR (Caltrans 2000) addressed one set of assumptions for all of the Local Road Alternative variations, estimating that this alternative would have required approximately 198 acres of R/W, including 99 acres for the Local Road Alternative POE site. The PSR estimated combined construction and R/W costs for the Local Road Alternative to be between $115 million and $136 million in FY 2006, plus $20 million in R/W costs for the POE. Although a more recent estimate is not available, it is expected that current actual costs would be much higher. Construction costs for the POE were not included in the PSR estimate.

The PSR (Caltrans 2000) determined that the Local Road Alternative would have provided substantially less mobility than would a freeway for interregional cross-border traffic, and may not have adequately handled the anticipated high volume of truck traffic, particularly at

[1] In addition, the federally listed as threatened California gnatcatcher was observed slightly northeast of the proposed Eastern POE site.

intersections. Local traffic circulation and access to local businesses would potentially be disrupted, as currently occurs due to queuing associated with congestion at the existing Otay Mesa POE. Emissions associated with such congestion would also likely be higher under the Local Road Alternative. It was determined that none of the identified variations of the Local Road Alternative would meet the basic, long-term purpose and need of the SR-11 and Otay Mesa East POE program, and this alternative was eliminated from further consideration.

2.5 TRANSPORTATION SYSTEM MANAGEMENT (TSM) AND TRANSPORTATION DEMAND MANAGEMENT (TDM) ALTERNATIVES

This Phase I, program-level PEIR/PEIS addresses only the location and boundaries of future SR-11 and the Otay Mesa East POE. Specific design and operational alternatives for these facilities would be subsequently defined and addressed during a Phase II/project level of environmental review. In the absence of project design/operational information, it is too soon to evaluate TSM and TDM alternatives. Such alternatives would be evaluated at the later Phase II/project level of analysis. No future TSM/TDM alternatives would be precluded as a result of the identification of either the Western or Central program alternative as preferred, as described within this PEIR/PEIS.

2.6 PERMITS AND APPROVALS NEEDED

The following permits, reviews and approvals would be required for Phase I program implementation:

Agency	Permit/Approval	Status
U.S. Department of State	Presidential Permit for the POE	Pending
U.S. General Services Administration	Approval of preferred POE site alternative	Pending
California Transportation Commission	SR-11 Route Adoption	Pending

It is anticipated that the following permits, reviews and approvals would be required at the future Phase II project level of implementation; additional permits may be identified during Phase II analysis:

Agency	Permit/Approval
U. S. General Services Administration	Approval of preferred design/operational characteristics for POE
U.S. Fish and Wildlife Service	Endangered Species Act Section 7 Consultation for Threatened and Endangered Species Review and Comment on Clean Water Act 404 Permit
U.S. Army Corps of Engineers	Clean Water Act Section 404 Permit for filling waters of the United States
California Regional Water Quality Control Board	NPDES Permits; Clean Water Act Section 401 Water Quality Certification or Waiver
California Department of Fish and Game	California Fish and Game Code 1602 Agreement for Streambed Alteration Section 2080.1 Agreement for Threatened and Endangered Species
County of San Diego City of San Diego	Freeway Agreement

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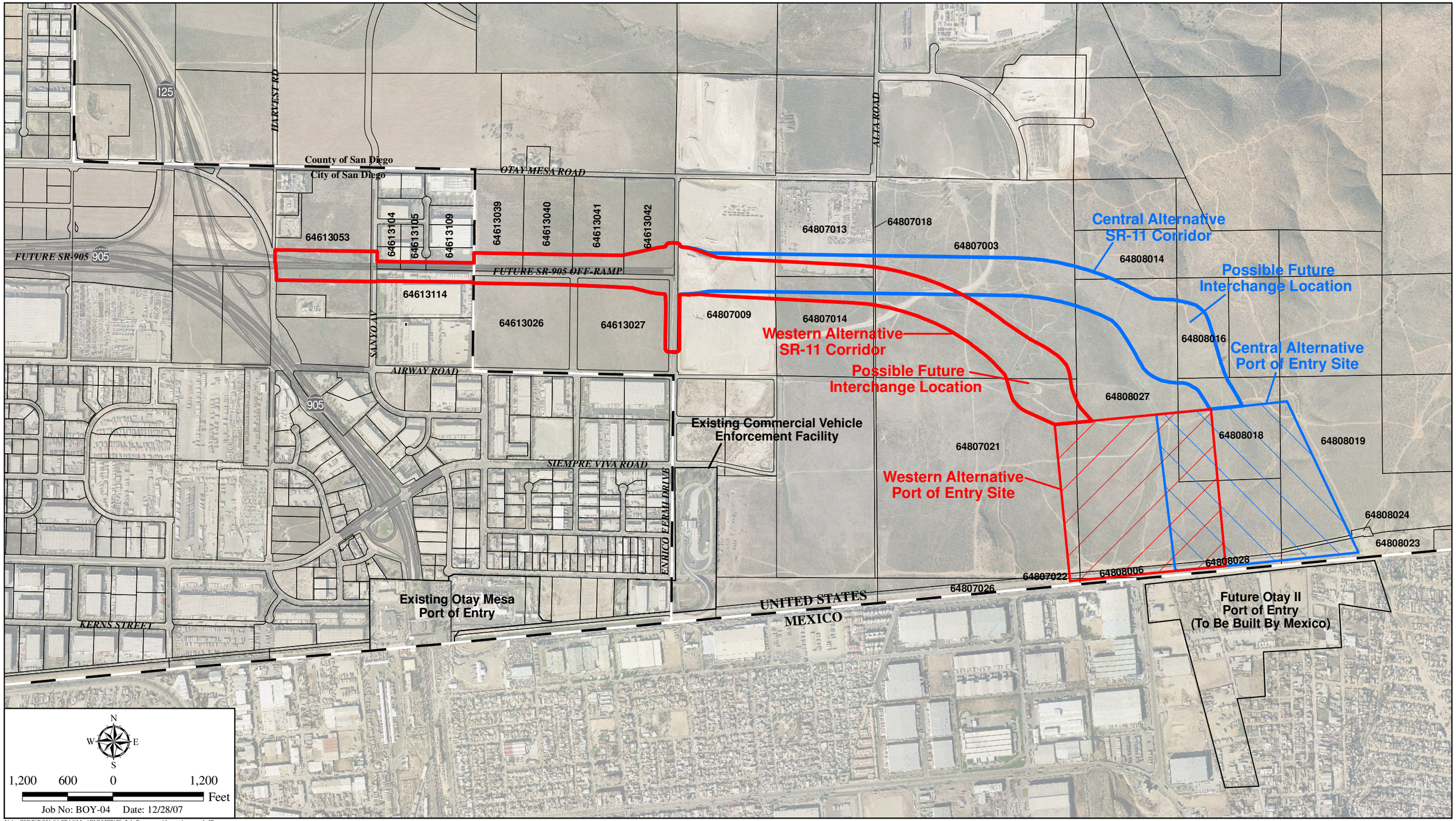

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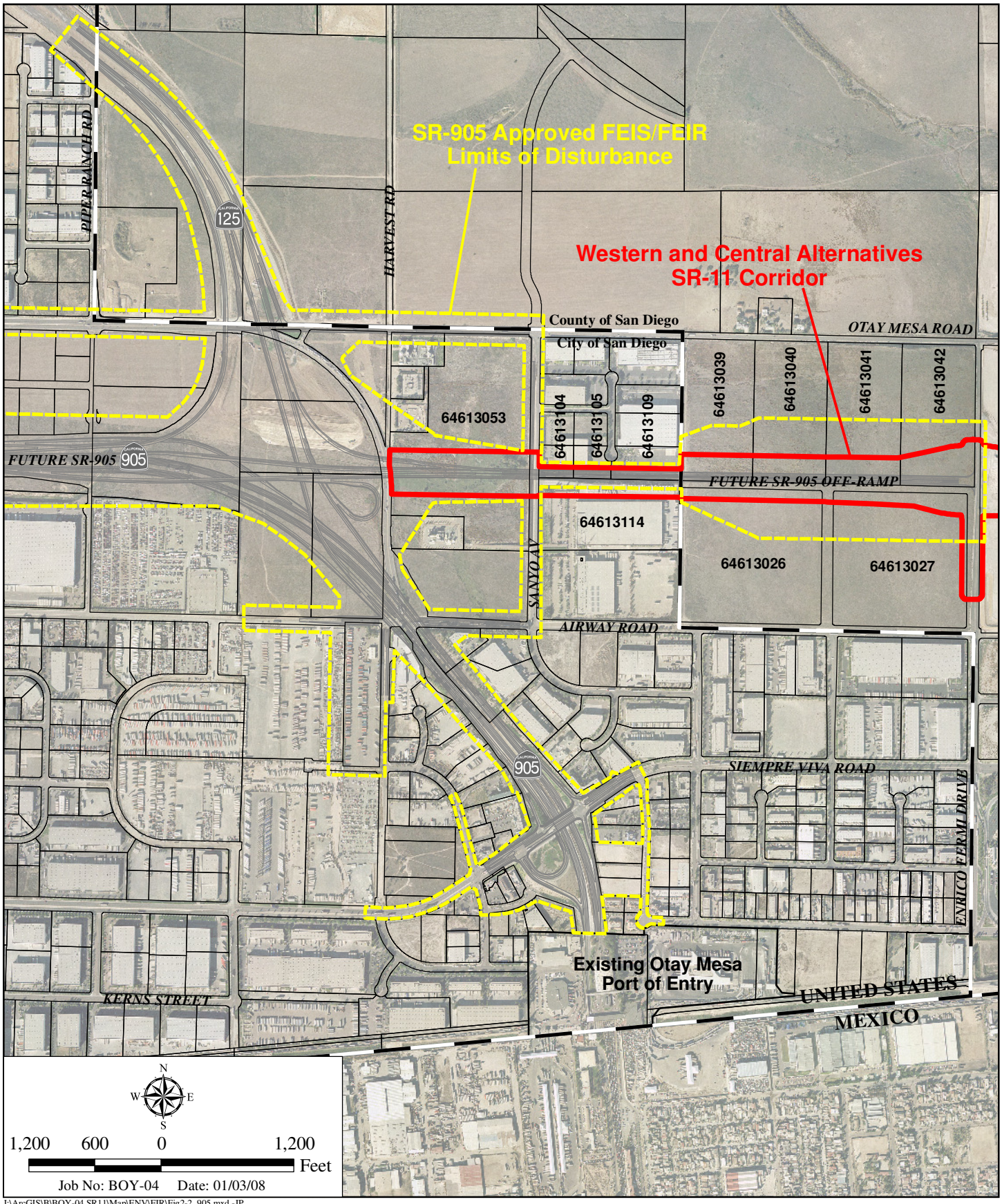
Program Alternatives

STATE ROUTE 11 AND OTAY MESA EAST PORT OF ENTRY PEIR/PEIS

Figure 2-1



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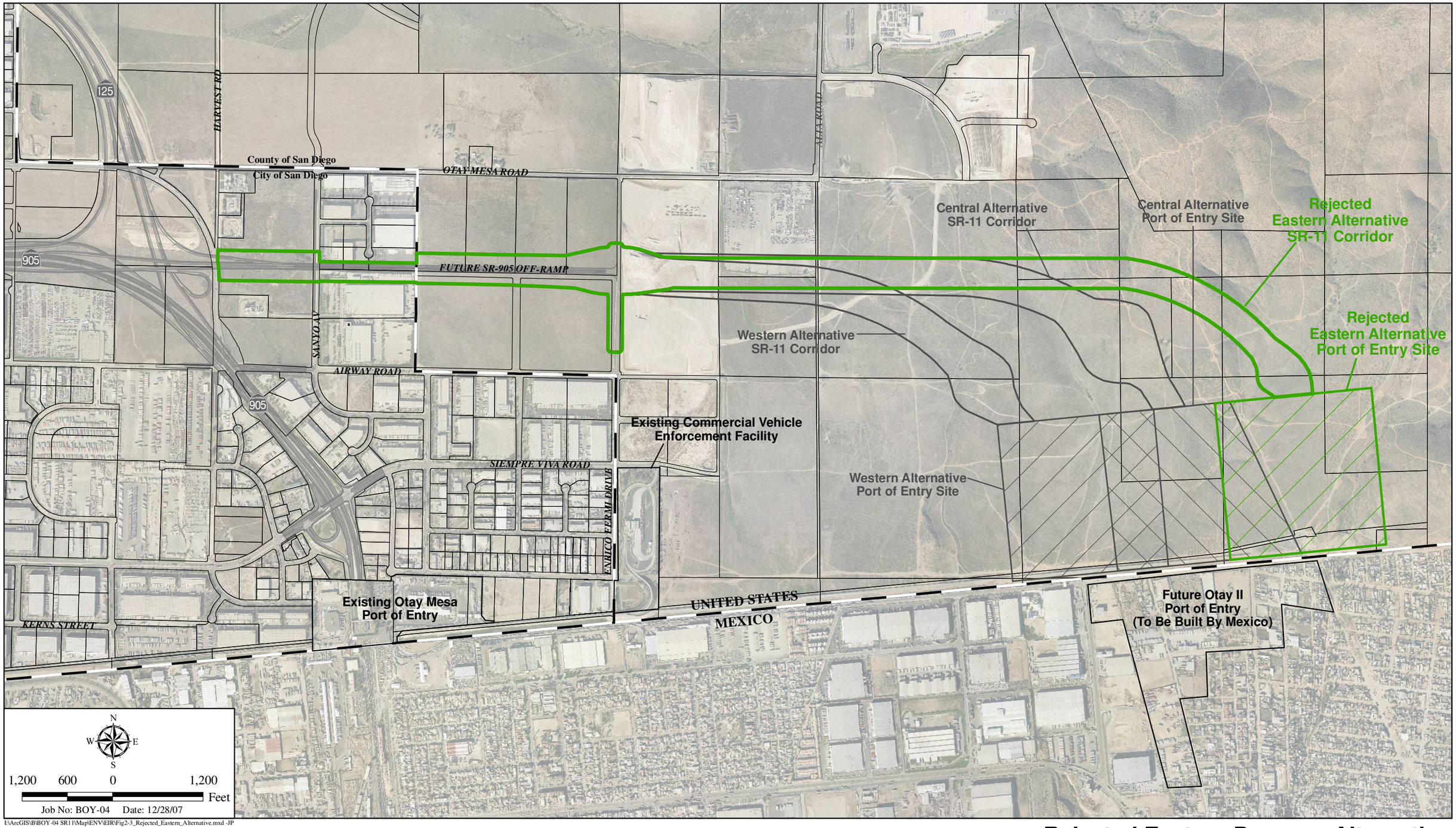
Limits of Previously Approved SR-905 Project

STATE ROUTE 11 AND OTAY MESA EAST PORT OF ENTRY PEIR/PEIS

Figure 2-2



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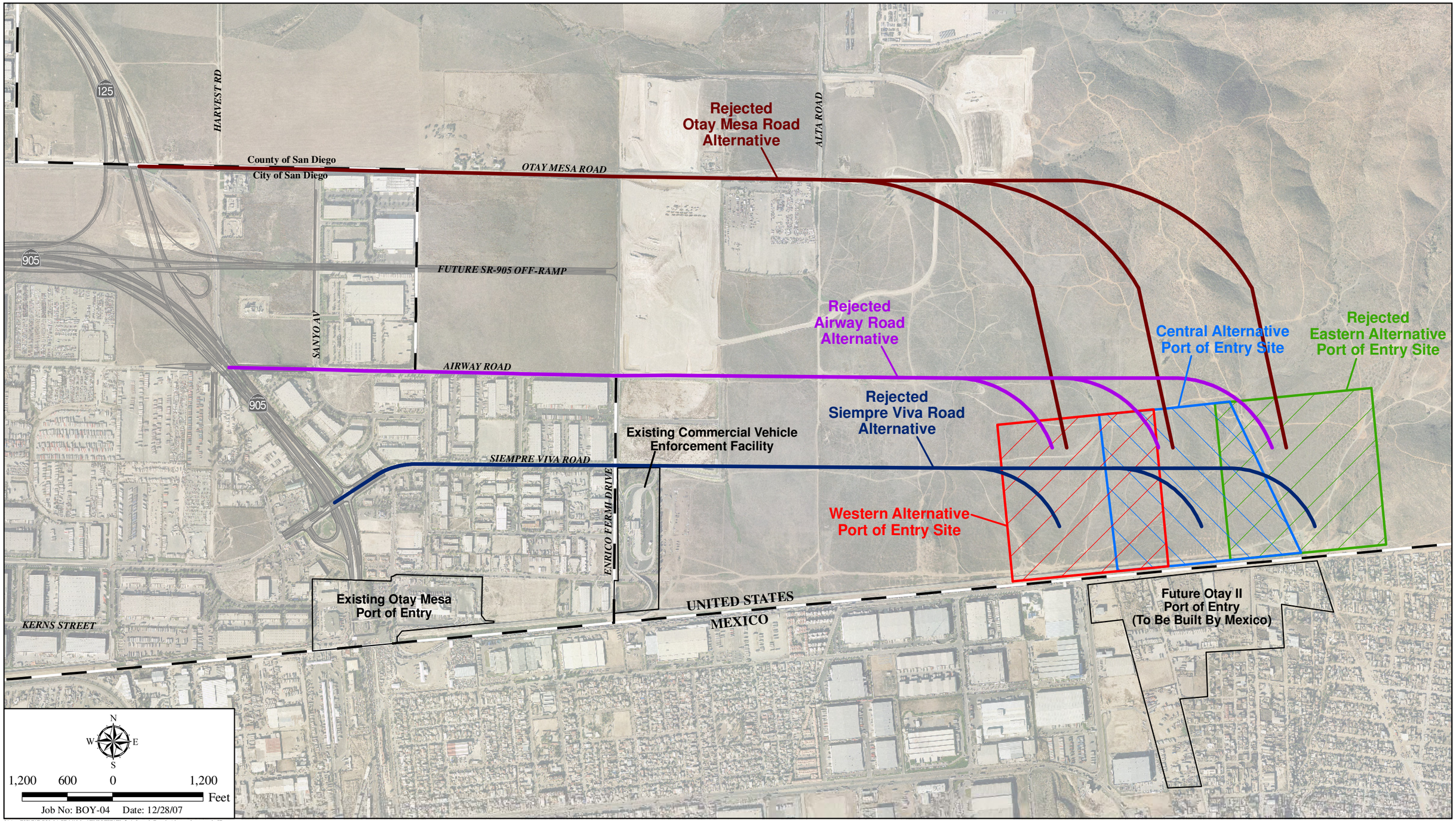
Rejected Eastern Program Alternative

STATE ROUTE 11 AND OTAY MESA EAST PORT OF ENTRY PEIR/PEIS

Figure 2-3



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Rejected Local Road Alternatives

STATE ROUTE 11 AND OTAY MESA EAST PORT OF ENTRY PEIR/PEIS

Figure 2-4

CHAPTER 3.0

AFFECTED ENVIRONMENT; ENVIRONMENTAL CONSEQUENCES; AND AVOIDANCE, MINIMIZATION AND/OR MITIGATION MEASURES

CHAPTER 3.0 – AFFECTED ENVIRONMENT; ENVIRONMENTAL CONSEQUENCES; AND AVOIDANCE, MINIMIZATION AND/OR MITIGATION MEASURES

The following technical studies were prepared to support this PEIR/PEIS. These technical studies are available for review at Caltrans District 11 offices at 4050 Taylor Street, Building 1 – Main Lobby, San Diego, CA 92110, and at the Imperial Beach, Bonita-Sunnyside and Otay Mesa-Nestor branches of the San Diego County Library.

Hazardous Materials and Hazardous Waste Initial Site Assessment - March 2007

Preliminary Geotechnical Study - October 2007

Existing Conditions Hydrology Report, State Route 11 Programmatic EIR/EIS – November 2007

Community Assessment Existing Conditions Report, State Route 11 and Otay Mesa East Port of Entry - December 2007

Biological Resources Existing Conditions Report for State Route 11 and East Otay Mesa Port of Entry – December 2007

First Addendum Archaeological Survey Report for State Route 11 and East Otay Mesa Port of Entry - October 2007; and Cultural Resource Survey and Extended Phase 1 Testing Program for the Future State Route 11 and East Otay Mesa Port of Entry Project – March 2001

State Route 11 Phase 1 Traffic Technical Report – December 2007

Proposed actions under Phase I include identification of a preferred SR-11 corridor for adoption by CTC, identification of a preferred POE site, acquisition of a Presidential Permit for the POE, and possible land acquisition for both facilities. This phase does not include any ground-disturbing activities and does not address specific design/operational characteristics of SR-11 or the POE. Consequently, as described herein, no immediate, direct impacts would occur for any environmental issue with the implementation of Phase I activities for either the Western Alternative or the Central Alternative. Identification of a preferred alternative in Phase I could influence the location, timing and rate of growth on Otay Mesa, however.

Implementation of Phase I under either alternative would also commit the adopted SR-11 corridor and the associated POE site to potential future development under Phase II, including associated construction and operation impacts. This Phase I document therefore provides general, program-level discussion of potential impacts resulting from Phase II, in order to facilitate a comparison of potential future impacts, determine whether such future impacts should influence the Phase I identification of a preferred SR-11 Corridor and POE site, and provide guidance for the future Phase II analysis. In addition, as required by NEPA, measures to avoid, minimize or mitigate impacts would be identified during Phase II, and potential measures that may be considered are provided in this Phase I document. Specific Phase II impacts would be evaluated in greater detail during the Phase II environmental process, following identification of specific design/operational alternatives for SR-11 and the Otay Mesa East POE.

For many issues, potential future impacts related to Phase II development of the SR-11 corridor and POE site under the Western Alternative and the Central Alternative would be essentially the

same. This conclusion is based on the similar nature, location and characteristics of the SR-11 corridors and POE sites under the two alternatives. Furthermore, the western portions of the alternative SR-11 corridors (approximately between Harvest Road and Enrico Fermi Drive) are identical. This was generally determined to be the case for all issues addressed in Chapter 3.0, with the exception of land use and biological resources.

An off-ramp from the SR-905/SR-125 interchange extending eastward to Enrico Fermi Drive was previously evaluated within the SR-905 EIS/EIR (Caltrans 2004a) and approved, including the identification of development impacts and minimization requirements. A Biological Opinion for the SR-905 has been issued by the U.S. Fish and Wildlife Service. Because the SR-905 project has been previously evaluated and approved, and the Enrico Fermi Drive off-ramp could be implemented at this time independent of the subject SR-11/Otay Mesa East POE program, this PEIR/PEIS focuses on the additional impacts (including cumulative impacts) that would occur along this off-ramp area as a result of the SR-11 corridor, beyond those improvements and impacts previously identified for the SR-905 project. Because the SR-905 off-ramp has been previously evaluated and approved in this location, the analysis in Chapter 3 assumes that the off-ramp will be implemented prior to implementation of SR-11, although the off-ramp has not been implemented as of this writing.

Under the No Action Alternative, for all environmental issues, it is assumed that none of the identified Phase I actions associated with the Western or Central Alternative would be implemented, and no associated impacts would occur. Potential impacts of not identifying an SR-11 corridor and POE site at this time are assessed.

Based on the analysis presented in this chapter, land use and biological resources are the primary environmental issues that differentiate the Program alternatives. Therefore, these issues have received the greatest emphasis in Chapter 3. Based on initial analysis, it became apparent that for certain issues, substantial impacts would not be expected during Phase I and are also unlikely to occur during Phase II. These issues are summarized below and are not addressed further in this PEIR/PEIS.

Farmland: As discussed in the Community Assessment Existing Conditions Report, the majority of the study area was no longer used for agriculture by the early 1980's, with all agricultural use terminated by 1990. There are no Williamson Act contract lands within the study area. Due to the potential for the Phase I program to commit Prime and Unique Farmland, as well as Farmland of Statewide and Local Importance, to future non-agricultural uses (i.e., SR-11 and the Otay Mesa East POE), potential farmland impacts were assessed using the National Resources Conservation Service (NRCS) Form NRCS-CPA-106 (Form 106), which establishes a farmland conversion impact rating score. The two alternatives each obtained a total score of approximately 68 out of a possible 260 points, which is below the NRCS threshold score of 160 points (see Appendix B). Therefore, farmland impacts are considered minor.

Community Character and Cohesion: The proposed program would take place in a relatively isolated, undeveloped area that is ultimately planned for industrial use, and would not generate any substantial, adverse impacts to an existing residential community. The potential need for additional space to accommodate SR-11 within the existing industrial properties east of Sanyo Avenue would be evaluated during Phase II, along with the implications for the existing industrial operations. The program would be required to comply with the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (refer to Appendices C and D), so that partial industrial property impacts would not be substantial.

Relocations: For the proposed program, a take would occur if acquisition of new right-of-way for SR-11 or the POE, or other impacts due to program implementation, would render one or more of the developed industrial properties in the program area unusable. Required avoidance, minimization or mitigation measures, including compliance with the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (refer to Appendices C and D), are expected to be identified, thereby ensuring that impacts would not be substantial. Any businesses or residences displaced by program implementation would be relocated in accordance with these regulations.

Environmental Justice: Because there would be no visible or operational change in the East Otay Mesa area from implementation of Phase I, no environmental justice impacts would be associated with that phase of the program. Because there is no existing or planned residential community in the program area (refer to Figures 3.1-1 and 3.1-2), environmental justice impacts are also considered unlikely for Phase II. If a toll facility is identified as a design/operational alternative in Phase II, this could result in environmental justice effects on minority or low-income populations. This potential impact would be evaluated in detail in the Phase II environmental document pursuant to Executive Order 12898, based on the specific toll operations proposed.

HUMAN ENVIRONMENT

3.1 LAND USE

This section of the PEIR/PEIS assesses the potential for existing use patterns and development trends within the study area to affect, or be affected by, implementation of the proposed program. A *Community Assessment Existing Conditions Report*, dated October 2007, was completed for Phase I of the SR-11/Otay Mesa East POE, and is summarized in this section of the PEIR/PEIS. The land use program area evaluated in this PEIR/PEIS extends from just north of Otay Mesa Road south to the U.S.-Mexico international border; and from just east of the Sempra Energy easement, near the base of the San Ysidro Mountains, west to Michael Faraday Drive close to the international border, and Harvest Road, closer to Otay Mesa Road. The program area is depicted in Figure 3.1-1.

3.1.1 Affected Environment

Land Use Designations and Zoning

The majority of the proposed program corridors/sites are located within the jurisdiction of the County. More specifically, all but the westernmost portion of the proposed SR-11 corridors and the entirety of the proposed POE sites are located within the EOMSP area, which extends northerly to Johnson and O'Neill canyons and easterly to the base of the San Ysidro Mountains. The westernmost portion of the proposed SR-11 corridors, including the business park fronting on Sanyo Avenue is within the City of San Diego's Otay Mesa Community Plan (OMCP) area.

County of San Diego

The POE sites and the County portions of the SR-11 corridors currently have a zoning designation of S88 (Specific Plan Use Regulations) under the County Zoning Ordinance. The S88 zoning is intended to accommodate any land uses designated in the applicable Specific Plan. In the case of the POE sites and the County portions of the SR-11 corridors within

Subarea 2, the EOMSP land use designation is entirely Mixed Industrial. For the County portions of the SR-11 corridors in Subarea 1, the land use designations are Technology Business Park and Light Industrial. A "B" Designator also applies to the program area, requiring specific development and design regulations for the industrial developments in the area. Section 2.1.2 (Land Use Designations) of the East Otay Mesa Business Park Specific Plan (EOMBPSP; i.e. the portion of the EOMSP that applies to Subarea 1 as a result of the 2002 amendment) includes a provision that the "north-south boundaries of adjacent land uses are intended to conform with the final alignment of future SR-11."

City of San Diego

The portion of the SR-11 corridors located in the City (has a land use designation of 4 – General Industrial in the Land Use Element of the City's Progress Guide and General Plan, and a zoning designation of OMDD-INDUST-SUBD (Otay Mesa Development District: Industrial Subdistrict) under the City's Land Development Code.

Existing Land Use Patterns

The proposed SR-11 corridors and POE sites are primarily surrounded by undeveloped land, as illustrated in Figure 3.1-1. A vehicle auction yard is located at the southwest corner of Otay Mesa Road and Alta Road, and two vehicle/container storage lots are located in the southwestern corner of the program area, along with a CVEF operated in cooperation with the existing Otay Mesa POE by the CHP. Much of the western edge of the program area is developed with industrial uses, including a power plant located in the northwest corner of the program area within the City of San Diego. Two small commercial zones, developed primarily with hotel/motel/restaurant uses, are also located on the western edge of the program area. The only residential uses in the vicinity are three single-family residences grouped together on the north side of Otay Mesa Road between SR-905 and Alta Road, and a residence located along Kuebler Ranch Road approximately one mile north of the proposed SR-11 corridors (beyond the limits of the land use program area).

There are no Federal lands in the program area. The CVEF, located on Enrico Fermi Drive just west of the existing Otay Mesa POE within the program area, is a State facility.

Development Trends

The majority of the land within both the program area and the proposed SR-11 corridors and POE sites is currently undeveloped or graded, and is therefore considered developable. Land on both sides of the border in the Otay Mesa area is rapidly urbanizing, and mounting development pressure has resulted in escalating land prices. On the U.S. side, employment in the three census tracts surrounding the program area is projected to more than triple by 2030 compared to 2000 levels, while population is projected to increase nearly five fold in the same time period.[1] Real estate prices in the Otay Mesa area have increased substantially over the past 10 years, and are expected to continue to rise as the San Diego region's last large potential supply of buildable industrial, commercial and office land is developed.

The County of San Diego has recently updated the EOMSP and has several active development applications within and adjacent to the program area. In the absence of an

[1] SANDAG Data Warehouse**:** http://datawarehouse.sandag.org/

approved corridor for SR-11 and the associated POE site, the proposed EOMSP assumes that an SR-11 corridor and POE site approximating the Western Alternative will be implemented. There is substantial pressure from private developers and the County to identify the R/W location for SR-11 and the Otay Mesa East POE site, so that land use planning and development in the area can proceed accordingly.

Similar development pressures are occurring in the areas of northeastern Tijuana near the proposed POE, where potential undeveloped sites for the Otay II POE on the Mexico side of the border have all but disappeared due to industrial development and increasing encroachment by low income, high density, unregulated residential settlements. Accordingly, Mexican transportation and land use agencies at the state and local levels have reserved a 91-acre site for the Otay II POE (refer to Figure 1-3) that corresponds closely to the program alternatives for the Otay Mesa East POE in the U.S. Concurrently, these agencies initiated studies of potential alternative links between the Otay II POE and Baja California regional transportation network. Under Mexican laws, however, the reservation that has been placed on the POE site must be released by May 2011, if it is not purchased for use as a POE by that time. This situation contributes to the urgency of identifying a definite location for SR-11 and the Otay Mesa East POE on the U.S. side of the border.

Figure 3.1-2 depicts the land use designations in the border region on both the U.S. and Mexican sides. Figure 3.1-3 and Table 3.1-1 present the current proposed land development projects in the program area. The SR-11 corridor and POE site alternatives would traverse the following proposed project sites described in Table 3.1-1: Otay Crossings Commerce Park, Otay Business Park (Paragon), Bradley/Robertson Copart Salvage Auto Auctions, Otay Mesa Travel Plaza, Dillard and Judd Roll County LLC/Enrico Fermi Industrial Park, and Saeed TM/Airway Business Center.

3.1.2 Impacts

Western Alternative

Impacts to Existing Land Uses

The Western Alternative would traverse primarily undeveloped land, with a few exceptions. The parcel at the southwest corner of Otay Mesa Road and Alta Road is currently used as a vehicle auction yard; the Western SR-11 corridor would traverse approximately the southern quarter of this parcel.

The corridor would pass through a graded parcel immediately west of the vehicle auction yard, as well as four smaller industrial parcels just east of Sanyo Avenue that support three existing industrial buildings adjacent to the SR-11 corridor. In this area, west of Enrico Fermi Drive, the SR-11 alternative corridors overlap with one another and lie primarily within the disturbance limits for the Enrico Fermi Drive off-ramp from the SR-905/SR-125 Interchange, previously approved as part of the SR-905 project. The SR-11 corridor includes a 43-foot-wide sliver of developed industrial land along the southern edge of the corridor east of Sanyo Avenue, which is not within the approved impact area for the SR-905/SR-125 project. No existing buildings are located within this additional area of the SR-11 corridor.

Table 3.1-1
CHARACTERISTICS OF PROPOSED LAND DEVELOPMENT PROJECTS IN THE PROGRAM AREA[1]

Map Key	Identifying Project Number/ Project Name	Proposed Improvements	Project Status
1	TM 5405/SPA 04-006 MUP 00-024/ *Otay Crossings Commerce Park*	Subdivision into 62 industrial lots ranging from 1.3 to 69.6 net acres each (total lot area: 287 acres). Also, 26.6 acres of public streets. Open space easements on 5 lots in the northeast corners of site to protect steep slopes and biologically sensitive resources. Two-phase development. Future R/W for SR-11 and new POE (corresponding approximately to the Western Alternative) tentatively mapped on 4 lots, covering approximately 102.7 acres. SPA proposes modifications to design guidelines to facilitate interim uses (e.g. truck parking) of the SR-11 and POE R/W. 311.6 acres.	February 9, 2006 County scoping letter required preparation of a supplemental EIR due to changes since the EOMSP EIR (July 27, 1994).
2	TM 5538/TM 5139/MUP 98-020 STP 02-05139-1/ SPA 07-003 *Sunroad Centrum Tech Center*	Subdivision into 56 industrial/commercial lots of a minimum of one acre each, plus a 51.5-acre open space remainder parcel. 200 acres. SPA is to apply a Commercial Overlay to the 17-acre triangular area adjacent to SR-125 (currently designated Business Technical Park).	Final Supplemental EIR to the EOMSP Final EIR dated December 15, 2000 for 96-lot project (TM 5139). EIR addendum dated March 4, 2003 for 56-lot project included changes to road improvements and grading. TM 5139 expired; TM 5538 currently proposed on same site (plus triangular area just west of original site, adjacent to SR-125). No further information available as of December 10, 2007.
3	TM 5304/ *Saeed TM/ Airway Business Center*	Subdivision into 18 lots (minimum 2 acres each) for light industrial uses. 40.59 acres.	Tentative Map approved on May 1, 2006. Upon completion of an addendum to the EOMSP, EIR project may proceed.
4	TM 5394/ *Dillard and Judd Roll County LLC/ Enrico Fermi Industrial Park*	Subdivision into 16 industrial lots ranging from 2.12 to 6.89 acres each. 79.4 acres.	FEIR dated January 2006, certified March 2006. Minor Amendment to the MSCP, consistent with BMO, within the boundary of the adopted HCP.
5	MUP 04-004 RP 04-001/ *Otay Hills Construction Aggregate Extraction Operation*	Rock Quarry located on 210 acres in 550 acre-ownership. Construction aggregate extraction operation, including materials processing (primary and secondary plants), concrete batch plant, cement-treated base plant, asphalt batch plant, and recycling of asphalt and concrete products. 210 acres.	NOP dated May 26, 2005 included Initial Study identifying potential impacts to land use, geology, hydrology/water quality, biological and cultural resources, traffic, noise, air quality, public services/utilities, hazardous materials, and aesthetics.
6	TPM 20414 MUP 98-024 MUP Modification 98-024-01 L14632 AD 04-025/ *Otay Mesa Travel Plaza*	Four parcels, ranging from 7.35 to 42.16 acres each. Full-service truck stop travel plaza, including driver facilities, restaurant, convenience store, service bays, fuel sales, 122-room hotel, office building, and parking. 82 acres. MUP modification to add and relocate driveway entrances on Enrico Fermi Drive and Airway Drive, and include additional truck/container park storage areas (April 2005)	MND for TPM 20414 and approval of MUP 98-024 relying on EOMSP Final EIR without modification, both dated June 9, 2000. MND dated June 13, 2001 extended Interim Ordinance 9226, while EOMSP was being updated, to allow temporary use TPM 20414. Project change of ownership April 22, 2004. TPM 20414RPL2 required SWMP – approved February 2, 2004. Minor amendment of MSCP Subregion for 39.5 acres credit of Tier 3 required in March, 12, 2004 status letter. NOD for Grading Plan 14632 dated April 21, 2006. Approval of project relying on EOMSP EIR.

[1] Jurisdiction for all projects is the County of San Diego.
SFR = Single-family residences; MFR = Multi-family residences; DU = Dwelling units; TM = Tentative Map; TPM = Tentative Parcel Map; STP = Site Plan; MUP = Major Use Permit; RP = Reclamation Plan; ZAP = Minor Use Permit; RPL = Replacement; SPA = Specific Plan Amendment; R/W = Right-of-Way; NA = Not Available or Not Applicable.

Table 3.1-1 (continued)
CHARACTERISTICS OF PROPOSED LAND DEVELOPMENT PROJECTS IN THE PROGRAM AREA[1]

Map Key	Identifying Project Number/ *Project Name*	Proposed Improvements	Project Status
7	TPM 20701RPL1/ ZAP 99-029/STP 05-018 SPA 05-005/ *Burke Minor Subdivision/Otay Logistics Center*	Subdivision into 4 parcels of 8.80, 9.37, 9.48, and 11.66 acres. Grading and improvement of a commercial road traversing the site. Truck parking and storage on site. Construction of approximately 270,00 square feet of buildings and warehouse in the northern part of the site, along with 404 parking spaces and 73 loading spaces. 39.3 acres.	MND for Burke Minor Subdivision dated October 2, 2003 (otherwise relies on EOMSP EIR).
8	MUP 00-012/ Minor Dev. 00-012-02/ L-14212/ *East Otay Mesa Auto Storage/ Aaron Construction Auto Auction Park*	Vehicle storage facility with weekly storage auctions. Temporary use (maximum 5 years). 38 acres.	MND dated July 9, 2003.
9	STP 07-002/ *RTX Truck Park*	Proposed lot for storage of tractor-trailers and containers. No proposed structures or project phasing. 15.3 acres.	Supplemental EIR requested April 5, 2007 requiring technical studies. As of September 7, 2007 comments on technical studies were being processed.
10	MUP 03-001/ *Otay Mesa Auto Transfer/Rowland*	Storage area for operable vehicles as an interim use. 40.4 acres.	MND dated June 24, 2005 relying on EOMSP with modifications.
11	MUP 88-020/ STP 00-070/ *Bradley/Robertson Copart Salvage Auto Auctions*	Modification of existing MUP to add a 300 ft. by 140 ft. auto storage facility on an existing graded auto storage lot.	First ND dated Feb. 22, 1994. Second ND dated Nov. 2, 2001 to increase the number of employees from 10 to 40, add 900 ft. of additional leach line, and extend the expiration date of the interim permit from Nov. 2000 to Nov. 2005. January 3, 2007 letter requested supplemental technical information regarding hydrology, storm water management, traffic, visual, route locations, and the preliminary grading plan.
12	TM 5505/ *Otay Business Park (Paragon)*	Subdivision into 61 industrial lots, in four phases, from west to east. No specific uses identified. Water, sewer and storm drain lines would be extended into the project site. Off-site improvements include extensions of Alta Road, Airway Road and Siempre Viva Road. The future alignment of SR-11 may traverse a portion of the site. 161.6 acres.	Supplemental EIR was requested May 30, 2007 for biology regarding preservation of vernal pools, storm water management, and easements.
13	L 14456/ *Border Patrol Site Grading Plan (East Otay Mesa Parcel B Grading Plan)*	Grade property for future development including on-site detention basin. 20.7 acres.	NOD dated April 21, 2006. Approval of project relying on EOMSP EIR. Environmental review update checklist form for projects with previously approved environmental documents dated April 21, 2006 stating project would impact 17.72 acres of NNG and 0.70 acres of CSS.
14	STP-07-038/ L 14625 *Vulcan-Otay Mesa Plant*	Proposed asphalt and concrete plants. 13.5 acres.	Scoping letter for asphalt and concrete plant project dated October 29, 2007. Approval of pad grading project relying on EOMSP EIR. Environmental review update checklist form for projects with previously approved environmental documents dated June 30, 2006 stating project would impact 73.5 acres of NNG. The impacts to NNG will be mitigated at a 1:1 ratio by contributing $10,000 per acre of mitigation responsibility to the San Diego Foundation to be used for management of NNG preserve areas on Otay Mesa.

[1] Jurisdiction for all projects is the County of San Diego.
SFR = Single-family residences; MFR = Multi-family residences; DU = Dwelling units; TM = Tentative Map; TPM = Tentative Parcel Map; STP = Site Plan; MUP = Major Use Permit; RP = Reclamation Plan; ZAP = Minor Use Permit; RPL = Replacement; SPA = Specific Plan Amendment; R/W = Right of Way; NA = Not Available or Not Applicable.

Although Phase I would not include any ground-disturbing activities, it would commit both the developed and undeveloped parcels in the path of the Western Alternative for future development as SR-11 and the new POE, and preclude other uses. As shown in Figure 3.1-1, for the Western SR-11 Corridor, this land use impact would involve the conversion to transportation-related uses of 94.2 acres of undeveloped land, 16.4 acres of graded land, 5.3 acres of industrial land, and 5.2 acres of land currently used as a vehicle auction yard under a temporary major use permit. The Western SR-11 Corridor would traverse an additional 2.7 acres of existing roads (Enrico Fermi Drive and Sanyo Avenue), but this area would not constitute a change of land use. For the Western POE Site, the land use impact would involve the conversion to transportation-related uses of 99.5 acres of undeveloped land. This land use conversion would not represent an adverse impact, because implementation of SR-11 and the Otay Mesa East POE would be consistent with the Circulation Elements of the County General Plan, EOMSP, the City General Plan and the OMCP, as explained in more detail in Section 3.2, *Consistency with Federal State, Regional, and Local Plans and Programs*.

Impacts to Proposed Land Uses

The Western Alternative SR-11 Corridor and POE Site would traverse the following currently proposed private developments: Saeed TM/Airway Business Center, Dillard and Judd Roll County LLC/Enrico Fermi Industrial Park, Otay Mesa Travel Plaza, Bradley/Robertson Copart Salvage Auto Auctions, Otay Crossings Commerce Park, and Otay Business Park (Paragon). The commitment of portions of these proposed developments for SR-11 R/W and the POE site would not be considered a substantial impact, since SR-11 and the POE would be consistent with the County General Plan, EOMSP, the City General Plan and the OMCP.

At the time that Phase II is implemented, additional land use analysis would be required to assess the potential for impacts to current and proposed land uses at that time.

Central Alternative

Impacts to Existing Land Uses

The Central Alternative would traverse primarily undeveloped land, with the exception of the southern quarter of the vehicle auction yard at the southwest corner of Otay Mesa Road and Alta Road, a graded parcel immediately west of the vehicle auction yard, and the four smaller industrial parcels just east of Sanyo Avenue that support three existing industrial buildings adjacent to the SR-11 corridor.

As explained previously, although Phase I would not include any ground-disturbing activities, it would commit both the developed and undeveloped parcels in the path of the Central Alternative for future development as SR-11 and the new POE, thus precluding other uses. As shown in Figure 3.1-1 for the Central SR-11 Corridor, this land use impact would involve the conversion to transportation-related uses of 119 acres of undeveloped land, 16.3 acres of graded land, 5.3 acres of industrial land, and 8.7 acres of land currently used as a vehicle auction yard under a temporary major use permit. The Central SR-11 Corridor would traverse an additional 2.7 acres of already existing roads, but this area would not constitute a change of land use. For the Central POE Site, this land use impact would involve the conversion to transportation-related uses of 100 acres of undeveloped land. These land use conversions would not be substantial because they are consistent with the conceptual representation of SR-11 and the POE in the Circulation Elements of the County General Plan, EOMSP, the City General Plan, and the OMCP, as explained in more detail in Section 3.2, *Consistency with*

Federal, State, Regional, and Local Plans and Programs. Although the location of the Central Alternative does not coincide exactly with these plans, the EOMSP contains a provision that the proposed corridor alignment for State Route 11 is subject to change upon the completion of Caltrans environmental studies.

Impacts to Proposed Land Uses

The Central Alternative corridor and POE site would traverse the following currently proposed private developments: Saeed TM/Airway Business Center, Dillard and Judd Roll County LLC/Enrico Fermi Industrial Park, Otay Mesa Travel Plaza, Bradley/Robertson Copart Salvage Auto Auctions, and Otay Crossings Commerce Park. Because the EOMSP (as amended) includes an approximation of the Western Alternative SR-11 corridor and POE site, identification of the Central Alternative as the preferred corridor could require modification of the site plans for the Otay Mesa Travel Plaza, Bradley/Robertson Copart Salvage Auto Auctions and Otay Crossings Commerce Park projects. The commitment of land within these proposed developments for future implementation of SR-11 and the Otay Mesa East POE would not be considered a substantial impact, since SR-11 and the POE would be consistent with the County General Plan, EOMSP, the City General Plan, and the OMCP.

At the time that Phase II is implemented, additional land use analysis would be required to assess the potential for impacts to current and proposed land uses at that time.

No Action Alternative

Under the No Action Alternative, there would be no short-term impact to land use in the area. An SR-11 corridor would likely still be shown conceptually on the circulation elements of the EOMSP and County General Plan, and the Otay Mesa East POE would likely continue to be indicated conceptually on the land use plan of the EOMSP. The areas currently shown for these facilities on the adopted EOMSP correspond approximately to the Western Alternatives addressed in this PEIR/PEIS.

It is expected that development would proceed in this area, with or without the identification of preferred locations for SR-11 and the Otay Mesa East POE. Without evidence of progress toward site identification for the future SR-11 and Otay Mesa East POE projects, the County could potentially process currently proposed tentative maps, likely reserving R/W for SR-11 and the POE commensurate with the conceptual locations shown within the referenced plans or anticipated facility limits specified by Caltrans. There is no guarantee, however, that sufficient R/W would be reserved. Land use and circulation planning and development in the EOMSP area could proceed without the benefit of a preferred location for SR-11 and the Otay Mesa East POE.

As noted in Chapter 2.0, *Project Alternatives*, Under Mexican law, the land currently reserved for a new POE by the Mexican government would have to be released for other uses by 2011, if it is not purchased for use as a POE by that time. This land, previously reserved by the Mexican government for development with the Otay II POE, may therefore become developed with other uses under the No Action Alternative.

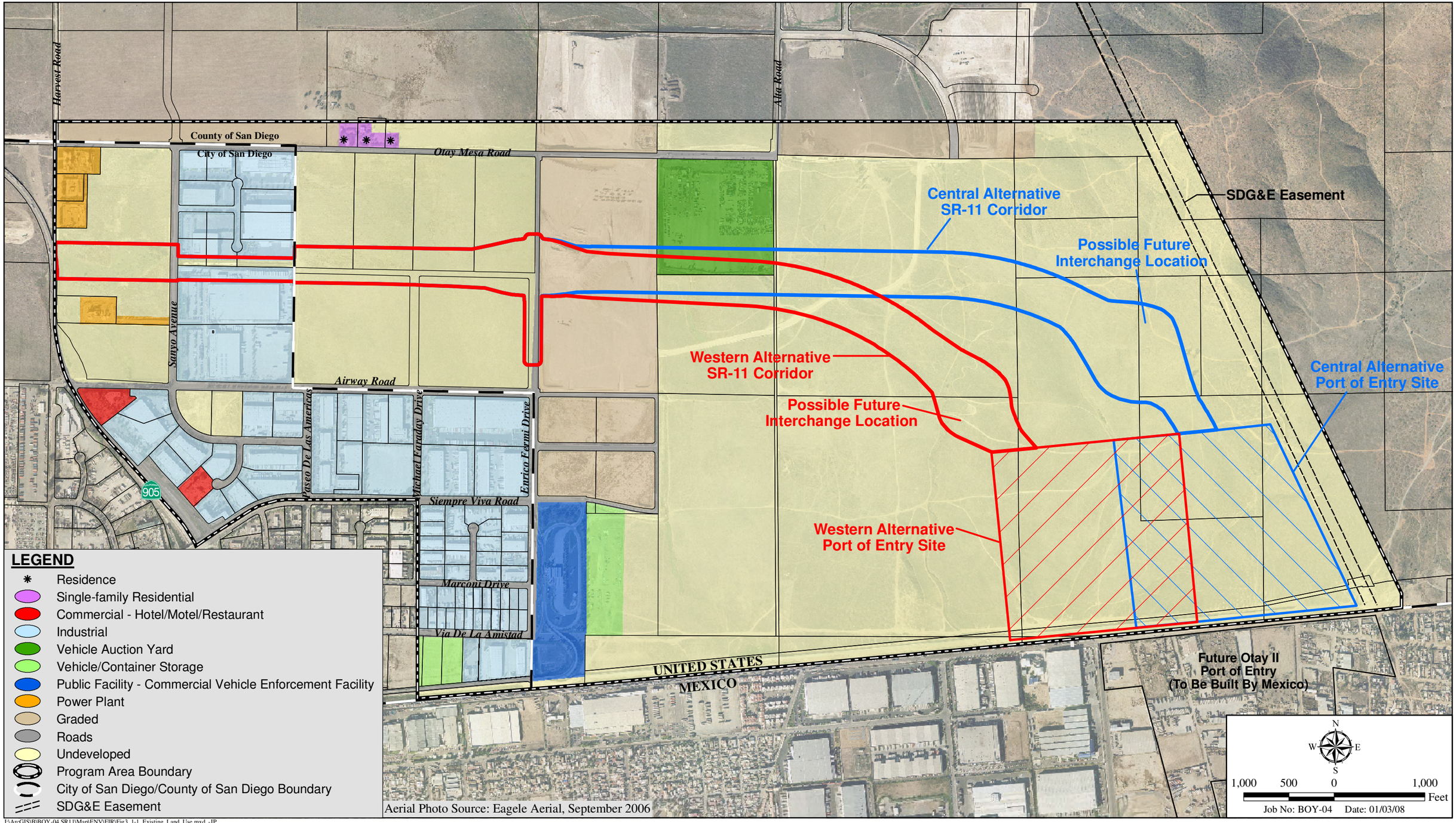
It is possible that the No Action Alternative would only delay implementation of the Otay Mesa East POE. If development were to proceed on the U.S. and/or Mexico sides of the border in the East Otay Mesa area, a situation could develop wherein acquisition of developed property would be necessary to implement SR-11 and the Otay Mesa East POE in the future. If

development leaves only the most environmentally constrained land available for these facilities and the facilities must be constructed in close proximity to existing development, associated visual and noise impacts may eventually be greater than they would be under the currently proposed Western or Central alternatives.

3.1.3 Avoidance, Minimization and/or Mitigation Measures

No substantial land use impacts are anticipated in Phase I under either program alternative, and therefore no avoidance, minimization and/or mitigation measures would be required. Additional land use analysis would be necessary in Phase II, and if impacts were identified, any necessary avoidance, minimization or mitigation measures would be developed at that time.

Because no impacts were identified under the No Action Alternative, no associated avoidance, minimization or mitigation measures are proposed.



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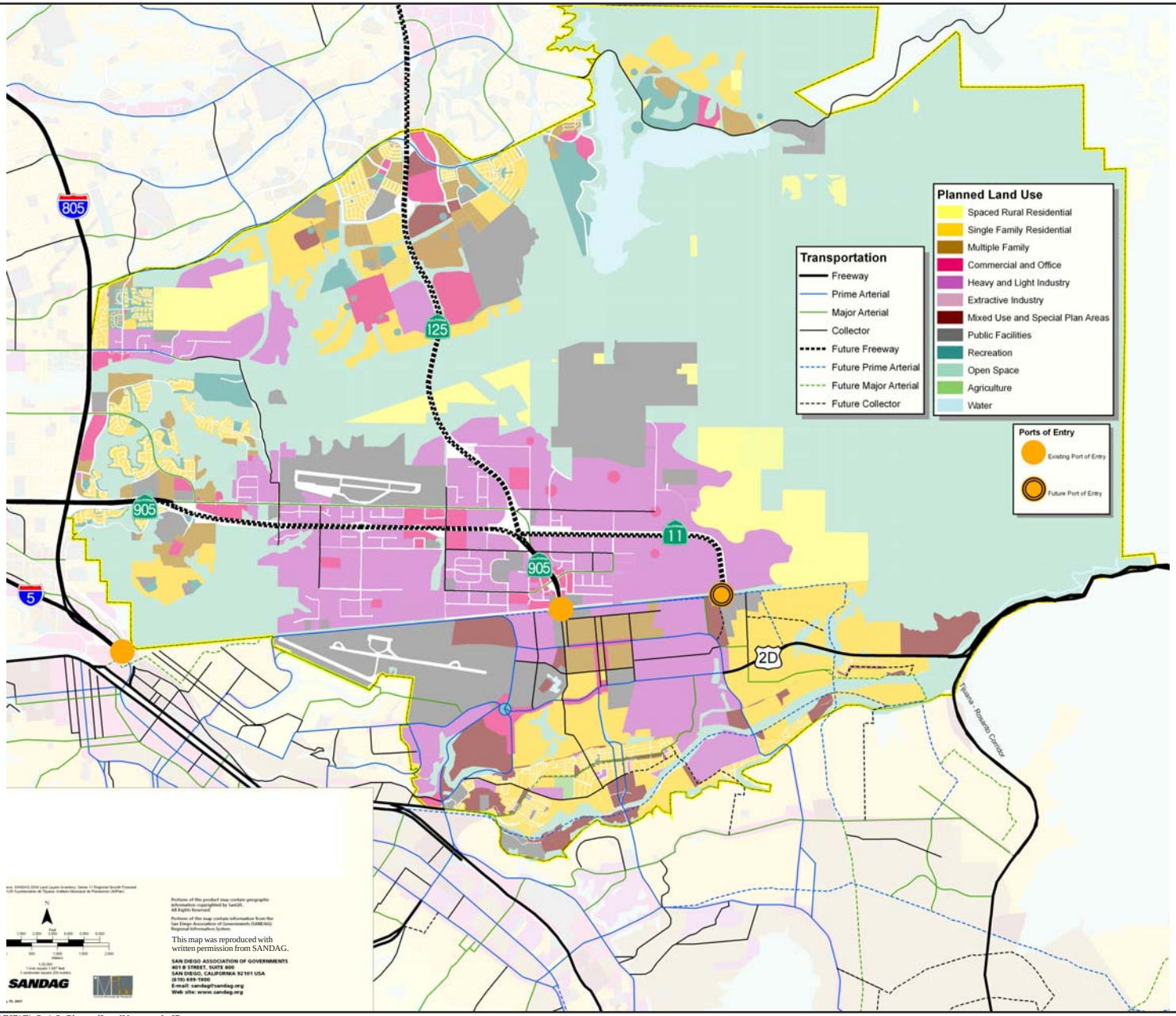
Existing Land Uses - Program Area

STATE ROUTE 11 AND OTAY MESA EAST PORT OF ENTRY PEIR/PEIS

Figure 3.1-1



Source: SANDAG

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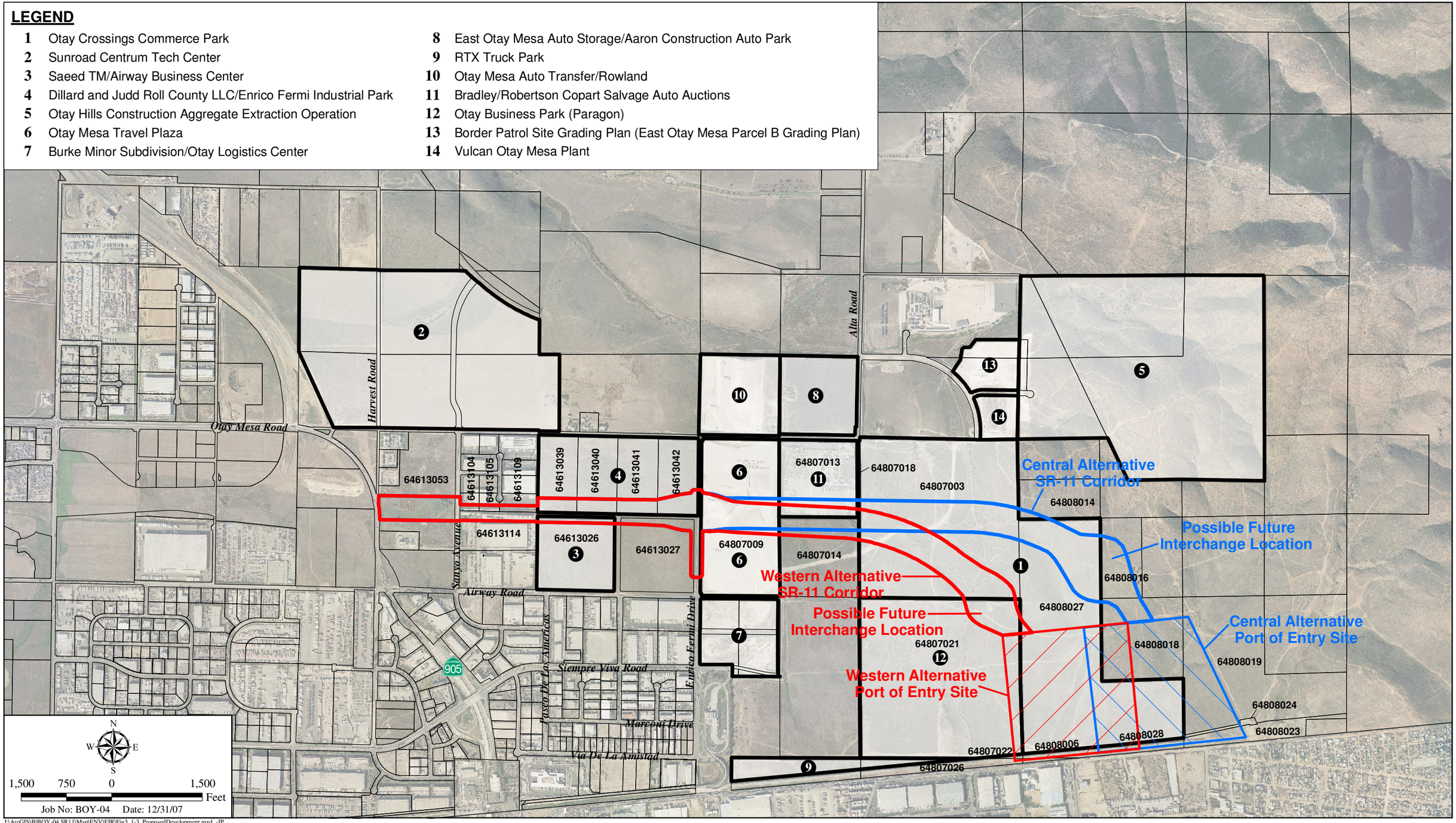
Planned Land Uses in the Region

STATE ROUTE 11 AND OTAY MESA EAST PORT OF ENTRY PEIR/PEIS

Figure 3.1-2



Proposed Development Within Program Study Area

STATE ROUTE 11 AND OTAY MESA EAST PORT OF ENTRY PEIR/PEIS

Figure 3.1-3

3.2 CONSISTENCY WITH FEDERAL, STATE, REGIONAL, AND LOCAL PLANS AND PROGRAMS

This section of the PEIR/PEIS assesses the proposed program's consistency with relevant adopted land use plans and programs. A *Community Assessment Existing Conditions Report*, dated October 2007, was completed for Phase I of the SR-11/Otay Mesa East POE, and is summarized in this section of the PEIR/PEIS.

3.2.1 Affected Environment

Plans, policies and ordinances that pertain to land use and transportation planning for SR-11 and the Otay Mesa East POE within the program area are contained in elements and policies of the RTP, RTIP, SANDAG Regional Comprehensive Plan (RCP), Natural Community Conservation Planning Program (NCCP), County General Plan, the Otay Subregional Plan (OSP), the EOMSP, the City of San Diego's General Plan, and the City's OMCP. These policies address a variety of issues, including development of a comprehensive regional transportation plan, efficient growth patterns, development at appropriate densities in accordance with existing community character, conservation of sensitive habitats, provision of open space, and protection against incompatible land uses. These land use plans and ordinances are described below. Although this program is federal and compliance with local (i.e., County and City) policies and regulations is not mandated, per Section 22 of the Caltrans Standard Environmental Reference, consistency with local plans, guidelines and ordinances must be considered.

There are no wild and scenic rivers in the regional study area and the program alternatives are not located in the coastal zone; therefore, policies related to these two issues are not discussed.

U.S. Department of Transportation - Section 4(f) Lands

Although construction funding is not yet secured for this project, it is likely to consist of federal funds (procured through the U.S. Department of Transportation [DOT]), state and private funds. The use of DOT federal funds requires compliance with Section 4(f) of the DOT Act of 1966, as amended and codified in 49 U.S.C. Section 303.

Because the proposed program alternatives would not traverse publicly owned land of a public park, recreation area or wildlife and waterfowl refuge of national, state, or local significance, or land of an historic site of national, state, or local significance, no further Section 4(f) evaluation is necessary (Caltrans 2007a). An evaluation of the presence of 4(f) lands would again be made during Phase II environmental review.

Regional Comprehensive Plan for the San Diego Region

The RCP (SANDAG 2004) is the strategic planning framework for the San Diego region. It creates a regional vision and provides a broad context in which local and regional decisions can be made that foster a healthy environment, vibrant economy and high quality of life for all residents. The RCP balances regional population, housing and employment growth with habitat preservation, agriculture, open space, and infrastructure needs. One of the major focuses of the RCP is improving connections between land use and transportation using smart growth principles. The RCP addresses the major elements of planning for the San Diego region, including urban form, transportation, housing, healthy environment, economic prosperity, public facilities, and borders issues. The RCP recognizes that many of the region's major

transportation facilities are operating at or beyond their current capacities. The Transportation Element of the RCP is discussed below.

Transportation Element

The Transportation Element of the RCP discusses the vision for the San Diego region in 2030 with regard to transportation and includes a description of existing conditions key issues and recommended goals, policy objectives and actions. The RTP (SANDAG 2007a) plays a key role in implementing the RCP. In order to implement the RCP, the RTP and related programming documents must be updated in a way that maximizes opportunities for local jurisdictions to implement smart growth. Relevant key issues include implementing the 2030 Mobility Network presented in the RTP, funding of necessary improvements and coordinating among agencies. The 2030 Mobility Network provides the infrastructure necessary to meet the region's overall mobility needs into 2030. Applicable policy objectives include reducing traffic congestion on freeways and arterials, and creating more walkable and bicycle-friendly communities consistent with current urban design concepts. Since the SR-11 project is included in the adopted 2030 Revenue Constrained RTP adopted in 2007, it would constitute an integral part of the realization of the RCP's goals.

Regional Transportation Plan

In November 2007, the SANDAG Board of Directors approved the 2030 RTP (SANDAG 2007a). The RTP is the adopted long-range transportation planning document for the San Diego region. It is used as the basis for funding decisions made through the RTIP (SANDAG 2006b), which is discussed below. The plan covers public policies, strategies and investments to maintain, manage and improve the regional transportation system through 2030. The RTP is the transportation component of the RCP. The RTP was developed around four main components: land use, system development, system management, and demand management. The plan addresses new and improved connections to more efficiently move people and goods throughout the region by providing more convenient, fast and safe travel choices for public transit, ridesharing, walking, biking, private vehicles, and freight.

Applicable policy goals of the RTP include improving the mobility of people and freight, improving accessibility to major employment and other regional activity centers, improving the reliability and safety of the transportation system, maximizing the efficiency of the existing and future transportation system, and minimizing effects on the environment. The RTP specifically includes major projects to improve access to border crossings, expand freight rail service and coordinate commercial vehicle crossings, with the goal of modernizing and transforming transportation infrastructure along the California portion of the U.S./Mexico border.

The RTP includes a Revenue Constrained Scenario of facilities and programs that would best maintain mobility in the region if the funding levels for transportation do not increase before 2030. The RTP also includes a Reasonably Expected Revenue Scenario (if more funding becomes available) and an Unconstrained Scenario. The RTP's study area is the San Diego metropolitan area, encompassing approximately the western half of San Diego County. Figure 3.2-1 illustrates the RTP 2030 Revenue Constrained Network, including both the highway and transit systems. The SR-11 project is included in all three revenue scenarios of SANDAG's November 2007 RTP as a four-lane toll road. The Otay Mesa East POE and SR-11 are considered a top priority of the RTP Goods Movement Action Plan.

Regional Transportation Improvement Plan

The RTIP is consistent with the RTP and incrementally implements the vision presented in the RTP. The RTIP is a five-year capital improvement program for transportation projects that is updated by SANDAG every two years and reflects the region's priorities for short-range transportation system improvements. The currently adopted 2006 RTIP (SANDAG 2006b) covers fiscal years (FYs) 2007 through 2011. Funding for the transportation projects in the RTIP comes from federal, state and local revenue sources, including TransNet, the local transportation sales tax program. The SR-11 Project was included in the 2006 RTIP, allocating funds for studies for the future construction of a four-lane freeway and truck bypass road.

Natural Community Conservation Planning Program/Multiple Species Conservation Program

The NCCP initiated by the State of California in 1991 resulted in the promulgation of the special 4(d) rule of the Federal Endangered Species Act (FESA). This rule focuses on conserving coastal sage scrub habitat in order to avoid the need for future federal and state listing of each individual coastal sage scrub-dependent species. The City of San Diego, the County of San Diego, USFWS, California Department of Fish and Game (CDFG) and other local jurisdictions joined together in the late 1990s to develop the Multiple Species Conservation Program (MSCP). The MSCP is a comprehensive, long-term habitat conservation plan that addresses the needs of multiple species by identifying key areas for preservation as open space in order to link core biological areas into a regional wildlife preserve.

The County adopted its MSCP Subarea Plan (Subarea Plan) on October 22, 1997, to meet the requirements of the NCCP Act of 1991, the FESA, and the California Endangered Species Act (CESA). The Subarea Plan regulates effects on natural communities throughout the region, including those on East Otay Mesa. The alternative SR-11 corridors/POE sites are located within the South County Segment of the County's MSCP Subarea Plan.

Although Caltrans is not an enrolled agency under the MSCP and the proposed SR-11/Otay Mesa East POE program does not require County approval, Caltrans does strive to be consistent with the MSCP and other local plans. In addition, the U.S. Fish and Wildlife Service (USFWS) may require compliance with the MSCP as part of the Section 7 consultation for the proposed program.

The County is undergoing an amendment process for the Quino checkerspot butterfly (QCB) for the entire County MSCP Subarea, including areas encompassed by the proposed corridors/POE sites. The County's take authorizations would not apply until the amendment process has been completed.

County General Plan

The County General Plan (adopted January 3, 1979, amended April 17, 2002, GPA 01-01) designates planned land uses that are considered appropriate for each portion of the County. In the Regional Land Use Element of the General Plan, the existing regional policy category for the proposed corridors/sites is (21) Specific Plan Area. The elements of the County General Plan that would be applicable to the proposed program are discussed below.

It should be noted that, at the time this Draft PEIR/PEIS is being prepared, the County is undergoing a comprehensive general plan update, entitled *General Plan 2020* (GP 2020 Draft

Land Use Plan). While the preparers of the PEIR/PEIS for the proposed program are aware of the General Plan 2020 update process, this PEIR/PEIS evaluates the proposed program against the adopted General Plan and Zoning Ordinance.

Circulation Element

The County General Plan's Circulation Element consists of a map and accompanying text depicting corridors for public mobility and access that are planned to meet the needs of the existing and anticipated population of San Diego County. It is the intent of the Circulation Element to preserve a corridor uninhabited by any permanent structure for future road R/W for every road shown on the Circulation Element. SR-11 is included conceptually in the Circulation Element of the adopted County General Plan, as amended.

Regional Land Use Element

The overall goal of the Regional Land Use Element is to accommodate population growth and influence its distribution in order to protect and use scarce resources wisely; preserve the natural environment; provide adequate public facilities and services efficiently and equitably; assist the private sector in the provision of adequate, affordable housing; and promote the economic and social welfare of the region. Of particular relevance to the proposed program are the capital facilities goals, which seek to: assure efficient, economical and timely provision of facilities (including roads) to accommodate development; assure coordination among agencies in provision of facilities and services; and provide a facilities program capable of adjustments to meet changing needs and conditions.

Open Space Element

The Open Space Element seeks to: promote health and safety by regulating development of lands; conserve scarce natural resources and lands; conserve open spaces needed for recreation, education and scientific activities; and preserve those open space uses that distinguish and separate communities. Of relevance to the proposed program, it seeks to promote these values on both privately and publicly owned lands and easements.

Conservation Element

The Conservation Element describes the natural resources of San Diego County (including water, vegetation and wildlife habitat, minerals, soil, astronomical dark sky, and cultural sites), and presents policies and action programs to conserve these resources.

Otay Subregional Plan

The OSP (adopted May 18, 1983, GPA 83-01; amended July 27, 1994, GPA 94-02) designates planned land uses in the Otay subregional area. The OSP currently shows the program area as having a single Land Use Element designation: Specific Plan Area (21). The OSP recognizes in its Land Use, Circulation and Coordination Goals, the need for a second POE in Otay Mesa, the impact a new POE will have on the local and regional road and highway network, and the need for planning coordination with Mexico. The County is currently preparing an update of the OSP in conjunction with the GP 2020 Draft Land Use Plan.

East Otay Mesa Specific Plan

The OSP was amended December 19, 1990 to designate East Otay Mesa as Specific Plan Area (21) and incorporate the EOMSP Guidelines. The original EOMSP and Site Planning and Design Guidelines were adopted in July 1994. The amended EOMSP, adopted June 12, 2002 (SPA 00-005 and GPA 02-CE1), divided the plan area into two subareas. The Specific Plan Amendment (SPA) governs land within Subarea 1 (the western portion of East Otay Mesa), while Subarea 2 (the eastern portion) remains largely governed by the EOMSP and Site Planning and Design Guidelines approved as part of the amended OSP in July 1994. The proposed program area lies within both Subareas 1 and 2.

A more recent County-initiated SPA, approved on August 1, 2007, addressed both subareas and revised the circulation plan, bicycle network and regulatory standards relating to site plan requirements, fencing detail, driveway location criteria, and sidewalk design. The revised EOMSP circulation plan includes SR-11 and the Otay Mesa East POE in locations approximately corresponding to the Western Alternative of the proposed program.

The majority of the County land in the program area is designated for industrial and technology business uses under the EOMSP, as amended. A small area in the northeast corner of the program area is designated rural residential (one dwelling unit per 20 acres), and another small area at the northeast corner of the intersection of Alta Road and Otay Mesa Road is designated commercial.

The EOMSP, as amended, currently shows the POE sites and the County portions of the SR-11 corridors within Subarea 2 as having only one Land Use Element Designation: Mixed Industrial, (S88/EOM-1), as shown in Figure 3. 2-2. This designation is intended to accommodate industrial plants that primarily engage in the manufacturing, treatment, warehousing, or fabrication of materials or products. The County portions of the SR-11 corridors within Subarea 1 would traverse land designated as Technology Business Park and Light Industrial. Land under the Technology Business Park designation is intended for development of manufacturing operations and business offices that research, develop and produce advanced technologies. The Light Industrial designation accommodates all uses allowed under the Technology Business Park designation, plus wholesale storage and distribution, manufacturing, general industrial, and several commercial uses. A “B” Designator also applies to the program area, requiring specific development and design regulations for the industrial developments in the area. Section 2.1.2 (Land Use Designations) of the East Otay Mesa Business Park Specific Plan (EOMBPSP; i.e. the portion of the EOMSP that applies to Subarea 1 as a result of the 2002 amendment) includes a provision that the “north-south boundaries of adjacent land uses are intended to conform with the final alignment of future SR-11.”

The Circulation Element of the EOMSP includes SR-11 and the POE conceptually, and was amended in August 2007 to show approximately the SR-11 corridor analyzed in this PEIR/PEIS as the Western Alternative, leading to a future international POE, including the interchanges at Enrico Fermi Drive and Siempre Viva Road. Section 2.1.2 of the EOMBPSP notes the following: “The proposed corridor alignment for State Route 11 is subject to change upon the completion of Caltrans Environmental Studies” (County 2005a). The POE shown on the EOMSP Circulation Element map has an area of approximately 22 acres, which is significantly smaller than the proposed 100-acre Western Alternative POE site. The EOMSP recommends that R/W be preserved and the East Otay Mesa circulation system be reevaluated as necessary to accommodate SR-11.

City of San Diego Progress Guide and General Plan

The Progress Guide and General Plan, hereafter referred to as "City General Plan" (City of San Diego 1979, as amended), represents the comprehensive long-term plan for the physical development of the City. The elements of the City General Plan that would be applicable to the proposed program are discussed below.

It should be noted that, at the time this Draft PEIR/PEIS is being prepared, the City is undergoing a comprehensive general plan update. While the preparers of the PEIR/PEIS for the proposed program are aware of the City's General Plan update process, this PEIR/PEIS evaluates the proposed program against the adopted General Plan and Zoning Ordinance.

Transportation Element

The Transportation Element of the City's General Plan provides the framework for developing a comprehensive transportation system that includes: streets, highways and parking to serve vehicular needs; transit, bicycle and pedestrian facilities; and airports, railroads and maritime facilities. Relevant goals contained in the element address the need for the transportation system to be consistent with City and regional development goals; in balance with the types and intensities of land uses that it serves; safe, functional, efficient, environmentally acceptable, and aesthetically pleasing; consistent with the character of the area traversed; and suitable for the type and volume of traffic served.

The Transportation Element also provides the City's standards for land use compatibility with various transportation noise levels. Both current and projected noise levels are to be used in determining land use compatibility, and transportation facilities are to be designed and managed to minimize their noise impact on surrounding uses. It should be noted that Caltrans projects would comply with FHWA noise standards, the FHWA publication *Procedures For Abatement Of Highway Traffic Noise And Construction Noise* (23 CFR 772) and the Caltrans Noise Protocol, and would not be subject to the above City thresholds. Refer to Section 3.15 for additional discussion of noise issues.

Open Space Element

The Open Space Element supports the conservation and enhancement of San Diego's existing communities and seeks to aid in the creation of new communities that strive to retain and enhance natural amenities. Of relevance to the project, the element states that "[t]he installation of public and private improvements in designated open space areas should respect the natural environment to the maximum extent possible" (1979, as amended: 307).

Conservation Element

The majority of the environmental goals, guidelines and recommendations of the City General Plan can be found in the Conservation Element. This element addresses land, water, mineral, ecological, and air resources. Included in the element's discussion of land resources are recommendations for the consideration of elements such as landform, soils and erosion in project design. The element also recognizes the influence of urban development on water quality.

Strategic Framework Element

The Strategic Framework Element was adopted in October 2002 to update the General Plan and guide the City in accommodating future growth. The core of the Strategic Framework Element is the City of Villages strategy, which draws upon the strengths of existing San Diego neighborhoods by combining housing, commercial, employment centers, schools, and civic uses together with easy access to transit. Policy recommendations relevant to the proposed program include: promoting an interconnected street network that includes pedestrian and bicycle access and increasing landscaping, emphasizing the use of deciduous trees and native plants to conserve energy and water and reduce urban runoff, and providing capacity and operational improvements to streets and highways to minimize congestion.

City of San Diego Otay Mesa Community Plan

In addition to the provisions of the City's General Plan Elements, development in the western portion of the program area that is within the City of San Diego is governed by the goals, objectives and policies of the OMCP. Adopted in 1981, the OMCP designates the majority of land in Otay Mesa for industrial uses. In the eastern area of the OMCP, adjacent to the proposed SR-11 corridors, land is exclusively designated for industrial uses, with the exception of Brown Field which is designated for aviation uses, the areas around the existing POE and adjacent to the southeast corner of Brown Field which are designated for commercial uses, and a strip of land north and east of Brown Field that is designated as open space. Under the current OMCP, residential uses are restricted to the western portion of the planning area. The portions of the proposed SR-11 Corridors themselves that are located within the OMCP area are designated for industrial uses. The OMCP is currently undergoing an update process.

3.2.2 Impacts

Western and Central Alternatives

As discussed above in Section 3.2.1, *Affected Environment*, SR-11 and the POE are included conceptually in the adopted SANDAG RCP, RTP and RTIP, and would therefore be consistent with these regional plans.

In the same way, these facilities are contemplated in the County General Plan, OSP and EOMSP. The most recent amendment to the EOMSP shows an SR-11 that closely approximates the Western Alternative SR-11 Corridor, and also notes that the proposed corridor alignment for SR-11 is subject to change upon the completion of Caltrans Environmental Studies. As a result, both the Western and Central Alternatives would be consistent with the County General Plan, OSP and EOMSP.

SR-11 is included conceptually in the current City OMCP and, by extension, the City General Plan, and would therefore be consistent with these plans.

Because there would be no ground-disturbing activities in Phase I, no inconsistencies would occur with respect to the NCCP/MSCP.

Further specific plan consistency analysis would be conducted in Phase II, once design and operational alternatives have been identified.

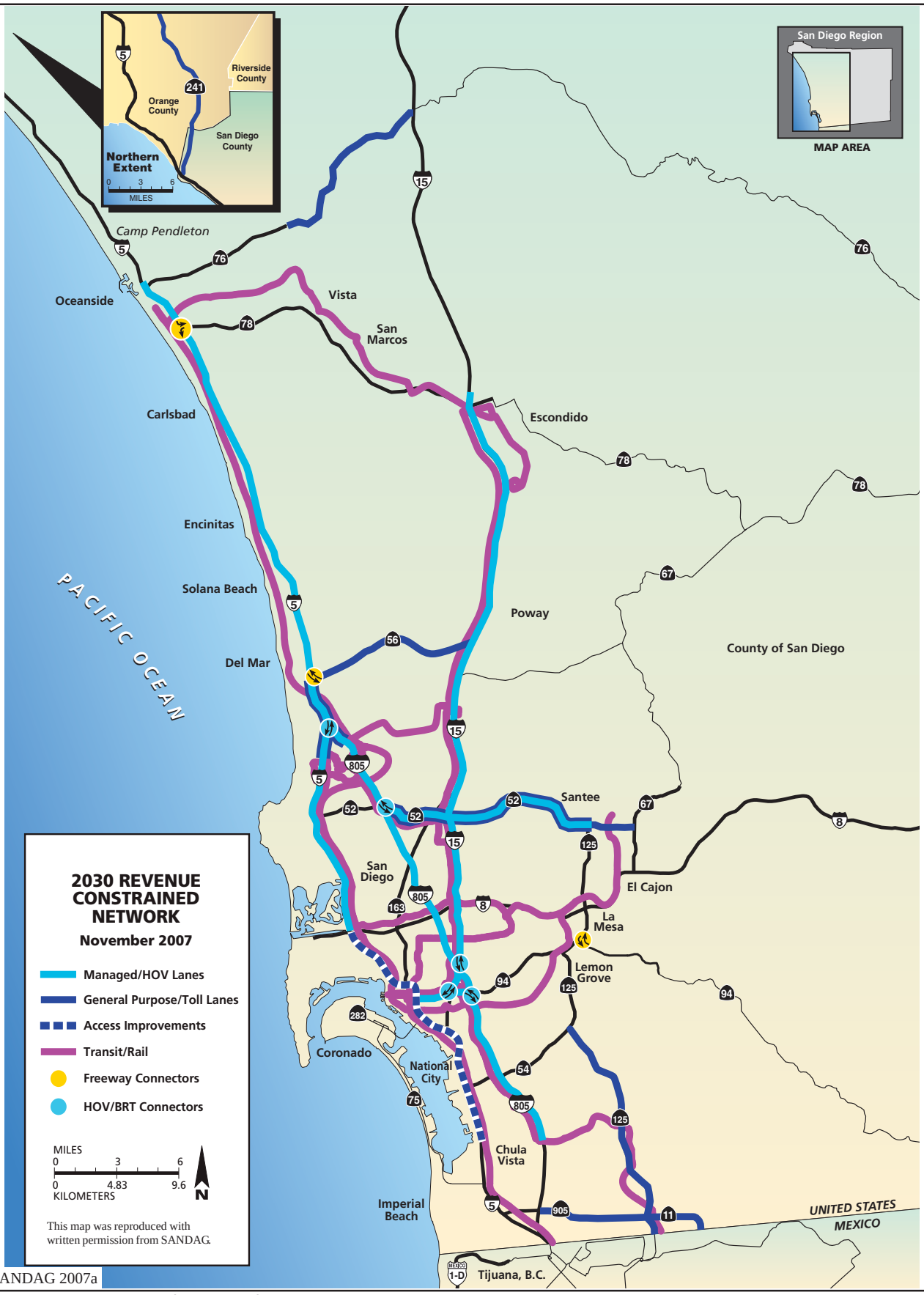
No Action Alternative

Under the No Action Alternative, there would be no impact with respect to land use plan consistency in the area. An SR-11 corridor would likely still be included in the RTP and shown conceptually on the circulation elements of the EOMSP and County General Plan, and the Otay Mesa East POE would likely continue to be indicated conceptually on the land use plan of the EOMSP. The areas currently shown for these facilities on the adopted EOMSP correspond approximately to the Western Alternatives addressed in this PEIR/PEIS.

3.2.3 Avoidance, Minimization and/or Mitigation Measures

No substantial land use plan consistency impacts are anticipated in Phase I under either program alternative, and therefore no avoidance, minimization and/or mitigation measures would be required. If further analysis during Phase II identifies any land use plan consistency impacts, then avoidance, minimization and/or mitigation measures would be recommended at that time.

Because no impacts were identified under the No Action Alternative, no associated avoidance, minimization or mitigation measures are proposed.



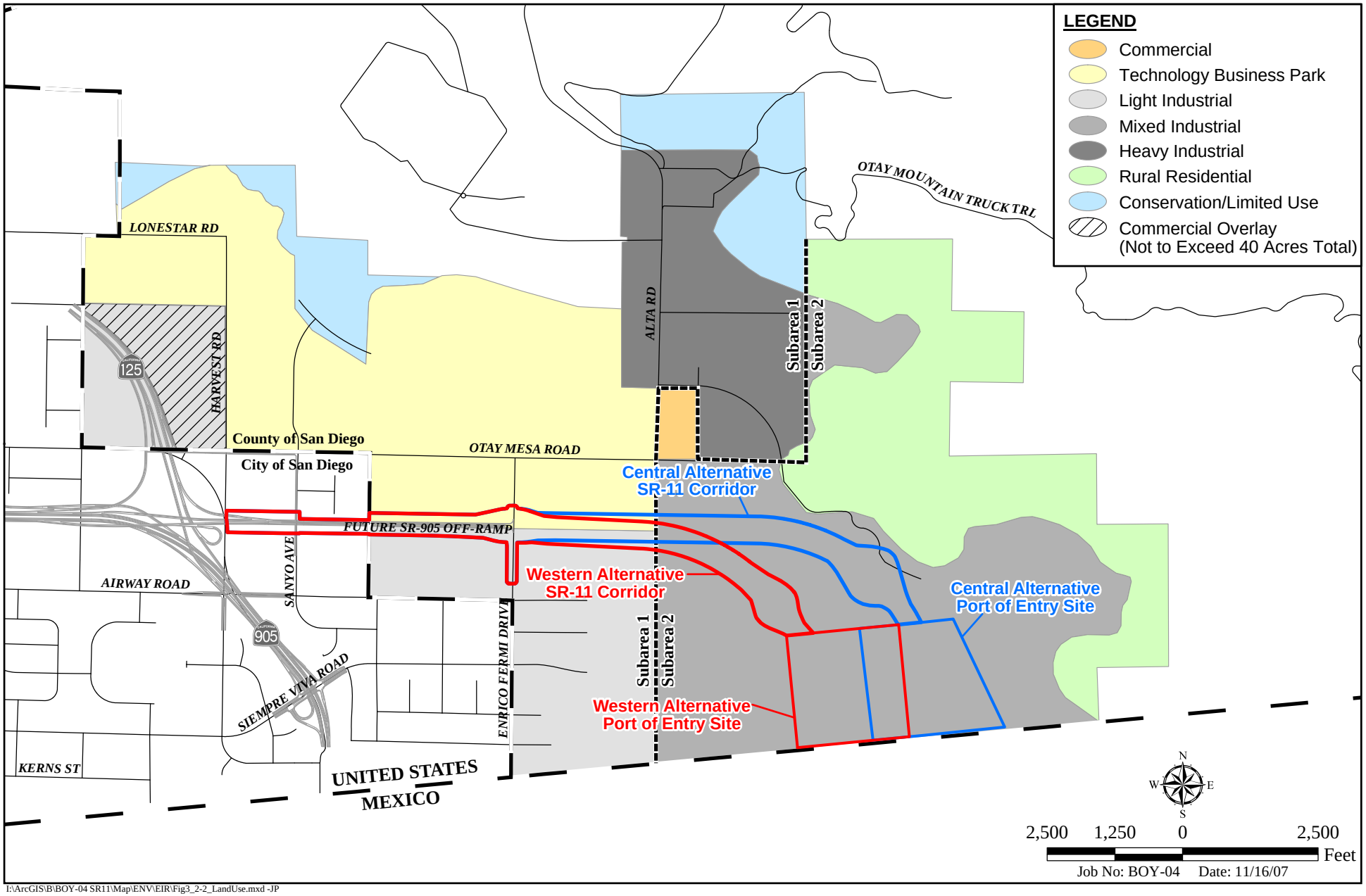
Source: SANDAG 2007a

I:\ArcGIS\B\BOY-04 SR11\Map\ENV\EIR\Fig3_2-1_Regional_Transportation.pmd -JP

Regional Transportation Plan 2030 Revenue Constrained Network

STATE ROUTE 11 AND OTAY MESA EAST PORT OF ENTRY PEIR/PEIS

Figure 3.2-1



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East Otay Mesa Specific Plan Land Use Designations

STATE ROUTE 11 AND OTAY MESA EAST PORT OF ENTRY PEIR/PEIS

Figure 3.2-2

3.3 GROWTH

Transportation networks are one of many factors that influence where, when and what type of development takes place in an area. Other factors include population and economic growth, desirability of certain locations, the costs and availability of developable land, physical and regulatory constraints, and the costs of sewer and water services.

Although transportation can influence growth, growth can also influence transportation. While transportation projects play a role in land use changes by providing infrastructure that can improve mobility or open access to new locations, the converse may also be true: new land development may generate travel to that location which, in turn, generates the need for new transportation facilities. Most capacity-increasing highway projects are proposed in response to traffic congestion that results from current or anticipated growth, rather than attracting new growth to an area that otherwise would remain stable or decline in population. However, transportation projects can affect the type, location, amount, or rate of growth in an area, most often indirectly, due to changes in travel time and increased land accessibility in areas that may be ripe for development.

This section addresses the issues of whether the proposed program could be expected to affect growth in the program area and vicinity, and whether any changes in growth patterns would be likely to impact environmental resources in the area. The analysis focuses on the identification of the reasonably foreseeable growth and land use change with or without the program; to what extent the program would influence the overall amount, type, location, or timing of that growth; and whether program-related growth could be expected to put pressure on or cause impacts to environmental resources of concern (Caltrans 2006a).

3.3.1 Regulatory Setting

The Council on Environmental Quality (CEQ) regulations, which implement the National Environmental Policy Act of 1969, require evaluation of the potential environmental consequences of all proposed federal activities and programs. This provision includes a requirement to examine indirect consequences, which may occur in areas beyond the immediate influence of a proposed action and at some time in the future. The CEQ regulations (40 CFR 1508.8) refer to these consequences as indirect impacts. Indirect impacts may include changes in land use, economic vitality, and population density, which are all elements of growth.

CEQA also requires the analysis of a project's potential to induce growth. CEQA guidelines [Section 15126.2(d)], require that environmental documents "…discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment…"

3.3.2 Affected Environment

As described in Section 3.1, *Land Use*, the program area currently is largely undeveloped, but potentially on the brink of major development. The County of San Diego has recently updated the EOMSP, which designates virtually the entire program area for industrial and technology business uses (with the exception of small areas for commercial and rural residential use). The County has numerous active development applications within and adjacent to the program area, as listed in Table 3.1-1. In the absence of an approved corridor for SR-11 and an associated POE site, the proposed EOMSP identifies a conceptual SR-11 Corridor and POE site

approximating the Western Alternative. There is substantial pressure from private developers and the County to identify the R/W location for SR-11 and the Otay Mesa East POE site, so that land use planning and development in the area can proceed accordingly. Similar development pressures are occurring in the areas of northeastern Tijuana near the proposed POE, where potential undeveloped sites for the Otay II POE on the Mexico side of the border have all but disappeared due to industrial development and increasing encroachment by low income, high density, unregulated residential settlements.

Rapid growth in the Otay Mesa area is also anticipated by regional planning agencies. Census Area 100.15, which includes the program area, is expected to experience population growth of 1,942 percent, from 1,062 in 2000 to 21,691 in 2030, compared with an approximately 42 percent increase over the same period for the San Diego region as a whole. Most of this residential growth is anticipated to occur in the western part of the census area, but would be supported by the industrial and business growth predicted in eastern sections, including the program area.

Thus, the identification of a preferred SR-11 corridor and POE site in Phase I, and the eventual construction and operation of these facilities in Phase II, would take place in an environment poised for rapid growth that is anticipated and planned for by local and regional planning agencies.

3.3.3 Impacts

This section assesses the likelihood that the proposed program would result in indirect impacts related to growth in the program area or in the larger land use study area. This assessment examines the type of transportation project, type of project location (e.g., urban, suburban or rural), changes in accessibility, and growth pressure, as factors influencing the likelihood of growth inducement and consequent growth-related impacts.

Western and Central Alternatives

Screening issues that may assist in identifying a project's potential to influence growth include: project type, project location, accessibility, and growth pressure.

Project Type

Certain transportation project types, such as widening existing lanes or repairing storm damage, clearly are unlikely to cause growth-related impacts. Other types of projects, such as construction of new highways, may have more potential for such impacts. The proposed Phase I SR-11/Otay Mesa East POE program would set a corridor for SR-11 and a site for the POE, but would not actually construct any facilities and would not determine the design or operational characteristics of these facilities. Because Phase I would only involve identification of the preferred corridor/site alternative, route adoption, processing of the Presidential Permit, and possible R/W acquisition, it would not constitute a type of project that would be likely to cause growth-related impacts.

The potential for growth-inducing impacts and the availability of information to assess such impacts would be greater in Phase II. Overall, growth inducement related to project type is more likely to be associated with Phase II than with Phase I, and would be evaluated in greater detail in Phase II.

Project Location

Another important screening factor is project location, that is, whether a project is located in an urban, suburban, urban/suburban fringe, or rural area. The proposed program would be located primarily on undeveloped parcels adjacent to an expanding urban/suburban area, where there is generally high land availability and lower land prices. Transportation projects in these types of areas have a relatively high potential to cause growth-related impacts, particularly if the land is suitable, development regulations are favorable, and the area is in the path of an expanding urban/suburban core (Caltrans 2006a). However, as previously noted, Phase I of the program would only identify the future locations of SR-11 and the Otay Mesa East POE, and facilitate route adoption, Presidential Permit processing and R/W acquisition; no associated construction or facilities operation would occur. Planned growth in this area has taken the proposed facilities and their approximate location into consideration for many years, as evidenced by provisions for SR-11 and/or the Otay Mesa East POE in many of the planning documents discussed in Section 3.1, *Land Use* (such as the County and City General Plans, the EOMSP and OMCP, and SANDAG RCP, RTP and RTIP). Therefore, although the Phase I program is proposed in a semi-rural, urban/suburban fringe area, implementation of Phase I in and of itself is not likely to result in growth-related impacts.

The location of the program area has stronger implications for growth in Phase II, when design and operational features would be determined and implementation would occur.

Accessibility

Accessibility reflects both the attractiveness of potential destinations and ease of reaching them, which, in turn, are related to land use and circulation issues. The program area is currently primarily undeveloped land with few developed roads and limited accessibility. The eventual implementation of SR-11 and the Otay Mesa East POE in Phase II would likely affect the ultimate circulation and land use pattern within the immediate program area and the resulting accessibility of the area. The identification of a preferred corridor and POE site in Phase I, however, without the design, construction and definition of operational features of the specific projects, is not likely to affect travel times, travel behavior or other aspects of accessibility within the program area.

With or without the proposed program, the existing and planned Circulation Element roads would provide access to existing and planned development in the area. Consequently, implementation of the proposed program would not be considered to remove a constraint to growth. However, future potential changes in land use and circulation patterns, and resulting accessibility within the study area for Phase II, would depend on the design and operational characteristics of the alternatives to be studied in Phase II. It is unknown at this time whether SR-11 would be a toll facility or a free facility, and what combination of commercial, private vehicle and pedestrian crossings would be accommodated by the Otay Mesa East POE. It is possible that functional changes in the other POEs in the San Diego region would occur in conjunction with implementation of the Otay Mesa East POE. These options would be evaluated during the development of the alternatives for analysis in Phase II, and the associated growth implications would be addressed in the NEPA and CEQA environmental review of the Phase II alternatives. This would include an analysis of the potential for implementation of SR-11 and the Otay Mesa East POE to result in improved access to an area that previously had poor accessibility, with associated implications for growth.

Growth Pressure

The Otay Mesa area contains the largest quantity of remaining undeveloped industrial land within the County. Land values in the Otay Mesa area remain relatively inexpensive, compared with remaining industrial infill parcels in other areas of the County. Furthermore, the land on Otay Mesa has the unique advantage of facilitating access to the existing Otay Mesa POE. On the other hand, growth in the East Otay Mesa area is physically constrained by the Otay River Valley to the north, the San Ysidro Mountains to the East, the international border to the south, and existing development to the west. Although the program area is primarily undeveloped land at the present time, there are numerous active development proposals within the area (See Figure 3.1-3 and Table 3.1-1 in Section 3.1, *Land Use*, of this PEIR/PEIS), which will likely proceed with or without approval of an SR-11 corridor and POE site during Phase I. The proposed industrial developments could support maquiladora and other international trade related business, which would then be required to utilize the Otay Mesa and/or Tecate POEs. In fact, the existence of these active development proposals, as well as the current and projected unacceptable wait times at the border, have contributed to the pressure to initiate Phase I of the subject program to set an SR-11 corridor and POE site that can then be accommodated by the various active development proposals.

Temporarily reducing this pressure, however, is the recent downturn in the San Diego real estate market, which is tied to developments in the sub-prime lending market at the national level.

Nearly every developable parcel in the program area is already the subject of a development proposal, which makes it unlikely that substantial growth stimulation would occur as a result of Phase I. It is possible, however, that identification of the preferred SR-11 corridor and POE site, as well as approval of a Presidential Permit for the Otay Mesa East POE under Phase I, would influence the rate and timing of development within the EOMSP area, by stimulating such development to occur sooner and more quickly in anticipation of the future construction of SR-11 and the POE. The type of development may also be affected, through the encouragement of more industrial uses related to cross border trade; this effect would likely be minor because of the similar influence of the existing Otay Mesa POE. The pattern of development would certainly be influenced in the immediate vicinity of the proposed facilities, in order to accommodate the preferred SR-11 Corridor and POE site.

Depending on the Phase II design and operational alternatives, there is the potential for growth pressure within a wider region, possibly encompassing the vicinities of the Otay Mesa and San Ysidro POEs. This would be assessed in greater detail during the Phase II NEPA and CEQA process, when project design and operational alternatives have been defined.

Overall Potential for Growth-Related Impacts Under the Western and Central Alternatives

The proposed program can be seen as both responding to and facilitating planned growth in the Otay Mesa area. Overall, under either the Western or the Central Alternative, consideration of factors such as type of transportation project, urban/suburban/rural project location, changes in accessibility, and growth pressure lead to the conclusion that there is little potential for growth inducement and consequent growth-related impacts in Phase I. Travel times, travel cost, accessibility to employment, commercial activities, destinations, trip patterns, travel behavior, and the attractiveness of specific areas for development would not be likely to change substantially as a result of Phase I. Development may occur sooner and at a more rapid pace, however, following identification of a preferred location for SR-11 and the POE. In addition, the

pattern of development would be expected to adjust to accommodate the preferred location, and the type of development could be influenced, with a greater percentage of new development being associated with international trade or freeway commercial uses. Consequently, the Phase I program would be expected to influence the overall amount, type, location, or timing of reasonably foreseeable growth. These effects would likely be minor in Phase I and would be limited to the EOMSP area. Such growth effects would not be expected to result in unanticipated development or impacts to resources; any associated development would be in accordance with the EOMSP and conform with CEQA and local, state and federal regulatory requirements for the protection of resources. Much of the EOMSP area surrounding the proposed program is currently covered by active development proposals within the County jurisdiction (refer to Chapter 4.0).

In Phase II, the project type (new road and POE), project location (in the urban/suburban fringe), accessibility (providing improved access to an area that previously had poor accessibility), and growth pressure (related to increased flow of goods and people across the U.S.- Mexico international border) all indicate the potential for changes in growth patterns in the area, and related indirect, growth-induced impacts to the environmental resources of concern identified above. This growth would be expected to conform to existing local and regional plans, but could affect the following resources:

- Resources in the human environment (land use, agricultural resources, community cohesion, relocations, environmental justice, aesthetics, utilities/emergency services, traffic/transportation, and cultural resources);
- Resources in the physical environment (hydrology and floodplains; water quality and storm water runoff; geology, soils and topography; paleontology; hazardous materials; air quality; and noise and vibration); and
- Resources in the biological environment (natural communities, wetlands and other waters, animal species, plant species, threatened or endangered species, and invasive species).

These potential effects to resources within the program area would be evaluated during the Phase II environmental process.

Because Phase II would consider alternative design/operational characteristics of SR-11 and the new POE, any of which could affect demand and operations at the existing Otay Mesa, San Ysidro and Tecate POEs, there is the potential for Phase II growth-related issues to affect a much wider area than the identified Phase I program area. Implementation of SR-11 and the Otay Mesa East POE in Phase II would increase the capacity for transport of people, goods and services across the border in both directions, with the potential for associated stimulation of the economy and growth inducement in the larger region. The geographic area for analysis of growth during Phase II would depend on the design/operational alternatives under consideration at that time; thus, the appropriate geographic area is best determined during Phase II.

No Action Alternative

Under the No Action Alternative, no SR-11 corridor or POE site would be identified, and uncertainty would remain regarding the possible eventual siting of these facilities in the area. Reasonably foreseeable development in the program area appears likely to be similar at this time, whether a Phase I SR-11 corridor/POE site alternative is approved or the No Action

Alternative is chosen, since the adopted EOMSP, as recently amended, includes SR-11 and the Otay Mesa East POE (reserving the approximate Western Alternative), and active development applications for most of the buildable area of East Otay Mesa are currently under review by the County. It is unknown whether the reserved area for these facilities would be sufficient for their future development. If implementation of SR-11 and the Otay Mesa East POE is delayed at this time, some redevelopment and/or realignment of roads could be required to accommodate construction of these facilities in the future.

The No Action Alternative could also have substantial implications for growth on a regional scale. As described in Chapter 1.0, *Purpose and Need*, there has been a substantial increase in trade between the U.S. and Mexico, and in the number of truck inspections that are required and the number of border crossings that occur each day. Currently, over 80 percent of merchandise crossing the U.S./Mexico border is moved by trucks. Because of the increased crossing demand at the border, wait times for personal trips across the border have averaged 45 minutes at the Otay Mesa POE and 75 minutes at the San Ysidro POE during peak periods, while approximately 10 percent of people waited as long as 1 hour at the Otay Mesa POE and 2 hours at the San Ysidro POE. The average processing and wait time for commercial freight crossings at the existing Otay Mesa POE has been reported as typically 1.5 to 2 hours (without U.S. secondary inspection), with 10 percent of commercial crossers waiting as much as 4 hours (SANDAG/Caltrans 2006). If the border continues to be a bottleneck, this could result in a curtailment of growth in the maquiladora industry near the border, and stimulate growth in other regions that provide other means to transport goods and services. Indirectly, a continued bottleneck at the land border crossings for vehicles, could result in increased demand and growth surrounding the region's airports, ocean ports and rail terminals and lines, resulting in potential pressure to expand these facilities, with associated potential adverse impacts to any of the following resources if present:

- Resources in the human environment (land use, agricultural resources, community cohesion, relocations, environmental justice, aesthetics, utilities/emergency services, traffic/transportation, and cultural resources);
- Resources in the physical environment (hydrology and floodplains; water quality and storm water runoff; geology, soils and topography; paleontology; hazardous materials; air quality; and noise and vibration); and
- Resources in the biological environment (natural communities, wetlands and other waters, animal species, plant species, threatened or endangered species, and invasive species).

3.3.4 Avoidance, Minimization and/or Mitigation Measures

The Phase I program could potentially result in a minor influence on the overall amount, type, location, and/or timing of reasonably foreseeable growth within the surrounding EOMSP area. Such effects would not be substantial. No other growth-related impacts were identified for Phase I under either of the implementation alternatives, and no avoidance, minimization or mitigation measures are proposed. Once design and operational features are determined in Phase II, further analysis would be required to determine any potential growth-related impacts. If necessary, measures to avoid, minimize or mitigate impacts to environmental resources from induced growth would be identified in the Phase II environmental document.

There is no NEPA or CEQA requirement for avoidance, minimization or mitigation measures under the No Action Alternative.

3.4 ENERGY

3.4.1 Regulatory Setting

NEPA (42 USC Part 4332) requires the identification of all potentially significant impacts to the environment, including energy impacts.

The CEQA Guidelines, Appendix F, Energy Conservation, state that EIRs are required to include a discussion of the potential energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful and unnecessary consumption of energy.

3.4.2 Affected Environment

In 2005, motor gasoline accounted for 54 percent of total petroleum use in California; in 2004 transportation uses accounted for 38.3 percent of total energy use in California, with residential and commercial uses accounting for 18.6 percent each, and industrial uses accounting for 24.5 percent (U. S. Department of Energy, Energy Information Administration, Petroleum Consumption Data Profile, www.eia.doe.gov/). While state and federal policies, such as the California Low-Emission Vehicle Program and the Federal Energy Policy Act of 1992, are increasing the use of alternative-fuel and low-emission vehicles, the consumption of non-renewable resources, such as fossil-fuels, remains high and points to the need to conserve such energy resources. The need to develop energy efficient projects is also highlighted in the Director's Policy on Energy Efficiency, Conservation and Climate Change (Caltrans 2007c), which states:

> "Caltrans incorporates energy efficiency, conservation, and climate change measures into transportation planning, project development, design, operations, and maintenance of transportation facilities, fleets, buildings, and equipment to minimize use of fuel supplies and energy sources and reduce GHG emissions.
>
> The intent of this policy is to implement a comprehensive, long-term departmental energy policy, interagency collaboration, and a coordinated effort in energy and climate policy, planning, and implementation."

3.4.3 Impacts

Western and Central Alternatives

No energy use would result from activities during Phase I; however identification of an SR-11 corridor and POE site during Phase I would commit the identified alternative for future development during Phase II. The future Phase II impacts would vary slightly depending on the identified SR-11 Corridor/POE site, with the Central Alternative requiring vehicles to travel approximately 2,000 feet farther than the Western Alternative, with associated increased auto/truck fuel usage over time. Energy requirements for construction of the Western Alternative would also be slightly less than for the Central Alternative, because the Western Alternative is shorter and would take less time and materials to construct; manufacturing of materials for road construction also uses energy. These differences would not be substantial, but are provided for comparative purposes. Post-construction operational energy uses of the facilities associated with the Program would depend on the design and operational characteristics of the alternatives

studied under Phase II. The energy impacts associated with program implementation in Phase II would be evaluated in detail during the Phase II CEQA/NEPA review.

No Action Alternative

Under the No Action Alternative, the described Phase I and Phase II actions would not be implemented, and no direct impacts related to energy would occur. The No Action Alternative could contribute to continued long wait times to cross the border, with associated traffic congestion and inefficient energy use by vehicles waiting at the border. These impacts would be expected to increase over time without implementation of the proposed program.

3.4.4 Avoidance, Minimization and/or Mitigation Measures

Because no impacts were identified for Phase I implementation under any of the described alternatives, no associated avoidance, minimization or mitigation measures are proposed.

As required by NEPA, measures would be identified during Phase II to avoid, minimize or mitigate any adverse impacts that may occur related to energy.

Avoidance, minimization or mitigation of the potential energy impacts associated with potential traffic congestion under the No Action alternative is not required under CEQA or NEPA.

3.5 UTILITIES/EMERGENCY SERVICES

3.5.1 Regulatory Setting

Public utilities, such as water and gas distribution pipelines, are often placed within streets that are franchised public R/W. Therefore, disturbing a street or utilities underneath could affect utility levels of service. This situation necessitated certain regulations regarding construction of public works in roadways. Pursuant to Public Utilities Code, "A district may construct works across or along any street or public highway, or over any of the lands which are the property of the state, and it shall have the same rights and privileges appertaining thereto as are granted to municipalities within the State. The district shall restore any such street or highway to its former state as near as may be…and shall not use it in a manner to unnecessarily impair its usefulness" (Public Utilities Code, Section 12808).

3.5.2 Affected Environment

Utilities

Utilities in the area are addressed in the *Community Assessment Existing Conditions Report* and summarized below.

The Draft *Otay Mesa and Otay Mesa East Feasibility Study* notes that the alternative Otay Mesa East POE sites are currently undeveloped, with existing utilities to be extended from the nearest service locations. Sewer service is provided by the East Otay Mesa Sanitation District, and the nearest sewer lines are located approximately 2,000 feet north of the site, at the intersection of Alta Road and Johnson Canyon, and approximately 3,000 feet west of the site, at the intersection of Enrico Fermi Drive and Airway Road. A conceptual sewer study prepared for the Otay Crossings project identifies a 12- to 15-inch-diameter City of San Diego sewer pipeline in Enrico Fermi Drive that connects to an existing 27-inch-diameter City of San Diego sewer main in Via de la Amistad.

Water service is provided by the Otay Water District. Existing water lines provide water to the state prison, the County detention facilities, and residences on Otay Mesa Road. Lines also provide emergency water service to Mexico. Existing water utility lines in the program area are listed below:

- 16-inch-/12-inch-diameter asbestos cement pipe (ACP) potable water pipeline in Alta Road;
- 24-inch-diameter ACP potable water pipeline in Alta Road;
- 12-inch-diameter PVC potable water pipeline in Enrico Fermi Drive;
- Recycled water pipeline in Enrico Fermi Drive (from Airway Road to Siempre Viva Road);
- 12-inch-diameter ACP potable water pipeline in Via de la Amistad; and
- 12-inch-diameter ACP potable water pipeline in Airway Road.

Sempra Energy Company provides power in the area. A power line within a 120-foot-wide transmission line easement is oriented toward the northwest from the border, extending along the eastern edge of the program study area. This easement contains above ground 69kV

electrical lines and a 230 kV line. All other utility lines in the EOMSP area are required to be placed underground in roadways. Sempra also has a 30-inch-diameter, 800-psi underground gas pipeline within Enrico Fermi Drive and Via de la Amistad.

Emergency Services

Emergency services typically relevant for public safety are police protection, fire protection and emergency medical services. These services are addressed in the *Community Assessment Existing Conditions Report*.

Police Protection Services

Police protection services for the portion of the program area within the City of San Diego are provided by the San Diego Police Department - Southern Division office located at 1120 27th Street, approximately 10 miles to the west, near I-5. The Southern Division serves the southern portion of the City of San Diego including Otay Mesa, Otay Mesa West and San Ysidro.

The County Sheriff's Department provides generalized patrol services, traffic control and law enforcement investigative services in the unincorporated areas of the County, an area of approximately 4,200 square miles. The nearest Sheriff's station to the program area is the Imperial Beach Station, located approximately 12 miles to the west. Most patrol functions in the program area are carried out by one of the two to three patrol units assigned to the entire Otay Mesa area. In urban unincorporated areas, such as East Otay Mesa, minimum response times are 8 minutes for priority calls and 16 minutes for non-priority calls. Current response times to the East Otay Mesa area are less than 8 minutes for first priority calls from the Imperial Beach Station, which meets the County General Plan standard.

The demand for police services in the vicinity of the program area is expected to increase as the current approved and proposed developments are implemented in the area. The Public Facilities Element of the General Plan notes that there is a need to locate a Sheriff's substation in the East Otay Mesa area, after the onset of development. Also, the Sheriff's office has indicated the need for a new Sheriff's station in the unincorporated South Bay area to improve service levels (Parker 2006). A combined fire/police station is identified in the EOMSP, at the southwest corner of the intersection of Otay Mesa Road and Alta Road, in the vicinity of the proposed SR-11 corridor alternatives. No funding source has been identified and no specific plans have been developed for the new station, but this planned Sheriff's station would provide the services necessary to satisfy the expected increase in demand due to anticipated cumulative development in the area.

Fire Protection Services

City of San Diego Fire-Rescue Department, Otay Mesa Station No. 43, located at the intersection of Otay Mesa Road (Interim SR-905) and La Media Road, provides fire protection services to the City portion of the program area.

Fire protection in the County portion of the program area is provided by the San Diego Rural Fire Protection District (SDRFPD). The SDRFPD, City of San Diego, City of Chula Vista, County of San Diego, and Donovan State Prison are signatories to a County Mutual Aid Agreement. In addition to fire services provided by the SDRFPD, the California Department of Forestry responds to wildland fires in East Otay Mesa.

There are two SDRFPD fire stations in the vicinity of the program area: Station 65, which is located at Donovan State Prison, and Station 68 (opened October 3, 2007), which is an interim fire station at the George F. Bailey Detention Facility and staffed by California Department of Forestry and Fire Protection (CAL FIRE) personnel as part of a cooperative agreement. Station 68 provides full-service fire suppression, rescue and emergency medical services. It is anticipated that Station 68 will operate for approximately two years, after which time, operations will move to the planned fire/police facility at the corner of Otay Mesa Road and Alta Road, as described above for police protection services. SDRFPD/CAL FIRE have secured a permanent station site at the intersection of Otay Mesa Road and Alta Road (Scully 2007).

Emergency Medical Services

San Diego Medical Services Enterprise (SDMSE), a public/private partnership formed as a limited liability company between the City of San Diego and Rural/Metro Ambulance Emergency, provides medical services to the program area. A paramedic responder is available at Station 43. The nearest Emergency Medical Technician is stationed at Fire Station 29, which is located near the I-805/I-5 merge. This location also has ambulance service. SDMSE has a mutual aid agreement with the County of San Diego, and responds to medical emergencies within both the City and County (Johnson 2007).

3.5.3 Impacts

Western Alternative

As noted in the Introduction to Chapter 3, no ground-disturbing activities would occur during Phase I; therefore, no impacts to existing utilities or emergency services would occur in association with the Western Alternative SR-11 Corridor or POE site.

To the extent that development plans for currently vacant parcels have proposed utilities within the Western SR-11 corridor, these plans would have to be adjusted to avoid the highway corridor. However, the EOMSP Amendment (County of San Diego 2007c) requires the use of all land in the SPA to conform with the applicable regulatory provisions in the Specific Plan, including the provision that the “north-south boundaries of adjacent land uses are intended to conform with the final alignment of future SR-11.” Therefore, no direct or indirect impacts to proposed utilities from the SR-11 corridor would occur due to Phase I.

To the extent that development plans for currently vacant parcels have proposed utilities within the adopted boundaries of the Western Alternative POE Site, these plans would be replaced by future plans for the POE facility. Therefore, no direct or indirect impacts to proposed utilities within the POE site would occur due to Phase I.

Identification of a preferred SR-11 Corridor and POE site during Phase I would commit those locations for future development with these facilities during Phase II, with potential future impacts to the utilities and emergency services within the identified preferred alternative. During Phase II, issues that would be addressed by the lead agencies for subsequent environmental documents would include the potential for the alternatives addressed to disturb existing utilities, require additional capacity for any utilities, disrupt travel on existing roadways such that emergency public services would be affected, or require additional emergency public services.

Construction of the Western Alternative SR-11 could temporarily disrupt or require relocation of existing utilities within the highway construction zone and permanent R/W. Existing water

pipelines in Enrico Fermi Drive, Alta Road and Airway Road could be impacted by SR-11 construction. Relocation of the water lines in Enrico Fermi Drive may occur in advance of SR-11 construction, due to implementation of the approved (pending construction) off-ramp from the future SR-905/SR-125 Interchange to Enrico Fermi Drive. Operation of the highway would require new utility services, including irrigation water, drainage and lighting. Design and construction of the Western Alternative POE could affect the 30-inch diameter gas pipeline in Via de la Amistad, which is within the site boundaries. Operation of the POE would require new utility services, including water, sewer, drainage, power, and communications.

Construction of the Western Alternative SR-11 could temporarily disrupt travel along existing roadways within the highway construction zone, potentially affecting emergency response times. Upon completion of SR-11, emergency response times would be reduced by the improved roadway, which would represent a program benefit to public safety.

Specific potential impacts of Phase II would be studied in greater detail during the future environmental review of the Phase II design/operational alternatives.

Central Alternative

As discussed above, no direct or indirect impacts to utilities or emergency services would occur due to Phase I.

Potential future Phase II impacts of the Central Alternative SR-11 Corridor and POE Site would be the same as for the Western Alternative, except that the 12-inch water pipeline in Airway Road would not be impacted by the Central Alternative for SR-11. Specific potential impacts of Phase II would be studied in greater detail during the future environmental review of the Phase II design/operational alternatives.

No Action Alternative

Under the No Action Alternative, the proposed Phase I and Phase II actions would not be implemented, and no impacts to utilities or emergency public services from the SR-11 corridor and POE would occur. In addition, the public safety benefit of reducing emergency response times by extending SR-11 would not occur.

3.5.4 Avoidance, Minimization and/or Mitigation Measures

Because no impacts were identified for Phase I implementation under any of the described alternatives, no associated avoidance, minimization or mitigation measures are proposed.

As required by NEPA, measures would be identified during Phase II to avoid, minimize or mitigate any anticipated impacts to utilities and emergency services, based on the design/operational alternatives identified during Phase II. Potential measures that could be considered during Phase II include identifying existing utilities on construction plans and designing proposed facilities to minimize utility disruption and relocation, providing plans and specifications for protection of existing utilities, sizing and locating new utilities appropriately to serve program facilities, and providing for passage of emergency vehicles in construction traffic control plans.

Because no impacts were identified for the No Action Alternative, no associated avoidance, minimization or mitigation measures are proposed.

3.6 TRAFFIC AND TRANSPORTATION/PEDESTRIAN AND BICYCLE FACILITIES

A *Traffic Existing Conditions Report*, dated August 2007, was completed for Phase I of the SR-11/Otay Mesa East POE, and is summarized in this section of the PEIR/PEIS. The traffic report presents a program-level analysis based on average daily traffic (ADT) conditions. A future traffic analysis conducted during Phase II will provide additional level of detail, such as AM and PM peak hour traffic conditions, for analysis of specific design/operational alternatives. The purpose of the Phase I traffic analysis summarized in this section is to provide a general description of existing and potential future traffic conditions based on ADT calculations.

3.6.1 Regulatory Setting

The FHWA directs that full consideration should be given to the safe accommodation of pedestrians and bicyclists during the development of federal-aid highway projects (see 23 CFR 652). It further directs that the special needs of the elderly and the disabled must be considered in all federal-aid projects that include pedestrian facilities. When current or anticipated pedestrian and/or bicycle traffic presents a potential conflict with motor vehicle traffic, every effort must be made to minimize the detrimental effects on all highway users who share the facility.

The Americans with Disabilities Act of 1990 prohibits disability-based discrimination in employment, government, public accommodations, community facilities, transportation, and telecommunications. The act requires the design, construction and alteration of facilities to comply with accessibility standards. The City, County and FHWA are committed to carrying out the Americans with Disabilities Act by building transportation facilities that provide equal access for all persons. The same degree of convenience, accessibility and safety available to the general public will be provided to persons with disabilities.

3.6.2 Affected Environment

Existing conditions were analyzed for the year 2007. The study area generally includes the proposed SR-11 corridor, as well as state highways and local roadways that are likely to experience a substantial increase or decrease in traffic, depending on whether SR-11 is built. The study area includes all of SR-905; portions of I-5, I-805 and SR-125; and key local roadways east of La Media Road and south of the Otay River Valley. Roadway classifications for existing conditions were based on the current characteristics of each analyzed roadway in the traffic study area. For roadway segments within the County and City, the respective County and City Roadway Classifications, Levels of Service and ADT tables were used.

Existing ADT values along state highways were taken from 2006 Caltrans State Highway information, prepared by the Caltrans Traffic and Vehicle Data Systems Unit and published on the Caltrans website. These values were increased by two percent to estimate year 2007 conditions. Existing ADT values on local streets were based on similar counts published on the SANDAG website, supplemented by counts provided by the City of San Diego.

Figure 3.6-1a shows the existing ADT on the limited-access freeway segments within the regional study area. All of the freeway segments are located within the City of San Diego. The regional study area includes the following freeway segments:

- SR-905, between I-805 and Ocean View Hills Parkway;
- SR-905, between Siempre Viva Road and the international border;
- I-5, between San Ysidro Boulevard and the international border;
- I-805, between Palm Avenue and SR-905; and
- I-805, between SR-905 and San Ysidro Boulevard.

Figure 3.6-1b illustrates the existing ADT on street segments within the local study area. The street segments analyzed in the traffic study are listed below. The project study area encompasses areas within both the City and unincorporated County; the jurisdictions in which the street segments are located are indicated in parentheses:

- Otay Mesa Road (SR-905), between Britannia Boulevard and La Media Road (City);
- Otay Mesa Road (SR-905), between La Media Road and SR-905 (City);
- Otay Mesa Road, between SR-905 and Alta Road (City/County);
- Airway Road, from Britannia Boulevard and La Media Road (City);
- Airway Road, from La Media Road to Harvest Road (City);
- Airway Road, from Harvest Road to Paseo de las Americas (City);
- Airway Road, from Paseo de las Americas to Enrico Fermi Drive (City/County);
- Siempre Viva Road, between Britannia Boulevard and La Media Road (City);
- Siempre Viva Road, between La Media Road and Harvest Road (City);
- Siempre Viva Road, between Harvest Road and SR-905 (City);
- Siempre Viva Road, between SR-905 and Enrico Fermi Drive (City);
- La Media Road, between Lone Star Road and Otay Mesa Road (SR-905) (City);
- La Media Road, between Otay Mesa Road (SR-905) and Airway Road (City);
- La Media Road, between Airway Road and Siempro Viva Road (City);
- Enrico Fermi Drive, between Airway Road and Siempre Viva Road (County);
- Alta Road, between Paseo De La Fuente and Otay Mesa Road (County); and
- SR-905, between Otay Mesa Road and Siempre Viva Road (under Caltrans jurisdiction, but analyzed as a City street for capacity purposes).

Existing Principal Roadways

The existing principal roadways in the project area are briefly described below. The descriptions include the physical characteristics.

- **SR-905** currently extends east from I-5, intersects with I-805, then continues east and then south to the existing Otay Mesa POE. SR-905 is a limited access freeway from I-5 to approximately 1.3 miles east of I-805. SR-905, from this point east, aligns with Otay Mesa Road (referred to as Otay Mesa Road [SR-905]). Otay Mesa Road (SR-905) is improved to six-lane Prime Arterial standards. In the City of San Diego Circulation Element, a six-lane Prime Arterial has a cross section of 102 feet curb-to-curb and a right-of-way of 122 feet. At approximately 5.4 miles east of I-805, SR-905 trends to the south to the Otay Mesa POE and Otay Mesa Road continues to the east. From Otay Mesa Road south to the border, SR-

905 is a divided four-lane Major Arterial that intersects with Airway Road (full access) and Siempre Viva Road (limit access with partial cloverleaf). A four-lane Major Arterial has a cross section of 78 feet curb-to-curb and a right-of-way of 98 feet. The posted speed limit on SR-905 and on Otay Mesa Road (Interim SR-905) is 50 miles per hour (mph). Otay Mesa Road (Interim SR-905) is a designated bike route.

- **I-5,** from San Ysidro Boulevard south to the international border (San Ysidro POE), is an eight-lane limited-access freeway. I-5 merges with I-805 just south of San Ysidro Boulevard.

- **I-805,** both north and south of its intersection with SR-905, is an eight-lane limited-access freeway.

- **Otay Mesa Road,** east of SR-905, is a two-lane Rural Collector located within the jurisdictions of both the City and County. The segment from approximately 1,200 feet east of Sanyo Avenue to SR-905 is located within both jurisdictions, with the centerline of the existing road as the boundary. East of this point, Otay Mesa Road is within the County jurisdiction. Otay Mesa Road has a varying pavement width of 29 to 58 feet. The posted speed limit on Otay Mesa Road is 50 mph.

  According to the EOMSP, the ultimate classification of the segment of Otay Mesa Road between Sanyo Avenue and Enrico Fermi Drive is Prime Arterial with bike lanes. Between Enrico Fermi Drive and Alta Road, Otay Mesa Road is classified as a four-lane Major Road. In the County Circulation Element, a Prime Arterial has a cross section of 102 feet curb-to-curb and 122 feet of right-of-way. A Major Road has a cross section of 78 feet curb to curb and 98 feet of right-of-way.

- **Airway Road** is an east-west roadway located within the City (west of Paseo de Las Americas) and County (from Paseo de Las Americas to Enrico Fermi Drive). Airway Road, between La Media Road and Avenida Costa Azul, is a two-lane undivided roadway. Between Avenida Costa Azul and Piper Ranch Road, Airway Road widens to a four-lane roadway with a raised median. East of Piper Ranch Road, for approximately 150 feet, Airway Road provides one eastbound lane and two westbound lanes. Just west of SR-905, Airway Road narrows to a two-lane, undivided facility with approximately 11-foot-wide travel lanes. Between SR-905 and Sanyo Avenue, Airway Road is striped to provide two travel lanes. Airway Road between Sanyo Avenue and Paseo De Las Americas has been improved to the standards of a four-lane Major Road. The north side of the roadway (which is ultimately intended to serve westbound traffic) is currently blocked off, however, and the south side of the roadway provides one lane of travel in each direction. Between Paseo De Las Americas and Enrico Fermi Drive, Airway Road narrows to a two-lane roadway.

  The segment of Airway Road between Britannia Road and Paseo De Las Americas is classified as a two-lane Collector Road. The segment of Airway Drive between Paseo De Las Americas and Enrico Fermi Drive is classified as a Rural Collector. Airway Road will be reconstructed in the future to no longer provide access to SR-905.

  In the EOMSP, as amended in August 2007, Airway Road has the ultimate classification of a four-lane Major Road.

- **Siempre Viva Road** is an east-west roadway that is located within the City's jurisdiction. From west of SR-905 to Enrico Fermi Drive, Siempre Viva Road is classified as a six-lane

facility with a cross-section equivalent to that of a Prime Arterial. Currently, east of Paseo De Las Americas to Enrico Fermi Drive, Siempre Viva Road is a four-lane road.

- **La Media Road** is a north-south roadway that extends from Lone Star Road south to Siempre Viva Road. The two-lane roadway, located entirely within the City, is classified as a two-lane Collector Road.

- **Enrico Fermi Drive** is constructed as a north-south, two-lane facility. The segment north of Airway Road is under the County's jurisdiction and has the classification of a Light Collector. The segment south of Airway Road is under the City's jurisdiction and has the classification of a Collector. Enrico Fermi Drive has the ultimate classification in the EOMSP Amendment of a four-lane Major Road.

- **Alta Road** is a north-south, two-lane Rural Collector within the jurisdiction of the County. Based on the County Circulation Element, the ultimate classification of Alta Road is a four-lane Major Road with bike lanes.

Scheduled or Programmed Highway Improvement Projects

Two major highway projects, in addition to the proposed program, are currently being constructed or are scheduled for construction in the project study area: SR-125 and SR-905.

- **SR-125,** also known as the South Bay Expressway, is a 12-mile segment of new highway between SR-54, near the Sweetwater Reservoir, and SR-905. This portion of SR-125 opened in November 2007 as a four-lane highway, with the southern 9.5 miles operated as a toll road. Ultimate project construction calls for six lanes (between Olympic Parkway and SR-905) to eight lanes (between SR-54 and Olympic Parkway), with possible future carpool lanes and/or transit facilities in the median.

- **SR-905** will consist of a six-lane freeway from I-805 to the Otay Mesa POE. The freeway alignment will run parallel to, and roughly one quarter-mile south of, the existing Otay Mesa Road (Interim SR-905). The project will include a grade-separated local access interchange with SR-125, and will be divided into four phases: 1) six-lane facility between Caliente Boulevard and Siempre Viva Road, with a full interchange at SR-905/La Media Road; 2) interchange at I-805/SR-905; 3) extension of SR-905 to Enrico Fermi Drive and construction of the interchange at SR-905/SR-125; and 4) interchange at Heritage Road. Caltrans has funding available only for construction of the six-lane facility between Caliente Boulevard and Siempre Viva Road, which is scheduled to begin early in 2008 and be completed by summer of 2010.

Pedestrian and Bicycle Facilities

The area near the existing Otay Mesa POE has standard City street sections with sidewalks. Because of the primarily industrial nature of the area, walking is generally associated with trips between employment destinations and transit stops/parking areas or eating establishments. The only existing sidewalk within the boundaries of the program alternatives is along the east side of Sanyo Avenue.

Several designated bike facilities are located in the project area. The San Diego Region Bike Map (SANDAG 2004) indicates that a bicycle route extends along Otay Mesa Road from Beyer Boulevard east to SR-125. A bicycle route is a shared right-of-way, designated by signs only,

with bicycle traffic sharing the roadway with motor vehicles. Bike lanes, striped lanes for one-way bike travel identified by special signs, lane striping, and other pavement markings, are found along Otay Mesa Road, from SR-125 to Alta Road; along SR-905 (Otay Mesa Road to the border); and along Siempre Viva Road, from La Media Road east to Enrico Fermi Drive. There are no existing bike facilities located within the proposed SR-11 corridors or POE sites.

The August 2007 amendment to the EOMSP contained an update of the Circulation Element's Bicycle Plan. Changes within the program area included deletion of the segment of the existing bike lane on Otay Mesa Road eastward from Piper Ranch Road to Enrico Fermi Drive due to safety concerns and other constraints; deletion of the planned bike lane on Michael Faraday Drive from Airway Drive northward because that segment of road was deleted from the circulation plan; addition of bike lanes on Enrico Fermi Drive and on Alta Road, both from Siempre Viva Road northward beyond the limits of the program area, to provide connectivity; and realignment of roadway network and bicycle lanes on Airway Road and Siempre Viva Road.

Transit

A Metropolitan Transit System bus route currently provides daily service to the Otay Mesa area near the existing Otay Mesa POE. Bus Routes 905 and 905A travel between the Iris Avenue Trolley Station in San Ysidro and the San Ysidro POE. Bus Route 905A provides service between the terminal destinations at Route 905, with additional local service within Otay Mesa. Both bus routes operate approximately every 30 minutes from early morning to about 7:45 pm and about once an hour on the weekends. The buses are equipped with bicycle racks.

The RTP identifies a bus rapid transit corridor named the South Bay Bus Rapid Transit (BRT). The South Bay BRT will provide high-speed transit connections between downtown San Diego and the existing Otay Mesa POE along future I-805 managed lanes, as well as a dedicated transit way through eastern Chula Vista and along SR-125, terminating at the existing Otay Mesa POE.

Existing Levels of Service

Level of Service (LOS) is a professional industry standard by which the operating conditions of a given roadway segment are measured. LOS is defined on a scale of A to F, where LOS A represents the best operating conditions, and LOS F represents the worst operating conditions. See Table 3.6-1 for general LOS definitions. LOS A facilities are characterized as having free-flowing traffic conditions with no restrictions on maneuvering or operating speeds; traffic volumes are low and travel speeds are high. LOS F facilities are characterized as having highly unstable, congested conditions, and low operating speeds. The City and County encourage operating conditions of LOS D or better for roadways and intersections in developed (versus planned) areas. The proposed SR-11 Corridors are partially located in a developed area with existing access routes. Therefore, for the purposes of reviewing existing segment and intersections conditions, LOS D or better is considered an acceptable LOS.

As noted above, for roadway segments within the City, the City of San Diego Roadway Classifications, Levels of Service, and ADT table was used. The conditions of roadway segments within the County were determined based on the County's roadway capacity analysis table.

The volume-to-capacity ratio (V/C) is another important parameter in determining LOS. V/C is a measure of traffic demand on a facility (expressed as volume) compared to its traffic-carrying capacity. Freeway LOS definitions, determined by V/C ratios, are provided in Table 3.6-2.

Table 3.6-1
LEVEL OF SERVICE DEFINITIONS

LOS	Traffic Flow Description
A	Highest quality of service. Free traffic flow with few restrictions on maneuverability or speed. No delays.
B	Stable traffic flow. Speed becoming slightly restricted. Low restriction on maneuverability. No delays.
C	Stable traffic flow, but less freedom to select speed, change lanes or pass. Minimal delays.
D	Traffic flow becoming unstable. Speeds subject to sudden change. Passing is difficult. Minimal delays.
E	Unstable traffic flow. Speeds change quickly and maneuverability is low. Significant delays.
F	Heavily congested traffic. Demand exceeds capacity and speeds vary greatly. Considerable delays.

Source: www.dot.ca.gov/ser (Levels of Service for Two-Lane Highways)

Table 3.6-2
CALTRANS FACILITIES LEVEL OF SERVICE DEFINITIONS

LOS	V/C	Congestion/Delay	Traffic Description
Used for freeways, expressways, and conventional highways			
A	<0.42	None	Free flow
B	0.42 – 0.62	None	Free to stable flow, light to moderate volumes
C	0.63 – 0.80	None to minimal	Stable flow, moderate volumes, freedom to maneuver noticeably restricted
D	0.81 – 0.92	Minimal to substantial	Approaches unstable flow, heavy volumes, very limited freedom to maneuver
E	0.93 – 1.00	Significant	Extremely unstable flow, maneuverability and psychological comfort extremely poor
Used for freeways and expressways			
F(0)	1.01 – 1.25	Considerable 0-1 hour delay	Forced flow, heavy congestion, long queues form behind breakdown points, stop and go
F(1)	1.26 – 1.35	Severe 1-2 hour delay	Very heavy congestion, very long queues
F(2)	1.36 – 1.45	Very severe 2-3 hour delay	Extremely heavy congestion, longer queues, more numerous breakdown points, longer stop periods
F(3)	>1.45	Extremely severe 3+ hour delay	Gridlock

LOS = Level of Service
V/C = Volume-to-Capacity Ratio

A highway capacity analysis was conducted for state freeways in the study area. The results, summarized in Table 3.6-3, indicate that all of the highway segments in the study area are operating at an LOS D or better.

Table 3.6-3
EXISTING CONDITIONS (2007) STATE HIGHWAY SEGMENT CAPACITY ANALYSIS

Route	Limits	2007 ADT	Peak Hour Volume (veh/hr)	Total Capacity (veh/hr)	2007 V/C	2007 LOS
SR-905	I-805 to Ocean View Hills Pkwy	63,200	3,128	4,000	0.90	D
SR-905	Siempre Viva Rd to International Border	38,800	1,921	4,000	0.55	B
I-5	San Ysidro Way to International Border	114,200	5,653	12,000	0.48	B
I-805	Palm Ave to SR-905	127,000	6,287	8,000	0.83	D
I-805	SR-905 to San Ysidro Blvd	69,400	3,435	8,000	0.45	B

ADT = Average Daily Traffic
V/C = Volume-to-Capacity Ratio
LOS = Level of Service

A capacity analysis was conducted for local street segments in the study area. The results, which are summarized in Table 3.6-4, indicate that all street segments within the study area currently operate at acceptable LOS D or better, with the exception of two segments operating at LOS E. These segments are Otay Mesa Road between La Media Road and SR-905, and SR-905 between Otay Mesa Road and Siempre Viva Road.

3.6.3 Impacts

Western and Central Alternatives

Program-level Analysis

The current proposal includes two alternative SR-11 corridors. Although the corridors would be slightly different, they were considered in the traffic existing conditions report to be equivalent for traffic analysis purposes. Therefore, the following discussion applies equally to both the Western and the Central alternatives.

As noted in the Introduction to Chapter 3, no ground disturbing activities would occur during Phase I; therefore, no traffic impacts would occur in association with either the Western Alternative or Central Alternative SR-11 corridor or POE.

During Phase II, issues that would be addressed by the lead agencies for subsequent environmental documents would include the potential for the alternatives addressed to generate impacts due to construction of new roadways; alteration of existing roadways; redistribution of traffic on local roads; construction of the POE or any other traffic-generating use; or creation of new demand for pedestrian, transit or bicycle facilities. For example, implementation of Phase II would include activities that could temporarily disrupt traffic at intersection points with local roadways (e.g., Enrico Fermi Drive and Siempre Viva Road), and at planned interchange locations with existing highways (e.g., SR-905 and SR-125). Construction of the proposed POE could affect local roadways currently in the POE footprint, such as Via de la Amistad, and

Table 3.6-4
EXISTING CONDITIONS (2007)
ROADWAY CAPACITY ANALYSIS COUNTY/CITY ROADWAYS

Route	Limits	Jurisdiction[1]	Classification	Typical Max ADT[2]	2007 ADT	2007 V/C	2007 LOS
Otay Mesa Road	Britannia Blvd. to La Media Rd.	City	6-Lane Prime	60,000	46,700	0.78	C
	La Media Rd. to SR-905		6-Lane Major	50,000	47,600	0.95	E
	SR-905 to Alta Rd.	County	Rural Collector	16,200	8,900	0.55	D
Airway Road	La Media Rd. to Harvest Rd.	City	2-Lane Collector	15,000	12,000	0.80	D
	Harvest Rd. to Paseo de las Americas				9,400	0.63	C
	Paseo de las Americas to Enrico Fermi Dr.	County	Rural Collector	16,200	4,100	0.25	B
Siempre Viva Road	La Media Rd. to Harvest Rd.	City	6-Lane Major	50,000	6,100	0.12	A
	Harvest Rd. to SR-905		6-Lane Prime	60,000	18,000	0.30	A
	SR-905 to Enrico Fermi Dr.		6-Lane Major	40,000	19,100	0.48	B
La Media Road	Lone Star Rd. to Otay Mesa Rd./SR-905	City	2-Lane Collector	15,000	4,500	0.30	A
	Otay Mesa Rd./SR-905 to Airway Rd.				5,800	0.39	B
	Airway Rd. to Siempre Viva Rd.				10,300	0.69	D
Sanyo Avenue	Otay Mesa Rd. to Airway Rd.	City	2-Lane Collector	15,000	2,000	0.13	A
Enrico Fermi Drive	Airway Rd. to Siempre Viva Rd.	County	Collector	16,200	3,000	0.19	B
	Otay Mesa Rd. to Airway Rd.				1,600	0.10	A
Alta Road	Paseo De La Fuente to Otay Mesa Rd.	County	Rural Collector	16,200	1,000	0.06	A
SR-905	Otay Mesa Rd. to Siempre Viva Rd.	City[3]	4-Lane Major	40,000	37,200	0.93	E

[1] County = San Diego County, City = City of San Diego
[2] Maximum capacity at level of service E
[3] Under the jurisdiction of Caltrans, but analyzed as a City street for capacity purposes.
ADT = Average Daily Traffic
V/C = Volume-to-Capacity Ratio
LOS = Level of Service

Siempre Viva Road. Upon completion of SR-11 and the POE, traffic would redistribute in accordance with driver preferences and development of destinations, including the proposed Otay Mesa East POE. It is anticipated that the new POE would relieve traffic at the existing Otay Mesa and San Ysidro POEs, and increase traffic on local existing and future roadways.

Specific impacts for Phase II would be analyzed in detail within future NEPA/CEQA documents for SR-11 and the POE, and would depend on the future alternative designs/operational characteristics developed for those projects, including design of the POE facility and whether or not tolls are instituted for SR-11. The environmental documents would be based on specific and detailed traffic studies that would model future traffic conditions and project future ADT and LOS. It is expected that standard engineering design and construction methods could be implemented to avoid, minimize or mitigate substantial adverse impacts in conjunction with future Phase II development. Also, completion of SR-11 would provide an additional high-capacity transportation facility in the study area, representing a benefit of the program to the local and international movement of people and goods.

East Otay Mesa Specific Plan Traffic Analysis

Although a traffic analysis specific to the proposed program has not been completed for Phase I, because Phase I does not address the design/operational alternatives for SR-11 or the Otay Mesa East POE, a *Traffic Assessment Update* (traffic update), dated June 2007, was completed for the EOMSP Amendment that was approved on August 1, 2007. The subject Amendment modified the Circulation Plan within the EOMSP area (Figure 3.6-2) and includes SR-11 and the Otay Mesa East POE in the approximate location of the Western Alternative. The associated traffic update provides an indication of the potential buildout traffic volumes and LOS that would be anticipated upon buildout of the EOMSP with SR-11 and the POE, and is therefore summarized here.

The buildout analysis within the traffic update for the EOMSP assumes implementation of: SR-11 as a four-lane freeway, the Otay Mesa East POE, SR-125, SR-905 as a six-lane freeway, and the SR-905/SR-125 interchange. The assumed roadway network, including SR-11, was based on buildout of the adopted EOMSP Circulation Plan. The portion of the network within the City of San Diego was based on the City's adopted Community Plan for buildout of the Otay Mesa area.

It is noted in the traffic update that, although the corridor alignment and location and configuration of ramp interchanges for SR-11 have not yet been determined by Caltrans, the preliminary representation of SR-11 and the POE is included to assist in the planning and implementation of the supporting East Otay Mesa circulation system. Although the traffic update shows an SR-11 facility in the approximate location of the Western Corridor, implementation of the Central Alternative for SR-11 and the POE would not be expected to substantially alter the traffic distribution and analysis for the EOMSP, that is summarized below.

Figure 3.6-3 illustrates future ADT conditions in the EOMSP local study area under buildout conditions. The projected future ADT buildout conditions on the freeway segments are provided in Table 3.6-5; LOS was not calculated in the EOMSP for freeway segments. The buildout LOS analyses for the local roadway segments are presented in Tables 3.6-6 (County) and 3.6-7 (City), and show that all roadway segments would operate at acceptable LOS D or better.

Table 3.6-5
DAILY TRAFFIC VOLUMES FOR CALTRANS FACILITIES – 2007 EOMSP UPDATE

Roadway Segment	ADT*
SR-11	
- SR-125 to Enrico Fermi Dr.	80,400
- Enrico Fermi Dr. to Airway Rd./Siempre Viva Rd.	50,000
- Airway Road/Siempre Viva Rd. to US/Mexico Border	44,300
SR-125	
- North of Lone Star Rd.	80,100
- Lone Star Rd. to Otay Mesa Rd.	69,600
SR-905	
- La Media Rd. to SR-125	156,000
- Otay Mesa Rd. to Siempre Viva Rd.	83,700
- Siempre Viva Rd. to US/Mexico Border	72,300

ADT = Average Daily Traffic
* Based on SANDAG 2030 traffic projections with full buildout of the EOMSP area.

Table 3.6-6
DAILY TRAFFIC VOLUMES AND LEVELS OF SERVICE FOR COUNTY ROADS – 2007 EOMSP UPDATE

Roadway Segment	Classification	ADT*	LOS[1]
Lone Star Road/Loop Road			
- Piper Ranch Rd. to Sunroad Blvd.	6L-Prime	30,900	B
- Sanyo Ave/Sunroad Blvd. to Vann Centre Blvd.	4L-Major	13,800	A
- Vann Centre Blvd. to Enrico Fermi Dr.	4L-Major	13,200	A
- Enrico Fermi Dr. to Alta Rd.	4L-Major	27,200	C
- Alta Rd (North) to Otay Mesa Rd.	4L-Major	12,500	A
- Otay Mesa Rd. to Siempre Viva Rd.	4L-Major	15,300	B
- South of Siempre Viva Rd.	4L-I/C Collector	13,200	A
Otay Mesa Road			
- Sanyo Ave./Sunroad Blvd. to Vann Centre Blvd.	6L-Prime	23,400	B
- Vann Centre Blvd. to Enrico Fermi Dr.	6L-Prime	21,300	A
- Enrico Fermi Dr. to Alta Rd.	4L-Major	6,600	A
- Alta Rd. to Loop Rd./Lone Star Rd.	4L-Major	5,500	A
Airway Road			
- Paseo de las Americas to Enrico Fermi Dr.	4L-Major	14,700	A
- Enrico Fermi Dr. to Alta Rd.	4L-Major	6,000	A
- Alta Rd to Loop Rd./Lone Star Rd.	4L-Major	6,400	A
Enrico Fermi Drive			
- Lone Star Rd. to Otay Mesa Rd.	4L-Major	19,900	B
- Otay Mesa Rd. to SR-11	4L-Major[3]	36,500	D
- SR-11 to Airway Rd.	4L-Major	17,800	B
- Airway Rd. to Siempre Viva Rd.	4L-Major	13,500	A
- Siempre Viva Rd. to Via de la Amistad	2-I/C Collector	3,900[4]	N/A[2]
Siempre Viva Road			
- Enrico Fermi Dr. to Alta Rd.	4L-Major	26,200	C
- Alta Rd. to Loop Rd./Lone Star R.d	4L-Major	21,600	B
- Loop Rd./Lone Star Rd. to Roque Rd.	4L-I/C Collector	16,800	B
Via de la Amistad			
- Enrico Fermi Dr. to Alta Rd.	2-I/C Collector	6,200[4]	N/A[2]

Table 3.6-6 (cont.)
DAILY TRAFFIC VOLUMES AND LEVELS OF SERVICE FOR COUNTY ROADS – 2007 EOMSP UPDATE

Roadway Segment	Classification	ADT*	LOS[1]
Piper Ranch Road			
- Lone Star Rd. to Zinser Rd.	4L-Collector	2,700	A
- Zinser Rd. to Otay Mesa Rd.	4L-Collector	17,500	B
Harvest Road			
- Sunroad Blvd. to Otay Mesa Rd.	4L-I/C Collector	15,800	B
Alta Road			
- Specific Plan Boundary to Lone Star Rd.	4L-Collector	14,900	B
- Lone Star Rd. to Otay Mesa Rd.	4L-Major	5,000	A
- Otay Mesa Rd. to Airway Rd.	4L-Major	10,400	A
- Airway Rd. to Siempre Viva Rd.	4L-Major	5,700	A
- Siempre Viva Rd. to Via de la Amistad	2-I/C Collector	4,300[4]	N/A[2]
Sunroad Boulevard			
- Lone Star Rd. to Zinser Rd.	4L-Major	17,100	B
- Zinser Rd. to Harvest Rd.	4L-Major	26,400	C
- Harvest Rd. to David Ridge Dr.	4L-Major	12,200	A
- David Ridge Dr. to Otay Mesa Rd.	4L-Major	14,100	A
Zinser Road			
- Piper Ranch Rd. to Sunroad Blvd.	4L-I/C Collector	16,800	B
- Sunroad Blvd. to Lone Star Rd.	4L-I/C Collector	1,000	A
Roque Road			
- Airway Rd. to Siempre Viva Rd.	2-I/C Collector	7,800[4]	N/A[2]
David Ridge Drive			
- Sunroad Blvd. to Vann Centre Blvd.	4L-I/C Collector	8,600	A
- Vann Centre Blvd. to Enrico Fermi Dr.	4L-I/C Collector	9,300	A
- Enrico Fermi Dr. to Alta Rd.	4L-I/C Collector	8,700	A
Vann Centre Blvd			
- Lone Star R.d to David Ridge Dr.	4-I/C Collector	1,000	A
- David Ridge Dr. to Otay Mesa Rd.	4-I/C Collector	5,400	A
Energy Center Way			
- Alta Rd. to east end of Energy Center Way	2-I/C Collector	3,500	N/A[2]

ADT = Average Daily Traffic
LOS = Level of Service
N/A = Not Applicable
L = Lanes
* Based on SANDAG 2030 traffic projections with full buildout of the EOMSP area.
[1] LOS criteria based on County's Public Road Standards (Appendix B of Traffic Assessment Update)
[2] Non-Circulation Element Road: LOS not applicable
[3] Enhanced Major Road requires additional R/W to accommodate turn movements and freeway access from Otay Mesa Road to SR-11; Design capacity of an enhanced 4L Major Road was assumed 45,000 ADT at LOS E.
[4] Buildout traffic forecast utilized from adopted Specific Plan Amendment 2002, since the model used in proposed traffic forecast provided a very low estimate for the roadway segment.

Table 3.6-7
DAILY TRAFFIC VOLUMES AND LEVELS OF SERVICE FOR CITY ROADS – 2007 EOMSP UPDATE

Roadway Segment	Classification[1]	ADT*	LOS[2]
Lone Star Road			
- La Media Rd. to SR-125	4L-Major	34,900	D
- SR-125 to Piper Ranch Rd.	4L-Major	33,400	D
Otay Mesa Road			
- La Media Rd. to Piper Ranch Rd.	8L-Major	38,600	N/A[3]
- Piper Ranch Rd. to SR-125 SB Ramp	[4]	26,900	N/A[3]
- SR-125 NB Ramp to Harvest Rd.	[4]	40,500	[4]
- Harvest Rd. to Sanyo Ave./Sunroad Blvd.	4L-Major	20,500	A
Airway Road			
- La Media Rd. to Harvest Rd.	4L-Major	33,500	D
- Harvest Rd. to Sanyo Ave.	4L-Major	33,500	D
- Sanyo Ave. to Paseo de las Americas	4L-Major	11,200	A
Siempre Viva Road			
- La Media Rd. to Harvest Rd.	6-L Prime	26,700	B
- Harvest Rd. to SR-905	6L-Prime	55,000	D
- SR-905 to Paseo de las Americas	6-L Prime	55,000	D
- Paseo de las Americas to Enrico Fermi Dr.	6-L Prime	36,700	A
La Media Road			
- Lone Star Rd. to Otay Mesa Rd.	6L-Prime	33,800	B
- Otay Mesa Rd. to SR-905	6L-Prime	30,800	B
- SR-905 to Airway Rd.	6L-Prime	18,000	A
- Airway Rd. to Siempre Viva Rd.	4L-Major	17,400	A
Sanyo Avenue			
- Otay Mesa Rd. to Airway Rd.	4L-Collector	25,000	D
- Airway Rd to Siempre Viva Rd.	4L-Collector	23,000	D
Paseo de las Americas			
- Airway Rd. to Siempre Viva Rd.	4L-Collector	21,500	D
- Siempre Viva Rd. to Via de la Amistad	4L-Collector	10,700[5]	B
Michael Faraday Drive			
- Airway Rd. to Siempre Viva Rd.	2L-Collector	3,800[5]	A
Via de la Amistad			
- Paseo de las Americas to Enrico Fermi Dr.	2L-Collector	11,700[5]	D

ADT = Average Daily Traffic
LOS = Level of Service
N/A = Not Applicable
L = Lanes
* Based on SANDAG 2030 traffic projections with full buildout of the EOMSP area
[1] Based on the City's Otay Mesa Community Plan Area Adopted Circulation Element Map approved November 23, 1999 (Appendix C of Traffic Assessment Update).
[2] LOS criteria based on City's Traffic Impact Manual (Appendix C of Traffic Assessment Update).
[3] LOS criteria not identified in City's Traffic Impact Manual (Appendix C of Traffic Assessment Update).
[4] Road segment located within Caltrans right-of-way. Additional lanes may be provided to accommodate turning movements and freeway access.
[5] Buildout traffic forecast utilized from adopted Specific Plan Amendment 2002, since the model used in proposed traffic forecast provided a very low estimate for the roadway segment.

No Action Alternative

Under the No Action Alternative, the proposed Phase I and Phase II actions would not be implemented, and no impacts to transportation facilities from the SR-11 corridor and POE would occur. In addition, the public benefit of providing an additional high-capacity transportation facility in the study area for improved movement of people and goods would not occur. Projected traffic conditions for the No Action Alternative are summarized below.

The assumed project opening day would be 2015. The horizon year utilized for traffic forecasts was 2035, twenty years after the assumed opening day. Future traffic forecasts for the No Action condition were developed for these time frames based on the latest approved land use forecasts and roadway network plans for the San Diego region at the time the existing conditions study was initiated, using the SANDAG regional transportation model. In the case of land use, the most recent forecasts were the SANDAG 2030 Regional Growth Forecast Update, also known as "Series 11". The roadway network was assumed to be consistent with the "reasonably expected" scenario from the 2030 RTP, also known as Mobility 2030. It should be noted that SANDAG was in the process of revising the RTP at the time the existing conditions study was initiated, but the roadway network information from this process was not used in the traffic analysis because it had not yet been approved.

The following figures illustrate projected future ADT for the No Action Alternative: Figure 3.6-4a shows the 2015 ADT forecasts on the limited-access freeway segments within the regional study area, Figure 3.6-4b shows the 2015 ADT forecasts on the roadways within the local study area, Figure 3.6-5a shows the 2035 ADT forecasts for freeway segments, and Figure 3.6-5b shows the 2035 ADT forecasts for roadways within the local study area. The results of LOS analysis in 2015 and 2035 for the No Action Alternative on the Caltrans facilities are summarized in Table 3.6-8. The projected future LOS results in 2015 and 2035 for the No Action Alternative on local roadways are summarized in Table 3.6-9.

Table 3.6-8
CALTRANS FACILITIES 2015 AND 2035 LEVELS OF SERVICE

Route	Limits	No. of Lanes (2015/2035)	No Action Alternative		No Action Alternative	
			2015 ADT	2015 LOS	2035 ADT	2035 LOS
SR-125	North of Lone Star Rd	4/8	38,700	B	72,300	B
	Lone Star Rd to Otay Mesa Rd	4/8	32,200	B	60,000	A
SR-905	East of I-805	6/6	68,800	C	101,300	E
	West of La Media Rd	6/6	51,800	B	85,900	D
	SR 11/SR 125 to Siempre Viva Rd	6/6	50,700	B	79,400	C
	Siempre Viva Rd to International Border	6/6	49,300	B	88,600	D
I-5	San Ysidro Way to International Border	12/12	132,200	B	182,000	C
I-805	Palm Ave to SR 905	8/12	150,500	E	201,100	C
	SR 905 to San Ysidro Blvd	8/12	112,300	C	148,200	B

ADT = Average Daily Traffic
LOS = Level of Service

The results for freeway segments indicate that all freeway segments in the study area would operate at acceptable LOS in 2015 and in 2035. The results for local roadways indicate that all local roadway segments in the study area would operate at acceptable LOS in 2015 and in 2035.

3.6.4 Avoidance, Minimization and/or Mitigation Measures

Because no impacts were identified for Phase I implementation under any of the described alternatives, no associated avoidance, minimization or mitigation measures are proposed.

As required by NEPA, measures would be identified during Phase II to avoid, minimize or mitigate impacts that may occur related to traffic and transportation/pedestrian and bicycle facilities. Examples of measures that would be considered include traffic control plans for areas where construction could disrupt travel along existing roadways and requirements in construction plans for the contractor to coordinate any detours, road closures or other disruptions with local and state agencies.

Detailed design of the approved SR-11 and POE facilities would include appropriate sizing of transportation facilities, including roadways and facilities for bicyclists and pedestrians. Design of future roadways should account for the redistribution of traffic that would occur with implementation of the approved SR-11 corridor and POE site. In addition, studies of the detailed design/operational alternatives to be conducted for future NEPA/CEQA documents for SR-11 and the POE would include detailed traffic studies, which would recommend measures needed to avoid or minimize impacts to existing transportation facilities.

Avoidance, minimization or mitigation of the potential traffic impacts associated with potential traffic congestion under the No Action alternative is not required under CEQA or NEPA.

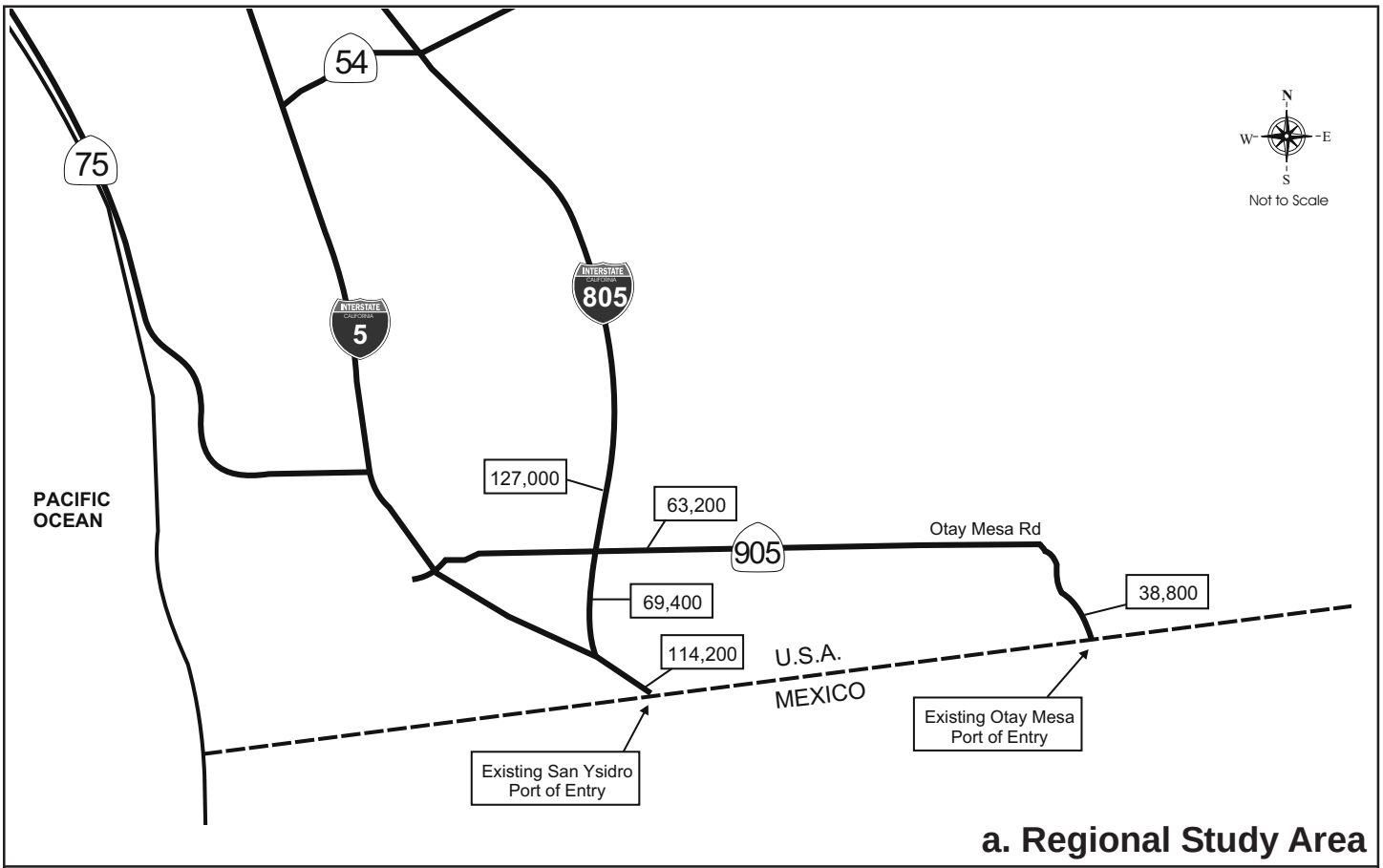
Table 3.6-9
LOCAL ROADWAYS 2015 AND 2035 LEVELS OF SERVICE

Route	Limits	No Action Alternative 2015			No Action Alternative 2035		
		Classification	ADT	LOS	Classification	ADT	LOS
Lone Star Road	SR-125 to Sunroad Blvd.	4-Lane Major	4,200	A	4-Lane Major	14,700	A
	Sunroad Blvd. to Enrico Fermi Dr.	Major Road	1,100	A	Major Road	18,200	B
	Enrico Fermi Dr. to Alta Rd.		3,900	A		12,600	A
	Alta Rd. to Otay Mesa Rd.		1,000	A		1,200	A
	Otay Mesa Rd. to Siempre Viva Rd.		1,000	A		1,200	A
Otay Mesa Road	West of La Media Rd. to Britannia	6-Lane Prime	13,000	A	6-Lane Prime	21,300	A
	La Media Rd. to SR-125		5,000	A		15,200	A
	SR-125 to Vann Center Blvd.	4-Lane Major	5,700	A	4-Lane Major	14,200	B
	Vann Center Blvd. to Enrico Fermi Dr.	Prime Arterial	2,000	A	Prime Arterial	8,900	A
	Enrico Fermi Dr. to Alta Rd.	Major Road	2,200	A	Major Road	6,800	A
	Alta Rd. to Lone Star Rd.		1,000	A		1,200	A
Airway Road	West of La Media Rd. to Britannia	4-Lane Major	6,700	A	4-Lane Major	7,900	A
	La Media Rd. to Harvest Rd.		10,100	A		12,800	A
	Harvest Rd. to Paseo de las Americas		5,400	A		9,800	A
	Paseo de las Americas to Enrico Fermi Dr.	Major Road	5,900	A	Major Road	6,900	A
	Enrico Fermi Dr. to Alta Rd.		1,000	A		1,300	A
	Alta Rd. to Siempre Viva Rd.		1,000	A		1,200	A
SR-905 Extension	SR-125/SR-905 to Enrico Fermi Dr.	4-Lane Major	9,000	A	4-Lane Major	35,000	D
Siempre Viva Road	West of La Media Rd. to Britannia	6-Lane Prime	7,100	A	6-Lane Prime	12,200	A
	La Media Rd. to Harvest Rd.		11,600	A		15,600	A
	Harvest Rd. to SR-905		18,900	A		28,400	B
	SR-905 to Enrico Fermi Dr.		24,200	B		29,200	B
	Enrico Fermi Dr. to Alta Rd.	Major Road	1,800	A	Major Road	2,500	A
	Alta Rd. to Airway Rd.		1,000	A		1,200	A
	Airway Rd. to SR-11		1,000	A		1,300	A
	SR-11 to Lone Star Rd.		1,000	A		1,300	A
La Media Road	Lone Star Rd. to Otay Mesa Rd.	4-Lane Major	17,300	B	6-Lane Prime	27,300	B
	Otay Mesa Rd. to SR-905		13,800	A	4-Lane Major	23,800	C
	SR-905 to Airway Rd.		11,800	A	4-Lane Major	23,800	C
	Airway Rd. to Siempre Viva Rd.		13,200	A	4-Lane Major	14,000	A

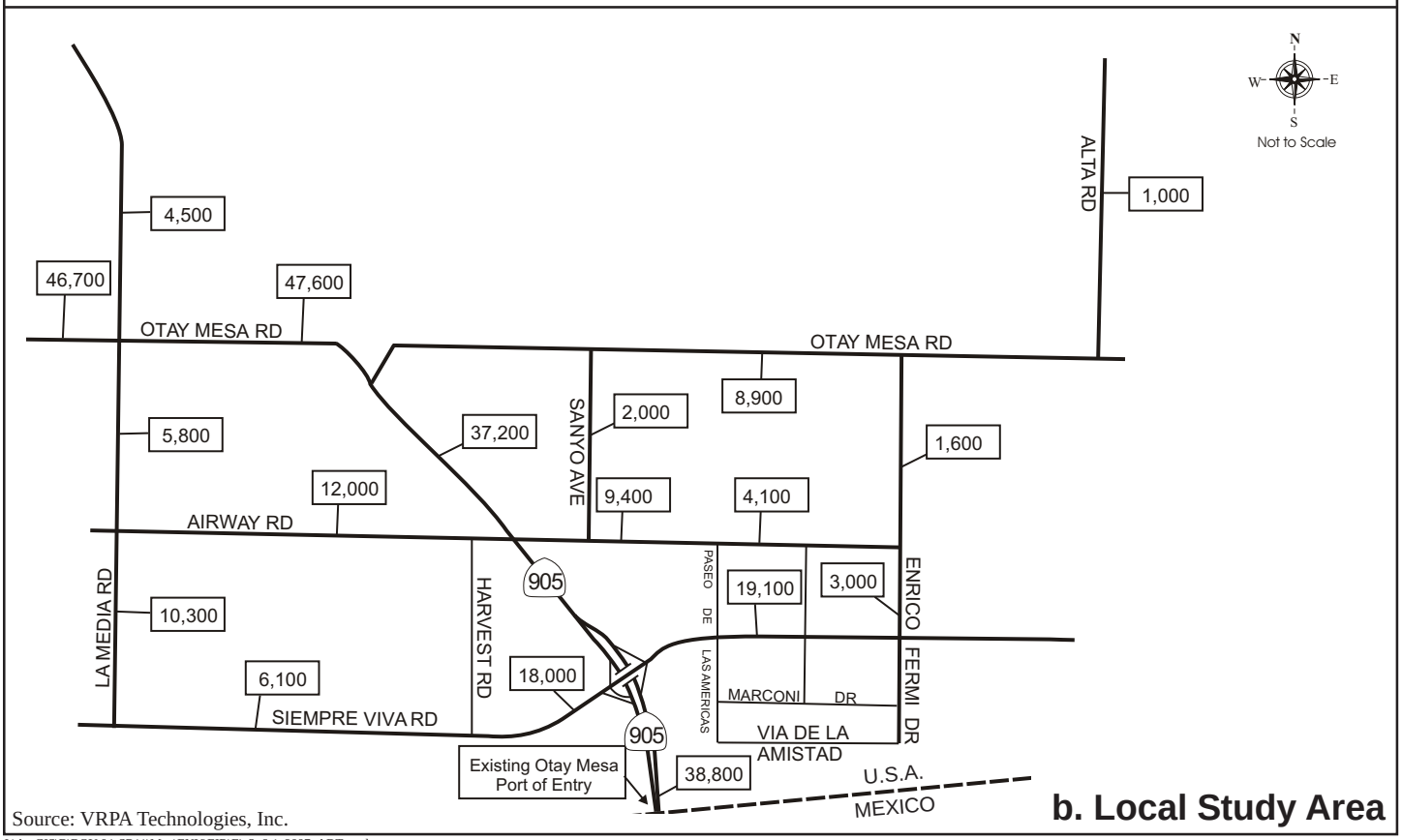
Table 3.6-9(cont.)
LOCAL ROADWAYS 2015 AND 2035 LEVEL OF SERVICE

Route	Limits	No Action Alternative 2015			No Action Alternative 2035		
		Classification	ADT	LOS	Classification	ADT	LOS
Enrico Fermi Drive	Lone Star Rd. to Otay Mesa Rd.	Major Road	5,300	A	6-Lane Prime	19,300	B
	Otay Mesa Rd. to SR-11		6,100	A	Major Road	30,100	D
	SR-11 to Airway Rd.		3,800	A		7,300	A
	Airway Rd. to Siempre Viva Rd.		3,800	A		7,300	A
Alta Road	North of Lone Star Rd.	Rural Collector	4,100	B	Rural Collector	7,600	D
	Lone Star Rd. to Otay Mesa Rd.	Major Road	1,800	A	Major Road	2,400	A
	Otay Mesa Rd. to Airway Rd.		1,800	A		2,400	A
	Airway Rd. to Siempre Viva Rd.		1,800	A		2,400	A

ADT = Average Daily Traffic
LOS = Level of Service



a. Regional Study Area



Source: VRPA Technologies, Inc.

b. Local Study Area

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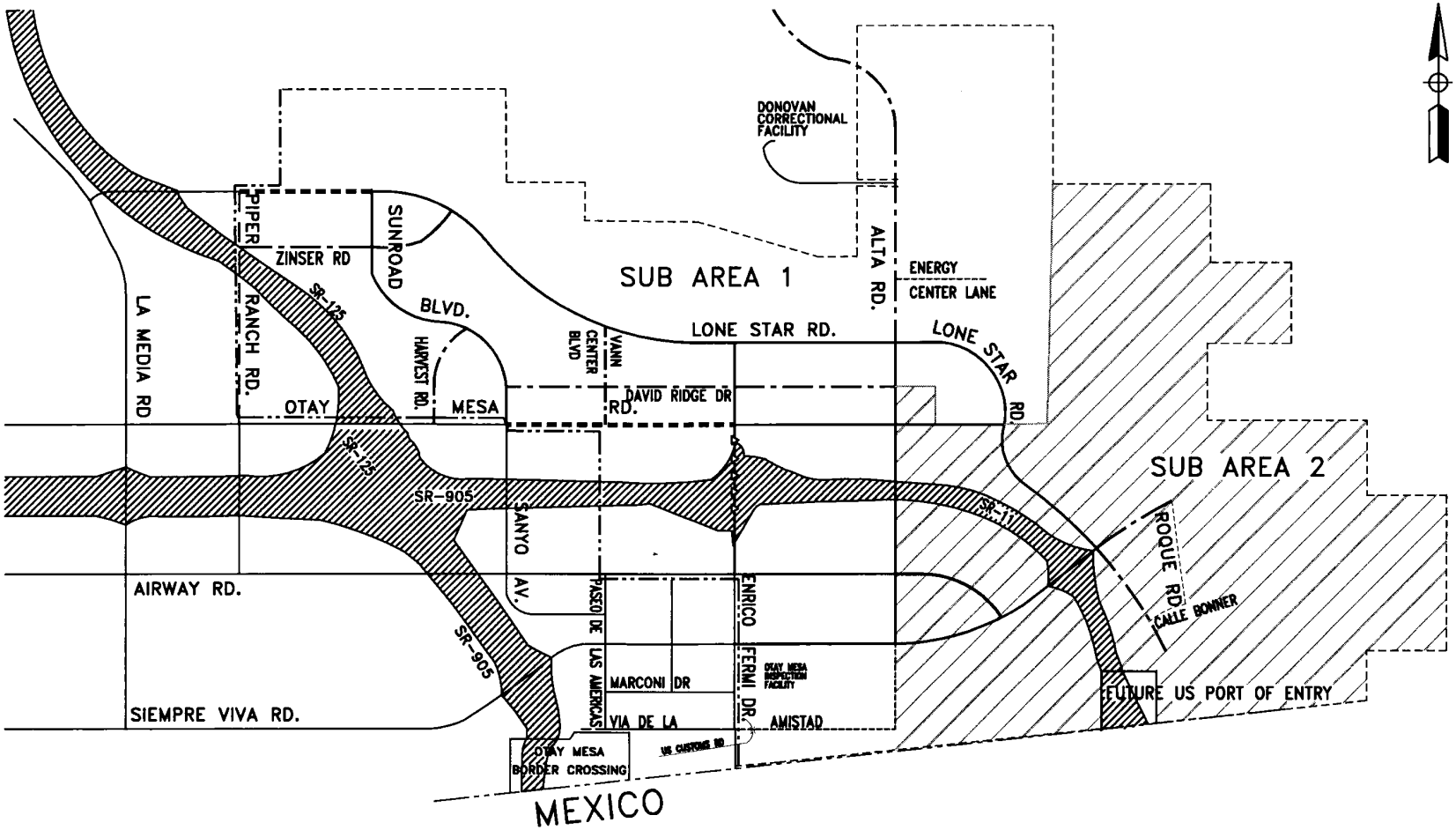
Existing (2007) ADT

STATE ROUTE 11 AND OTAY MESA EAST PORT OF ENTRY PEIR/PEIS

Figure 3.6-1



LEGEND

- PRIME ARTERIAL (C.E.)
- ENHANCED MAJOR ROAD(C.E.)(REQUIRES ADDITIONAL RIGHT-OF-WAY TO ACCOMODATE TURN MOVEMENTS AND FREEWAY ACCESS FROM OTAY MESA ROAD TO SR-11)
- MAJOR ROAD (C.E.)
- 4-LANE COLLECTOR ROAD (C.E.)
- 4-LANE ROAD (S.P.)
- 2-LANE ROAD (S.P.)
- CITY ROAD/OTHER ROAD
- CITY/COUNTY BOUNDARY
- SUB AREA BOUNDARY

NOTE:

- C.E. – CIRCULATION ELEMENT ROAD
- S.P. – SPECIFIC PLAN ROAD
- THE SR-11 FACILITY AS DEPICTED ON THIS GRAPHIC IS FOR INFORMATION PURPOSES ONLY AND BASED ON THE BEST CURRENTLY AVAILABLE INFORMATION. THE DESIGN OF SR-11 AND ITS INTERCHANGES ARE SUBJECT TO CHANGE PER CALTRANS.

Source: Darnell and Associates, Inc.

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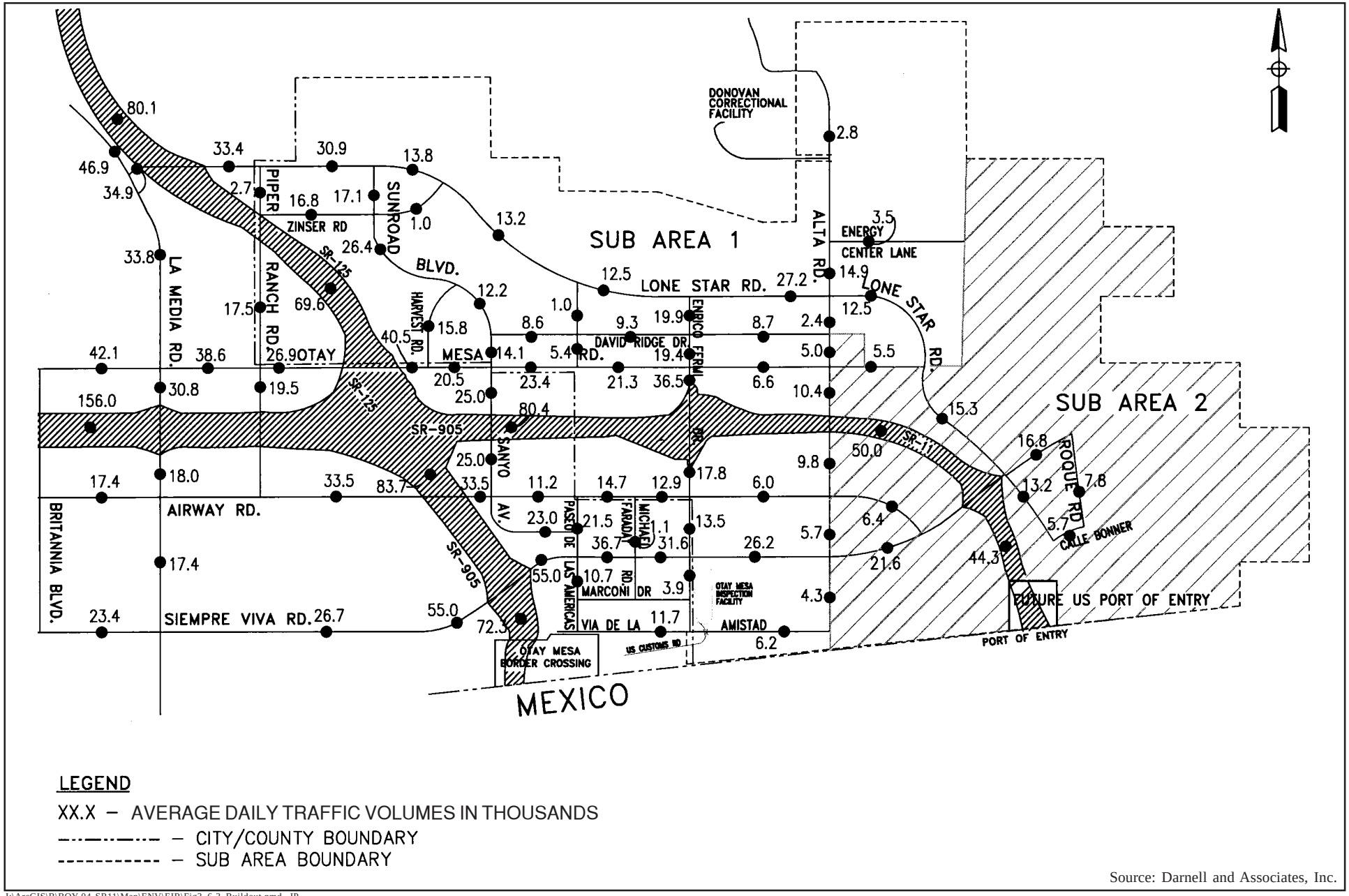
EOMSP Circulation Plan

STATE ROUTE 11 AND OTAY MESA EAST PORT OF ENTRY PEIR/PEIS

Figure 3.6-2



Source: Darnell and Associates, Inc.

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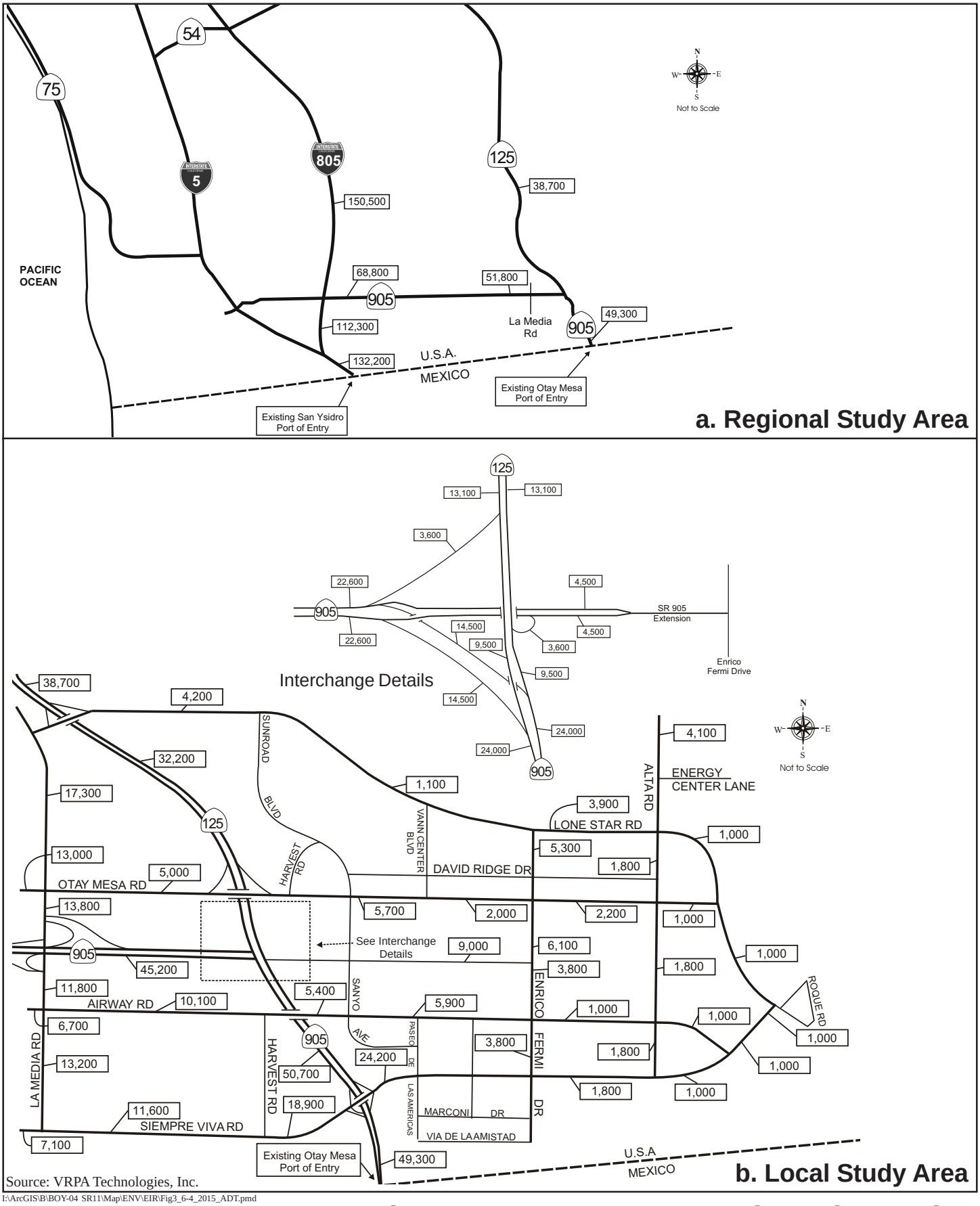
EOMSP Buildout Traffic Projections

STATE ROUTE 11 AND OTAY MESA EAST PORT OF ENTRY PEIR/PEIS

Figure 3.6-3



Source: VRPA Technologies, Inc.

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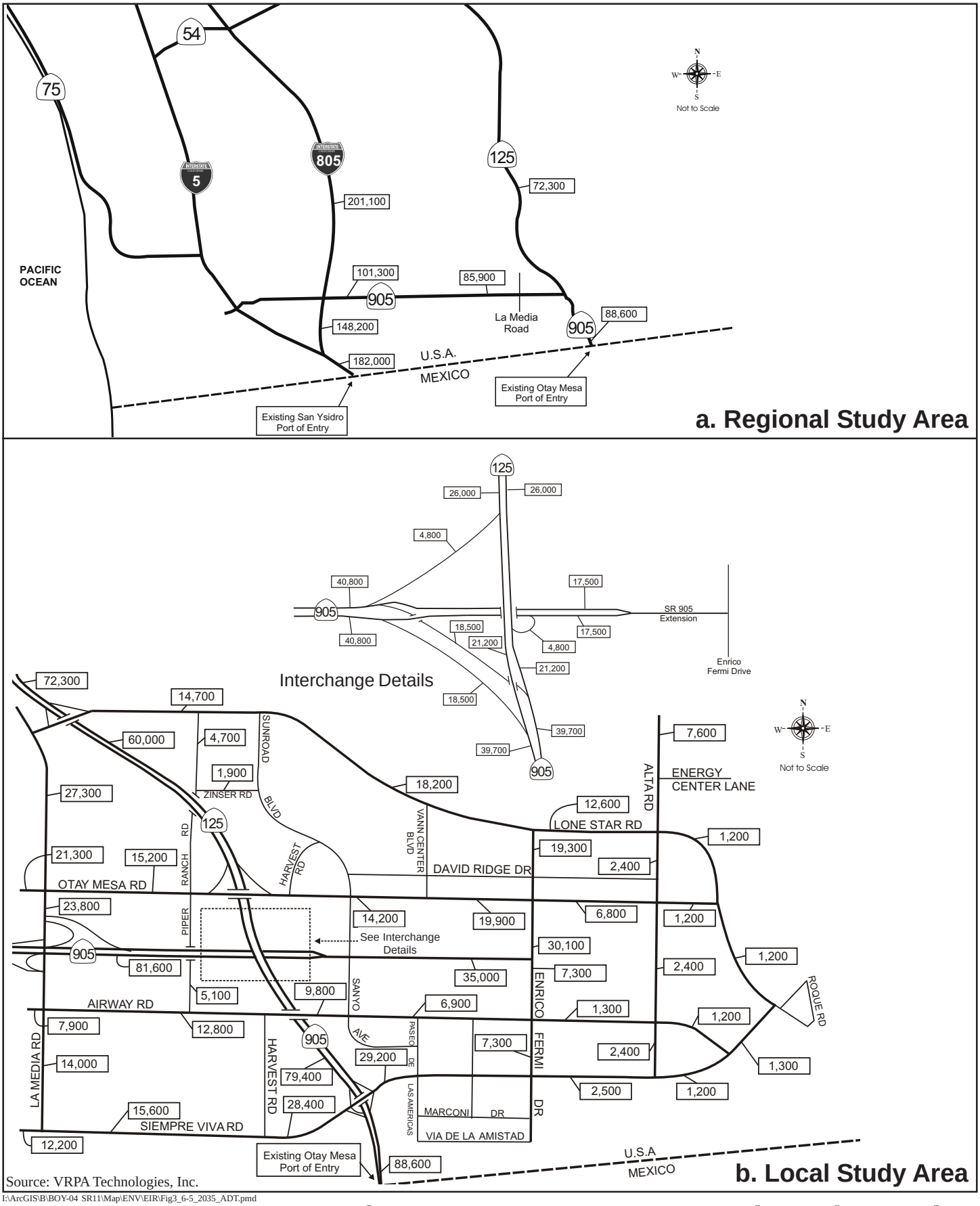
2015 Opening Day ADT For No Action Alternative

STATE ROUTE 11 AND OTAY MESA EAST PORT OF ENTRY PEIR/PEIS

Figure 3.6-4



Source: VRPA Technologies, Inc.

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2035 Horizon Year ADT For No Action Alternative

STATE ROUTE 11 AND OTAY MESA EAST PORT OF ENTRY PEIR/PEIS

Figure 3.6-5

3.7 VISUAL/AESTHETICS

The FHWA *Visual Impact Assessment for Highway Projects* provides guidance on how to conduct a visual assessment for federal or federal-aid highway projects. The basic steps in the process include defining the project setting and viewshed; analyzing the visual character and quality of existing resources in terms of vividness, intactness, and unity; and predicting the viewer response by defining viewer groups and their sensitivity, exposure, and awareness. A viewer's awareness can be defined as their level of consciousness regarding the surrounding visual environment, and how cognizant they would be to noticeable changes in that environment.

3.7.1 Regulatory Setting

NEPA establishes that the federal government shall use all practicable means to ensure all Americans safe, healthful, productive, and *aesthetically* (emphasis added) and culturally pleasing surroundings [42 U.S.C. 4331(b)(2)]. In its implementation of NEPA [23 U.S.C. 109(h)], FHWA directs that final decisions regarding projects are to be made in the best overall public interest, taking into account adverse environmental impacts including, among others, the destruction or disruption of aesthetic values. Likewise, CEQA establishes that it is the policy of the state to take all action necessary to provide the people of the state "with…enjoyment of *aesthetic*, natural, scenic and historic environmental qualities." [CA Public Resources Code Section 21001(b)]

3.7.2 Affected Environment

Project Setting and Regional Landscape

The two program alternatives are located in the same general area and have nearly identical visual characteristics. The affected environment is similar for each, and the discussion below is valid for each.

The proposed program alternatives are located within Otay Mesa, the topographically flat area west of the San Ysidro Mountains. The average elevation within the alternative corridors/POE sites is 520 feet above mean sea level (AMSL). The two alternative SR-11 corridors and corresponding POE sites are currently undeveloped, except the portion of the SR-11 corridor located immediately east of Sanyo Avenue. This western portion of the corridor extends between existing buildings that are typical of the industrial complexes within Otay Mesa. Additional land uses include automobile and/or equipment yards and a municipal small-airplane airport (Brown Field). A temporary automobile auction yard is located adjacent to the northern limits of the program alternatives, south of Otay Mesa Road and Alta Road. Additionally, a power plant is under construction east of Alta Road, and two prison facilities are located approximately three miles north of the proposed alignments. In much of the program area, the coexistence of developed and undeveloped lots results in high visual diversity.

The eastern portions of the proposed alignments, POE sites and surrounding land are undeveloped and generally covered with low-growing grasses. These areas generally have high visual continuity, exhibiting little topographic diversity and low levels of change in scale, as well as very little variation in line, form, color, or texture. This uniformity, extending over an expansive area can be described as visually impressive, although substantial development has occurred along other portions of the mesa top.

The eastern edge of the Central POE Site borders a utility easement through which high voltage, overhead power lines extend. The power lines and associated support structures, though larger and more visible than localized power poles/lines, are not visually dominant compared to the vast mesa top and the large foothills that dominate the visual environment surrounding the program alternatives.

The San Ysidro Mountains lie north and east of the program alternatives. The mountains and foothills are largely undeveloped and include many steep slopes, canyons and peaks. A few roads, such as the Otay Mountain Truck Trail, and some dirt trails transect these mountains. A San Diego County Resource Conservation Area (RCA) for Biologically Sensitive Lands Overlay is designated over most of these mountains. The Otay Mountain Cooperative Land and Wildlife Management Area and the BLM Otay Mountain Wilderness Area, National Wilderness Preservation System land also overlay areas to the east within the mountains. Otay Mountain Truck Trail is a graded, gravel-paved roadway mainly used by border patrol agents; some mountain bikers and off-road vehicle motorists desiring a scenic view also use this road. It provides access to and across the BLM land and wildlife conservation area at Otay Mountain. The foothills are visually dominant from the mesa, providing topographic variation at a much greater scale than otherwise visually experienced from most of the mesa top. The hills also block views of mountains or canyons further to the east; the peak of Otay Mountain and the RCA and BLM areas are not visible from the vicinity of the project alternatives.

The Otay River Valley is approximately 2.5 miles north and northwest of the program alternatives. Johnson Canyon and O'Neal Canyon, located approximately 1 to 1.5 miles (and more) north of the sites, trend northwest to intersect with the Otay River Valley. While notable topographic features, these canyons contribute little to visual variety from the project site and immediate vicinity; because they are down slope, at some distance from the alternative corridors/POE sites, they are not visually accessible to an on-site viewer or from the immediate surrounding area.

Area maps were reviewed to identify any additional public recreation areas located within the immediate vicinity of the project. The closest mapped facilities include the Lower Otay County Park and the Otay County Open Space Preserve approximately six miles to the north of the program alternatives. These two San Diego County facilities are located in the Otay River Valley.

Five private residential farms/ranches also are located within five miles of the program alternatives. Three of these are located on the north side of Old Otay Mesa Road, approximately midway between SR-905 and Alta Road; another is located off of Alta Road with access via Kuebler Ranch Road; and the fifth is located between the two prison facilities. Small in scale and separated by large areas of open space, these uses do not form dominant elements within the landscape.

The alternative POE sites are located at the international border between the United States and Mexico. The border is visible as a large fence, beyond which development in Mexico, east of Tijuana, is visible. At the POE sites, the U.S. side is undeveloped and consists of grasslands typical of the area.

No officially designated State scenic highways are located within the Otay Mesa area (Caltrans, 2007c). The proposed project, therefore, does not have the potential to affect any scenic routes.

Landscape Units

A landscape unit is a portion of the regional landscape and can be thought of as an outdoor room that exhibits a distinct visual character. A landscape unit will often correspond to a place or district that is commonly known among local viewers. The program alternatives are located within a single landscape unit known locally as Otay Mesa, and generally defined by the foothills of the San Ysidro Mountains on the east, U.S./Mexico border on the south, Interstate 5 on the west, and Otay River Valley on the north.

Viewshed

A viewshed is a subset of a landscape unit and is comprised of all the surface areas visible from an observer's viewpoint. The limits of a viewshed are defined as the visual limits of the views from the proposed project. The viewshed also includes the locations of viewers likely to be affected by visual changes brought about by project features. The viewshed for the program alternatives, shown in Figure 3.7-1, was delineated through computer-aided and field-verified analysis of the topography on site and in the surrounding area. The computer-generated viewshed generally is based on topography, and does not consider physical obstructions that can limit the viewshed, such as local buildings, small variations in topography, and vegetation.

As can be seen in Figure 3.7-1, the viewshed for the proposed alternatives generally is limited by the south- and west-facing slopes of the San Ysidro foothills, north and east of the program alternatives. The varied topography of the mountains limits visibility to the project site from the undeveloped areas of these hills beyond the easternmost foothills. Portions of the Otay Mountain Truck Trail, a gravel-paved road sometimes used for recreational purposes, may provide views of the program alternatives from the San Ysidro Mountains. It also may be possible to view the program alternatives from some peaks and slopes further to the north and east; however, these undeveloped areas have few access roads and generally are not used for recreation. Additionally, beyond one mile, atmospheric conditions limit clarity and visually mute the details of topographic variation, highway fixtures and structures such as overcrossings or bridges and ramps; a one-mile radius centered on the project site is marked on Figure 3.7-1 for reference purposes.

The project site is not visible from the southern edge of the Otay River Valley, or from the slopes of Johnson and O'Neal canyons. Intervening topography prohibits any views of the site from the County recreational facilities in the Otay River Valley.

Views from within the developed portions of Otay Mesa in the City of San Diego, toward the portions of the program alternatives that are within the County of San Diego, are largely blocked by existing buildings and landscaping within the City of San Diego portion of the viewshed. Views of the program alternatives may be available from local roadways, particularly from SR-905, where the western edge of the program alternatives would meet existing roadways.

Visual Character and Quality: Vividness, Intactness, Unity

The FHWA method of visual analysis evaluates visual quality by identifying the vividness, intactness and unity present in the viewshed, which can be defined as follows:

1. Vividness is the visual power or memorability of landscape components as they combine in distinctive visual patterns.

2. Intactness is the visual integrity of the natural and man-built landscape, and its freedom from encroaching elements. It can be present in well-kept urban and rural landscapes, as well as in natural settings.

3. Unity is the visual coherence and compositional harmony of the landscape considered as a whole. It frequently attests to the careful design of individual manmade components in the landscape.

Taken one parcel at a time, the grasslands are neither visually powerful nor memorable. Put together over a large area, however, the expanse of flat areas is visually impressive and memorable. The San Ysidro Mountains and foothills also are visually dominant, powerful and memorable, and have high vividness. In contrast, the vividness of the developed areas west of the program alternatives is low; the buildings are neither unique nor memorable, and taken together they do not comprise a distinctive space. The area of the program alternatives, composed primarily of undeveloped grasslands and situated between the developed mesa and undeveloped mountains, can be characterized by the combination of the vividness of each, resulting in a moderate level of vividness.

The undeveloped flat grasslands and the adjacent mountains have high visual intactness. The undeveloped areas are bounded on the south by the international border, beyond which developed areas of Tijuana are visible, and on the west by the industrial areas of Otay Mesa. These industrial areas, though visually composed of diverse elements, are also highly intact; The City of San Diego and County of San Diego have design guidelines that regulate the look and feel of the buildings and landscapes. Though directly bordering each other, the distinct change from undeveloped to developed visual environments does not distract from the intactness of either, and the contrast tends to heighten the visually intact character of each.

The unity and visual coherence within the area is moderate. Though the undeveloped and developed areas each have high intactness, and within themselves have high unity, where developed lots and undeveloped areas are interspersed, the diversity is higher and the unity is lower. Similarly, when Otay Mesa is considered as a whole, the developed areas are not designed to integrate with the grassland or mountain areas

Taken together, the vividness, intactness and unity combine to suggest that the area of the program alternatives has moderate visual quality.

Existing Viewers: Sensitivity and Exposure

Viewer response is composed of two elements: viewer sensitivity and viewer exposure. Viewer sensitivity is defined both as the viewers' concern for scenic quality and the viewers' response to change in the visual resources that make up the view. Viewer exposure is typically assessed by measuring the number of viewers exposed to the resource change, type of viewer activity, duration of the view, speed at which the viewer moves, and position of the viewer.

Existing viewers of the proposed program alternatives mainly are motorists on local streets and workers and visitors to local businesses. A very few recreational motorists may be able to see the existing project site from the Otay Mountain Truck Trail, which provides access to the BLM preserved areas of the San Ysidro Mountains.

Most motorists on existing local roadways presumably are workers at the local businesses, power plant and prison facilities, or visitors to the prisons and patrons of the businesses. As

they are not actively seeking recreation or scenic views, their sensitivity can be considered low. The exposure of existing motorists on local roadways could be considered low to high, depending on the roadway on which they are traveling, and in which direction. Existing local roadways mostly extend between buildings and developed lots, and provide few views of the undeveloped areas within which the program alternatives are located. Motorists traveling on Otay Mesa Road, Alta Road and other outlying roadways have extensive views of the grassy, flat areas. Eastbound motorists on SR-905 would have direct views of the westernmost end of the program alternatives. Existing motorists' awareness similarly would be mixed. These motorists most likely are focused on their respective destinations, and while they may be appreciative of the views available from these roadways, they are not seeking a recreational experience, and therefore would have low to moderate awareness.

Panoramic views of Otay Mesa are available from parts of Otay Mountain Truck Trail. Recreational users of this road would have high sensitivity, as they would be seeking a scenic recreational experience. Border patrol agents, while focused on the view from this roadway, cannot be considered as having the same sensitivity as recreational motorists. While their speed of travel would be low, necessitated by the unpaved and winding condition of the road, motorists' and hikers' exposure from this roadway would be low, due to the low number of users (i.e., less than 1,000 recreational drivers use the road per year) and the few look-out areas available along the roadway. A motorist's awareness of views that include the program alternatives would be moderate; while they may be aware of the available views, unless stopped at a look-out point they would be focused on the rugged roadway.

3.7.3 Impacts

Western and Central Alternatives

Phase I visual impacts would be the same for either the Western or Central Alternative. While Phase I would commit the identified corridor to future development of the highway and POE facilities, no grading or ground-disturbing activities would occur under Phase I. As no physical change would occur under Phase I, no visual change would be discernable to any viewer group. The visual character and quality of the site would remain the same, and no immediate impact to visual resources would occur. Furthermore, no visual conditions have been identified for Phase I that would substantially differentiate the two alternatives and influence the identification of a preferred alternative.

Implementation of SR-11 and the Otay Mesa East POE under Phase II would create change in the visual environment. The level of change cannot be determined until Phase II, and would be based on the alternative design and operational characteristics to be studied at that time. Based on the EOMSP land use plan (refer to Figure 3.2-2), the areas within and adjacent to either alternative are planned for development. Viewers surrounding each program alternative would ultimately have views of SR-11 and/or industrial development, regardless of the preferred alternative that is identified. Therefore, the identified corridor/POE location is not anticipated to influence the Phase II impacts of the proposed program. Detailed visual analysis would be completed during the CEQA/NEPA environmental review process for the Phase II design/operational alternatives. Such analysis would address the potential for implementation of the SR-11 and POE alternatives to impact the visual character and quality of the area, based on the visual conditions at the time of program implementation.

No Action Alternative

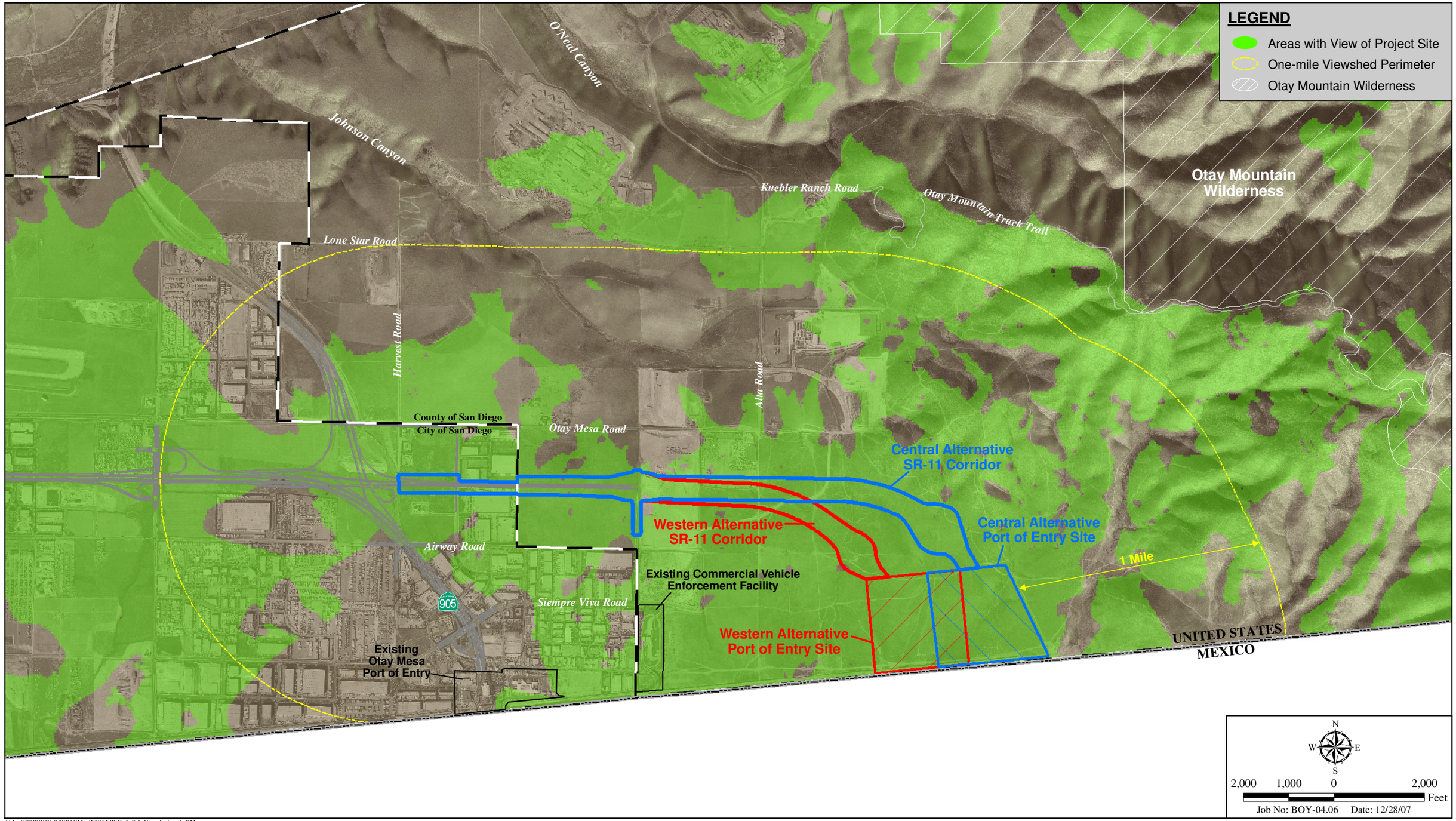
Under the No Action Alternative, the proposed program would not be implemented. Over time, as the area develops with primarily industrial uses in conformance with the EOMSP, the overall visual effect of the No Action Alternative would not differ substantially from the two action alternatives; the area would be built out and would take on an industrial appearance. Although SR-11 would not be built, other local roadways would be constructed to serve the planned industrial uses in the area.

3.7.4 Avoidance, Minimization and/or Mitigation Measures

As no physical change would occur under any alternative in Phase I, no avoidance or minimization measure would be required for any of the alternatives.

As required by NEPA, if adverse visual impacts are identified in Phase II, measures would also be identified in Phase II to avoid, minimize or mitigate those impacts. Methods that could be considered during Phase II to avoid or minimize visual impacts, if necessary, would include creative use of texture and/or color, as well as architectural details among the POE facilities and SR-11 bridge structures to minimize their contrast with the existing visual environment, promote consistency with existing and planned local development patterns, and provide an appropriate visual entry statement for the international border crossing. Landscaping also could be incorporated to screen and soften structures with natural elements.

The No Action Alternative would need no minimization measures, as no physical change or visual impact would occur.



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Viewshed Map

STATE ROUTE 11 AND OTAY MESA EAST PORT OF ENTRY PEIR/PEIS

Figure 3.7-1

3.8 CULTURAL RESOURCES

Cultural resources studies prepared for the SR-905 EIS/EIR encompassed the western portion of the project area from SR-905/SR-125 to the future extension of Enrico Fermi Drive. The *Cultural Resource Survey and Extended Phase 1 Test Program for the Future State Route 11 and East Otay Mesa Port of Entry Project* report prepared for the SR-11/Otay Mesa East POE (2001) analyzed potential impacts associated with the Western SR-11 Corridor and Central SR-11 Corridor from Enrico Fermi Drive east to the U.S./Mexico border. A subsequent cultural resources survey was conducted to address an expanded project area adjacent to portions of the western program area boundary. The *First Addendum Archaeological Survey for State Route 11 and the East Otay Mesa Port of Entry* report, dated October 2007, was completed for Phase I of the SR-11/Otay Mesa East POE. These reports are summarized in this section of the PEIR/PEIS.

3.8.1 Regulatory Setting

The term "Cultural Resources," as used in this document, refers to all historical and archaeological resources, regardless of significance. Laws and regulations dealing with cultural resources include the National Historic Preservation Act (NHPA), CEQA and the California Public Resources Code.

The NHPA of 1966, as amended, sets forth national policy and procedures regarding historic properties, defined as districts, sites, buildings, structures, and objects included in or eligible for the National Register of Historic Places. Section 106 of the NHPA requires federal agencies to take into account the effects of their undertakings on such properties and to allow the Advisory Council on Historic Preservation the opportunity to comment on those undertakings, in accordance with regulations promulgated in CFR36§800. On January 1, 2004, a Section 106 Programmatic Agreement between the Advisory Council, FHWA, State Historic Preservation Officer (SHPO), and the Department went into effect for Department projects, both state and local, with FHWA involvement. The Programmatic Agreement implements the Advisory Council's regulations streamlining the Section 106 process and delegating certain responsibilities to the Department. The FHWA's responsibilities under the Programmatic Agreement have been assigned to the Department as part of the Surface Transportation Project Delivery Pilot Program (23 CFR 773), (July 1, 2007).

"Historical Resources" are considered under CEQA Section 21084.1 and CEQA Guidelines Section 15064.5, as well as California Public Resources Code Section 5024.1, which established the California Register of Historical Resources. Public Resources Code Section 5024 requires state agencies to identify and protect state-owned resources that meet National Register of Historic Places listing criteria. It further specifically requires the Department to inventory state-owned structures in its rights-of-way. "Historical resources" is the CEQA equivalent to NEPA's "historic properties." CEQA Section 21083.2 and CEQA Guidelines 15064.5 also require consideration of unique archaeological resources.

3.8.2 Affected Environment

The area of potential effect (APE) consists of a relatively level mesa that has historically been used for agriculture. A segment in the western area has been developed with an industrial park (east of Sanyo Avenue). The remainder of the APE is generally undeveloped, with a series of dirt roads cutting through the area.

Cultural resources work for the entire project has consisted of background records searches at appropriate archives to determine what sites had been previously recorded within the project study footprint, and what other surveys and excavations had been conducted in the greater Otay Mesa region. Consultation with local Native American tribes was also conducted.

Archaeological resources within the study footprint consist of very sparse, highly disturbed surface scatters of prehistoric lithics, including what archaeologists call flakes, cores, and the scatter that is created when cores are struck by hammerstones to produce flakes. Appropriate flakes were then taken elsewhere for further modification into more formal tool types. These sites have been highly disrupted by dry farming activities on the mesa over the last 150 years, so none of the sites have artifacts in their original contexts. The resulting disturbance pattern for these sites is that the artifacts are widely scattered over large areas and no longer exhibit any patterning related to how they were originally created and deposited by local Native Americans. Since the sites all lack subsurface deposits, the entire integrity of a site is affected by dry farming practices. The sites further lack diagnostic artifacts to place them in the context of San Diego County prehistory; they lack faunal remains, which prevents the sites from being dated through radiocarbon methods; they lack Native American human remains or items that tribes hold to be sacred; and they offer archaeologists almost no further research potential. Every single Otay Mesa sparse lithic scatter that has been further investigated has been found to be insignificant.

No other types of cultural resources have been previously recorded or were discovered during the cultural resource surveys for the SR-11/Otay Mesa East POE program.

3.8.3 Impacts

Western and Central Alternatives

As noted in the Introduction to Chapter 3, no ground-disturbing activities would occur during Phase I; therefore, no cultural resources impacts would be associated with Phase I of the SR-11/Otay Mesa East POE program. Although no impacts would occur during Phase I, the identification of a preferred alternative as a result of Phase I would commit the identified SR-11 corridor and POE site for future development with these uses. No cultural resources have been identified within either alternative that would substantially differentiate the two alternatives and influence the identification of a preferred alternative.

Future implementation of Phase II would involve ground-disturbing activities associated with site preparation, grading and construction of SR-11 and the Otay Mesa East POE. The Western SR-11 Corridor encompasses three identified prehistoric archaeological sites and the Western POE Site includes all or portions of four prehistoric archaeological sites. The Central SR-11 Corridor encompasses all or portions of six identified prehistoric archaeological sites and the Central POE Site includes all or portions of three prehistoric archaeological sites. All cultural resources are sparse lithic scatters. Cultural resource surveys conducted within the APE for the SR-11 corridors and POE sites, however, have determined that existing cultural resources would not be subject to further analysis beyond their recordation, and that no further survey work would be necessary during Phase II, unless the project study footprint is changed to include areas not previously studied. Because the sparse lithic scatters are not considered historic properties for the purposes of NEPA, nor historical resources or unique archaeological resources for the purposes of CEQA, no direct or indirect impacts to significant/important cultural resources would occur as a result of Phase II implementation. The potential for adverse

effects to unknown cultural resources beneath the ground surface during Phase II grading and construction would be determined during the environmental review process for Phase II.

No Action Alternative

Under the No Action Alternative, the described Phase I and Phase II actions would not be implemented, and no impacts related to cultural resources would occur.

3.8.4 Avoidance, Minimization and/or Mitigation Measures

Because no impacts were identified for Phase I implementation under any of the described alternatives, no associated avoidance, minimization or mitigation measures are proposed.

During Phase II environmental review, the potential for impacts to as yet unidentified cultural resources beneath the ground surface would be determined and avoidance, minimization or mitigation measures would be identified, if necessary.

Because no impacts were identified for the No Action Alternative, no associated avoidance, minimization or mitigation measures are proposed.

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PHYSICAL ENVIRONMENT

3.9 HYDROLOGY AND FLOODPLAIN

An *Existing Conditions Hydrology Report*, dated November 2007, was completed for Phase I of the SR-11/Otay Mesa East POE, and is summarized in this section of the PEIR/PEIS.

3.9.1 Regulatory Setting

The proposed program is subject to a number of regulatory requirements related to hydrology and floodplain issues, as outlined below. These guidelines are intended to avoid or reduce adverse effects related to hydrology and flood hazards through efforts such as maintaining pre-development conditions, and avoiding or minimizing development in mapped floodplains.

International Boundary and Water Commission

The International Boundary and Water Commission (IBWC) is a bi-national organization that oversees projects along the U.S./Mexico Border with the potential to generate impacts involving political, economic, environmental, or infrastructure issues. For hydrologic concerns, the IBWC mandates that new development in applicable border regions (including the study area) does not increase, concentrate or relocate overland drainage flows into either country.

Executive Order 11988

Executive Order 11988 (Floodplain Management) directs all federal agencies to refrain from conducting, supporting or allowing actions in floodplains unless it is the only practicable alternative.

The base floodplain is defined as “the area subject to flooding by the flood or tide having a one percent chance of being exceeded in any given year.” An encroachment is defined as “an action within the limits of the base floodplain.”

3.9.2 Affected Environment

Watershed and Drainage Characteristics

The study area for hydrology and floodplain issues includes an approximately 2,033-acre watershed area that encompasses the two alternative corridors and associated POE sites. The study area includes several distinct drainage basins extending both up- and downstream of the alternative corridors and POE sites, as depicted in Figure 3.9-1. The drainage basins exhibit flows moving generally south from the study area through the six associated outlets. Peak discharges from the six individual outlets, along with drainage junction points located up- and downstream of the alternative facility footprints, are depicted on Figure 3.9-1.

The study area is within the Tijuana Hydrologic Unit (HU), 1 of 11 such drainage areas designated in the 1994 (as amended) San Diego Regional Water Quality Control Board (RWQCB) Basin Plan. The Tijuana HU is divided into a number of hydrologic areas and subareas based on local drainage characteristics, with the study area located within the Water Tanks Hydrologic Subarea (HSA) of the Tijuana Valley Hydrologic Area (HA). Drainage in the

Tijuana HU is through the Tijuana River and associated tributaries, with the Water Tanks HSA drained primarily by a number of swales and canyons flowing west and/or south.

Surface drainage within the study area occurs as both non-point runoff (sheet flow) and confined flow within several small, unnamed swales and canyon drainages flowing primarily south. Drainage from the study area continues south before crossing the International Border with Mexico and eventually entering the Tijuana River. Flows within the river continue generally west for approximately 12 miles before reaching the Pacific Ocean through the Tijuana Estuary, with the last approximately five-mile stretch of the Tijuana River on the U.S. side of the border.

The alternative SR-11 corridors and POE sites are mostly undeveloped, with minor areas of industrial use and several paved roads present west of Alta Road. The remaining areas encompass undeveloped or graded sites, with existing uses limited to unpaved roads and trails. Existing drainage facilities include storm drain systems related to the industrial development, with nearby downstream drainage facilities including several culverts extending under the international border fence. Drainage facilities in areas further downstream include crossing structures along the Tijuana River at a number of roadways.

Floodplain Characteristics

The program study area has been mapped for flood hazards by the Federal Emergency Management Agency (FEMA). The SR-11 and POE alternative sites are designated as Zone X, or areas determined to be outside the 500-year (and therefore the 100-year) floodplain (FEMA 2002, 1997a, 1997b). The closest mapped 100-year floodplain is located approximately 0.5 mile to the north along Johnson Canyon Creek. It should also be noted that the County of San Diego Department of Public Works concurs with the description of the SR-11 corridor as being outside the mapped 500-year floodplain, and has determined that an associated Floodplain Impact Assessment would not be required (County 2007a). This letter is presented in Appendix E of this PEIR/PEIS.

Groundwater

No regional groundwater basins are mapped within the study area and immediate vicinity. The closest major aquifers include the Otay Valley and Lower Tijuana River basins, located approximately 1.5 miles north and 5 miles west, respectively, at their closest points (California Department of Water Resources [DWR] 2003, San Diego County Water Authority [SDCWA] 1997). While no known current information is available regarding the occurrence or depth of local groundwater, historical data identify groundwater depths of between approximately 350 and 485 feet in areas just west of the study area (DWR 1986). Perched groundwater, generally consisting of one or more shallow, unconfined aquifers supported by impermeable or semi-permeable strata, could potentially occur locally. Perched groundwater is typically limited in volume and extent, but can vary with seasonal precipitation and/or local irrigation.

3.11.3 Impacts

Western and Central Alternatives

As noted in the Introduction to Chapter 3, no ground-disturbing activities would occur during Phase I; therefore, no hydrology and floodplain impacts would occur in association with either the Western Alternative or Central Alternative. Although no impacts would occur during Phase I, the identification of a preferred alternative as a result of Phase I, would commit the identified

SR-11 corridor and POE site for future development with these uses. No hydrological conditions have been identified within either alternative that would substantially differentiate the two alternatives and influence the identification of a preferred alternative. The preliminary SR-11 corridor boundaries identified for Phase I analysis are expected to be adequate to accommodate required future drainage facilities for SR-11. This will need to be confirmed during Phase II preliminary design of SR-11.

Additional hydrology studies would be conducted during Phase II, as part of the engineering and environmental evaluation of the design and operational alternatives for SR-11 and the Otay Mesa East POE. Hydrologic issues for program implementation that would likely be addressed by the lead agencies during the Phase II CEQA/NEPA review would include the potential for the alternatives addressed to generate additional runoff and increase runoff velocities due to creation of impervious surfaces, such as pavement, that would reduce infiltration capacity; alter existing hydrologic conditions (drainage patterns); or result in any floodplain-related conflicts due to facility construction, operation and maintenance. Anticipated hydrology impacts from implementation of the Program Phase II activities would be addressed through conformance with applicable regulatory requirements and implementation of standard design measures.

No impacts related to floodplains or associated hazards would result from implementation of SR-11 or the POE facility site under either alternative. This conclusion is based on the fact that the SR-11 corridor and POE sites are located outside of the mapped 500-year (and thus 100-year) floodplain, as described above for the SR-11 corridor. Based on the noted conditions and related Caltrans requirements, a Summary Floodplain Encroachment Report would be prepared for the Phase II POE development under either alternative.

For the western, overlapping portion of the two alternative SR-11 corridors (approximately between Harvest Road and Enrico Fermi Drive) previously evaluated as part of the SR-905 EIS/EIR (Caltrans 2004a), the need for a detention basin and several storm drain pipelines was identified. The adequacy of these approved facilities to serve the SR-11 project would be evaluated in Phase II and modifications would be proposed as necessary.

No Action Alternative

Under the No Action Alternative, the described Phase I and Phase II actions would not be implemented, and no impacts related to hydrology and floodplains would occur.

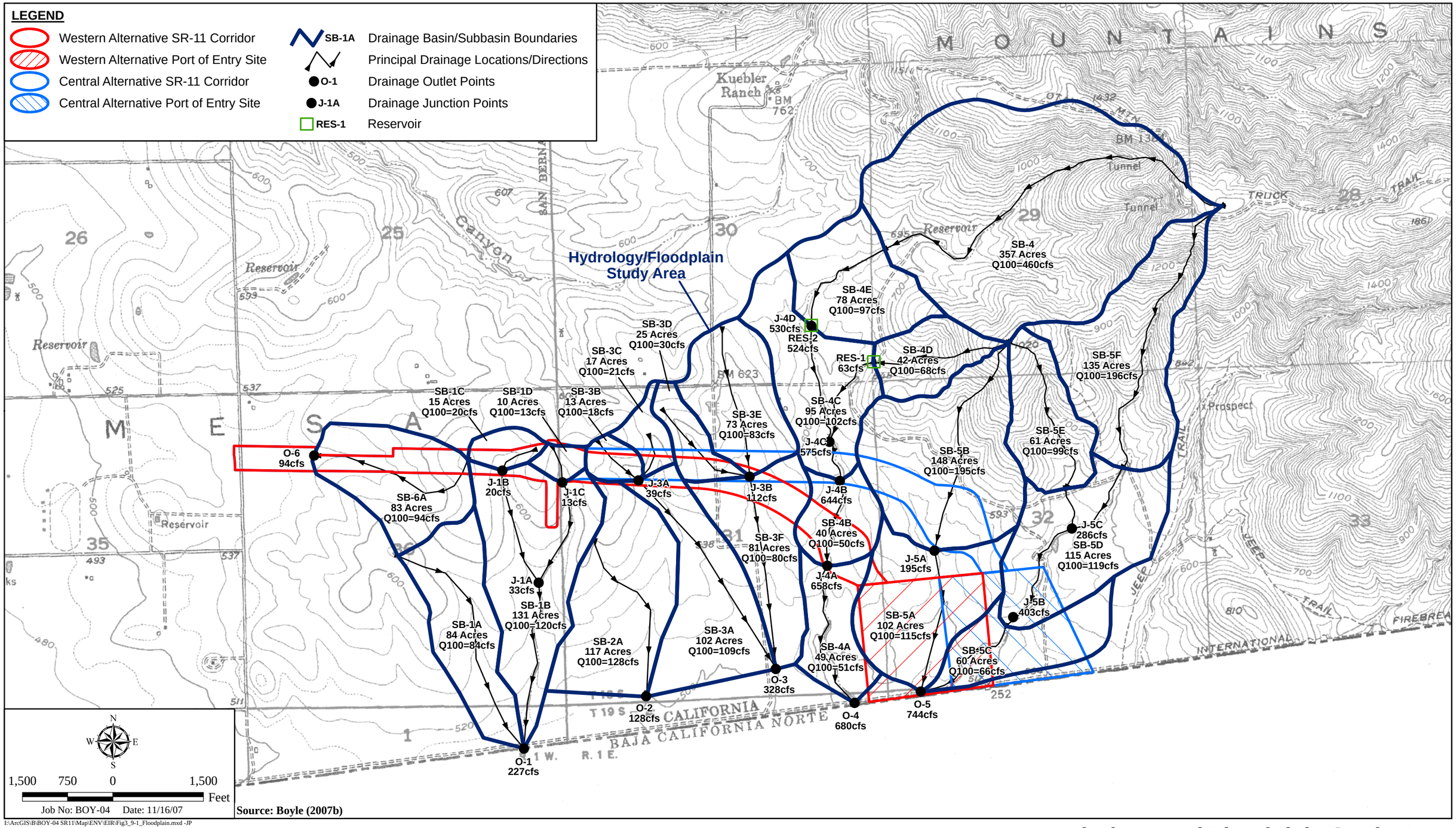
3.9.4 Avoidance, Minimization and/or Mitigation Measures

Because no impacts were identified for Phase I implementation under any of the described alternatives, no associated avoidance, minimization or mitigation measures are proposed.

As required by NEPA, measures would be identified during Phase II to avoid, minimize or mitigate any potential impacts that may occur related to hydrology and drainage. Development of either alternative would involve conformance with applicable requirements related to future drainage conditions at the international border and other drainage alteration issues. Based on the IBWC requirements described above under Regulatory Setting, Phase II implementation would be required to control post-development discharge to maintain pre-development drainage conditions at the international border. Also, flows from upstream portions of the study area would be required to incorporate similar flow regulation for future development as described for the proposed program (County 2007a). This would entail consideration of design measures such as crossing structures (e.g., culverts) to maintain existing drainage patterns, and flow

regulation facilities (e.g., detention or infiltration basins) to maintain pre-development drainage conditions at adjacent properties and the international border (pursuant to applicable Caltrans standards).

Because no impacts were identified for Phase II implementation of the No Action Alternative, no associated avoidance, minimization or mitigation measures are proposed.



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Hydrology and Floodplain Study Area

STATE ROUTE 11 AND OTAY MESA EAST PORT OF ENTRY PEIR/PEIS

Figure 3.9-1

3.10 WATER QUALITY AND STORM WATER RUNOFF

The program study area (study area) for water quality issues includes a watershed area of approximately 2,033 acres, as described for hydrology and floodplain issues in Section 3.9 and shown on Figure 3.9-1.

3.10.1 Regulatory Setting

The proposed program is subject to a number of regulatory requirements related to water quality, as outlined below. These guidelines are intended to prevent or reduce adverse effects related to water quality through efforts such as preventing or minimizing sediment and non-sediment runoff and treating runoff to remove sediment and non-sediment prior to discharge from disturbed soil areas (DSA) and new impervious areas.

International Boundary and Water Commission

The IBWC (as outlined in Section 3.9) requires that new development in applicable border regions (including the study area) conform with appropriate elements of the federal Clean Water Act (CWA), as described below.

CWA Section 401/402 and NPDES Requirements

Section 401 of the federal CWA requires water quality certification from the State Water Resources Control Board (SWRCB) or from a RWQCB when the project requires a CWA Section 404 permit from the ACOE to dredge or fill within waters of the United States (refer to Section 3.17 for additional discussion of Section 401 and 404 requirements). Section 401/404 requirements are not triggered due to storm water permitting requirements.

Along with CWA Section 401, CWA Section 402 establishes the National Pollutant Discharge Elimination System (NPDES) program for the discharge of any pollutant into waters of the United States. The U.S. Environmental Protection Agency (EPA) has delegated administration of the NPDES program to the SWRCB and nine RWQCBs. The SWRCB and RWQCB also regulate other waste discharges to land within California through the issuance of waste discharge requirements under authority of the Porter-Cologne Water Quality Act, with related discharge requirements in the San Diego RWQCB Basin Plan outlined below.

The SWRCB has developed and issued a statewide NPDES permit to regulate storm water discharges from all Caltrans activities on its highways and facilities. Caltrans construction projects are regulated under the statewide permit, and projects performed by other entities on Caltrans R/W (encroachments) are regulated by the SWRCB's Statewide General Construction Permit. All construction projects that include an area of one acre or more of ground disturbance require a Storm Water Pollution Prevention Plan (SWPPP) to be prepared and implemented during construction. Caltrans activities that involve less than one acre of ground disturbance require a Water Pollution Control Program. Caltrans projects are subject to applicable requirements related to construction and operational activities in the Caltrans Statewide Stormwater Management Plan (SWMP), with encroachments subject to applicable operational requirements of the SWMP. As directed by the SWMP and the Caltrans Project Planning and Design Guide (PPDG), projects must be evaluated using the most recent approved evaluation guide to determine whether the incorporation of permanent storm water runoff treatment measures must be considered.

RWQCB Basin Plan Requirements

The San Diego RWQCB Basin Plan (1994) establishes beneficial uses and water quality objectives for surface and groundwater resources. Beneficial uses are defined in the Basin Plan as "the uses of water necessary for the survival or well being of man, plus plants and wildlife." Identified existing and potential beneficial uses for inland and coastal receiving waters located within and downstream of the study area include: agricultural supply; industrial service supply; contact and non-contact water recreation; warm freshwater habitat; wildlife habitat; navigation; commercial and sport fishing; biological habitats of special significance; estuarine habitat; rare, threatened or endangered species; marine habitat; aquaculture; migration of aquatic organisms; spawning, reproduction and/or early development; and shellfish harvesting. Identified beneficial uses for groundwater in the Tijuana Valley HA include municipal and domestic supply, agriculture supply and industrial service supply.

Water quality objectives identified in the Basin Plan are defined as "the limits or levels of water quality constituents or characteristics which are established for the reasonable protection of beneficial uses." Water quality objectives include both narrative requirements (which can encompass qualitative and quantitative standards) and specific numeric objectives for identified constituents.

3.10.2 Affected Environment

Surface Water

As described in Section 3.9, the study area is within the Tijuana HU, which is divided into a number of hydrologic areas and subareas based on local drainage characteristics. The study area is located within the Water Tanks HSA of the Tijuana Valley HA. Drainage in the Tijuana HU is through the Tijuana River and associated tributaries, with the Water Tanks HSA drained primarily by a number of swales and canyons flowing west and/or south.

Surface water within the study area consists predominantly of intermittent flows from storm events and irrigation, with no known current water quality data available. Based on limited historic data, surface water quality within the Water Tanks HSA was generally good in 1985, while water quality in the San Ysidro HSA (Tijuana River) varied between good (Spring 1983) and poor (Fall 1982, EPA 1995, DWR 1986, U.S. Geological Survey 1985).

Numeric water quality objectives have not been established for surface waters in the Tijuana Valley HA or the Water Tanks HSA, with these areas subject to identified narrative objectives. Specifically, these include quantitative requirements for constituents such as ammonia, coliform and chloride, as well as qualitative standards for additional constituents, degradation of waters and associated biological communities.

More recent surface water quality monitoring has been conducted within the Tijuana River watershed in association with local/regional water agency programs and NPDES requirements. Specifically, these efforts have included wet/dry season monitoring, bioassessment studies, and ambient lagoon/bay monitoring.

Wet and Dry Season Monitoring

Monitoring at the Tijuana River mass loading station (MLS, located at the Hollister Street Bridge) covered three storm events each for the 2001/2002 through 2005/2006 storm seasons.

These monitoring events addressed numerous physical, chemical and bacterial constituents of concern (COCs). Water quality standards during the described monitoring efforts were regularly exceeded for COCs, including fecal coliform, ammonia, chemical oxygen demand (COD), total phosphorus, total suspended solids (TSS) and toxicity to aquatic test organisms (Weston Solutions, Inc. [Weston] 2007).

Dry weather sampling was also conducted in 2002 through 2005 at several sites located both up- and downstream of the Tijuana River MLS. This program is focused on collecting dry season samples from storm drain facilities to identify urban pollutants and sources. Data from the described dry weather sampling documented that water quality objectives were most commonly exceeded for ammonia, total coliform, fecal coliform, *Enterococcus*, and turbidity (Weston 2007).

Ambient Bay and Lagoon Monitoring

Beginning with the 2002/2003 storm season, ambient bay and lagoon monitoring was initiated for a number of coastal waters, including the Tijuana River Estuary. Samples from the Tijuana River Estuary from the 2003/2004 through 2005/2006 storm seasons exhibited generally high individual and overall (i.e., relative to other sampled embayments) quality rankings for sediment chemistry and toxicity, and intermediate rankings for benthic (estuary floor) community structure. These rankings contrast with the generally poor water quality observed during the described wet weather sampling in upstream areas, and indicate that heavy COC loadings documented during storm events in the Tijuana River do not necessarily lead to persistent accumulation of COCs downstream.

Bioassessment Monitoring

In addition to the described efforts, bioassessment monitoring has been conducted at one downstream site along the Tijuana River (at Dairy Mart Road) in May of 2003, 2005 and 2006. Bioassessment testing involves evaluation of (among other criteria) the taxonomic richness (i.e., number of taxonomic groups) and diversity (i.e., species diversity within taxonomic groups) of benthic macroinvertebrate (BMI) communities, with all tested sites numerically ranked for the condition of BMI communities. Test results for the Dairy Mart Road site indicate generally poor rankings relative to other test sites, with these results attributable (at least in part) to poor water quality in surrounding urban areas (Weston 2007).

Bi-annual Clean Water Act Assessments

The SWRCB produces bi-annual qualitative assessments of statewide and regional water quality conditions. These assessments are focused on CWA Section 303(d) impaired water listings and scheduling for assignment of total maximum daily load (TMDL) requirements. The most current (2006) approved assessment identifies the following impaired waters downstream of the study area: (1) six miles of the Tijuana River listed for eutrophic conditions, bacterial indicators, low dissolved oxygen, pesticides, solids, synthetic organics, trace elements, and trash; (2) 1,319 acres in the Tijuana Estuary listed for eutrophic conditions, bacterial indicators, lead, low dissolved oxygen, nickel, pesticides, thallium, trash, and turbidity; and (3) three miles of the Pacific Ocean shoreline north of the international border listed for bacterial indicators. Proposed TMDL completion dates include 2010 for the Pacific Ocean and 2019 for the Tijuana River and Estuary (SWRCB 2007).

Groundwater

No known groundwater quality data are available for the study area or immediate vicinity. Regional data include reported TDS levels of between 500 and 3,000 milligrams per liter (mg/l), and 380 to 3,620 mg/l in the Lower Tijuana River Basin (SDCWA 1997 and DWR 2003, respectively).

Water Quality Summary

Existing surface water quality within the study area and associated upstream watersheds are assumed to be generally good, based on the undeveloped nature of these areas. Surface and groundwater quality in areas downstream of the study area is characterized as generally moderate to poor, based on historic and current monitoring data, existing urban development and impaired water designations identified by the SWRCB.

3.10.3 Impacts

Western and Central Alternatives

As noted in the Introduction to Chapter 3, no ground-disturbing activities would occur during Phase I; therefore, no water quality impacts would occur in association with either the Western Alternative or Central Alternative SR-11 corridor or POE. Although no impacts would occur during Phase I, the identification of a preferred alternative as a result of Phase I would commit the identified SR-11 corridor and POE site for future development with these uses. No existing water quality conditions have been identified within either alternative that would substantially differentiate the two alternatives and influence the identification of a preferred alternative.

Additional water quality studies would be conducted during Phase II, as part of the engineering and environmental evaluation of the design and operational alternatives for SR-11 and the Otay Mesa East POE. Water quality issues for program implementation that would likely be addressed by the lead agencies during the Phase II CEQA/NEPA review would include the potential for the alternatives addressed to increase runoff (refer to Section 3.9) or generate contaminants related to proposed construction, operation and maintenance, as well as the potential for such contaminants to adversely affect surface and ground water resources in the program area. Specifically, potential water quality impacts that would be addressed include increased or changed concentrations of constituents or conditions commonly found in highway runoff, such as TSS, nutrients (nitrogen/phosphorous), pesticides, metals, pathogens, trash, biochemical oxygen demand, pH, temperature, and total dissolved solids. In addition, alteration of watershed and runoff characteristics, or hydromodification[1], would be addressed, as this could contribute to water quality impacts through effects such as increased downstream erosion/sedimentation potential and increased capacity to convey pollutants. Based on the IBWC, Caltrans and Basin Plan requirements described above under Regulatory Setting, during Phase II implementation, potential runoff must be addressed to provide conformance with applicable CWA, NPDES and Caltrans (e.g., SWMP) requirements (refer to Section 3.9 of this PEIR/PEIS for additional discussion of regulatory controls on runoff generation). Specific water quality measures would be determined as part of the Phase II technical and environmental analyses, with a detailed technical study of water quality impacts to be prepared as part of the

[1] Hydromodification is generally defined as the change in natural watershed hydrologic processes and runoff characteristics (infiltration and overland flow) caused by urbanization or other land use changes that result in increased stream flows, sediment transport and morphological changes in the channels receiving the runoff.

Phase II assessment. This would include evaluating the previously described measures approved within the Phase II SR-11 corridor as part of the SR-905 project to determine whether additional measures would be required to accommodate the SR-11 design.

No Action Alternative

Under the No Action Alternative, the described Phase I and Phase II actions would not be implemented and no program-related impacts related to water quality would occur.

3.10.4 Avoidance, Minimization and/or Storm Water Permit Compliance

Because no Phase I impacts were identified for the described alternatives, no associated avoidance, minimization or mitigation measures are proposed.

As required by NEPA, measures would be identified during Phase II to avoid, minimize or mitigate any potential anticipated impacts related to water quality. The Statewide SWMP describes how Caltrans would comply with the provisions of the NPDES permit (Order 99-06 DWQ) to reduce any discharge of pollutants to the storm water drainage system that serves the highway and highway-related properties, facilities and activities. The SWMP divides its Best Management Practices (BMPs) into four categories from the planning and design phase, to the operational and maintenance phase; these are referred to as Construction, Pollution Prevention, Treatment, and Maintenance BMPs. If impacts related to water quality could reasonably be expected to occur, typical measures that could be considered during Phase II would include implementation of such approved BMPs . Potential erosion and sediment control BMPs for consideration during construction would include phased grading; preservation of native vegetation where feasible; sediment control measures such as silt fence, fiber rolls or temporary desilting basins; dust control measures such as regular watering and/or application of palliatives; and covering material stockpiles and transport vehicles to prevent off-site sediment tracking or spilling. Possible pollution prevention BMPs for consideration during post-construction would include preservation of existing vegetation; incorporation of pervious surface materials to increase infiltration and reduce runoff; use of flow-control facilities to reduce flow volumes and velocities; and installation of informational signs and/or stencils to discourage illegal dumping and waste disposal. Potential design measures for treatment that could be considered would include biofiltration (e.g., vegetated strips/swales) and infiltration/detention facilities. Possible maintenance BMPs for consideration during Phase II would include vegetation/irrigation management (e.g., weed control, plant replacement, runoff prevention and hardware inspection/maintenance); slope stabilization (e.g., drainage facility and retaining wall maintenance); regular inspection/repair of drainage facilities and post-construction BMPs; and street sweeping.

Because no impacts were identified for implementation of the No Action Alternative, no associated avoidance, minimization or mitigation measures are proposed.

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3.11 GEOLOGY/SOILS/SEISMICITY/TOPOGRAPHY

A *Preliminary Geotechnical Study,* dated October 2007, was completed for Phase I of the SR-11/Otay Mesa East POE, and is summarized in this section of the PEIR/PEIS. The program study area (study area) for geology/soils, seismic and topographic issues includes approximately 1,173 acres within the two alternative SR-11 corridors and associated POE sites, as well as adjacent areas that may affect or be affected by geologic conditions related to ultimate program implementation. The study area extends generally north-south between Otay Mesa Road and the international border, and east-west between the San Ysidro mountains and Paseo de Las Americas.

3.11.1 Regulatory Setting

The proposed program is subject to a number of regulatory requirements and industry standards related to geologic issues as outlined below. Compliance with these guidelines would be required during Phase II to avoid or reduce adverse effects related to geologic issues through efforts such as evaluation of risks and mitigation of potential impacts/hazards through design and construction techniques; any potential implications for corridor identification and Presidential Permit approval in Phase I are also evaluated in Section 3.11.3 below.

Federal Historic Sites Act

The Historic Sites Act of 1935 established a policy "[t]o preserve for public use historic sites, buildings and objects of national significance for the inspiration and benefit of the people of the United States." The act also established a National Registry of Natural Landmarks to protect, among other resources, "outstanding examples of major geological features." Topographic and geologic features are also protected under CEQA.

This section also discusses geology, soils and seismic concerns as they relate to public safety and project design. Earthquakes are prime considerations in the design and retrofit of structures. The Department's Office of Earthquake Engineering is responsible for assessing the seismic hazard for Department projects. The current policy is to use the anticipated Maximum Credible Earthquake (MCE) from young faults in and near California. The MCE is defined as the largest earthquake that can be expected to occur on a fault over a particular period of time.

3.11.2 Affected Environment

Geologic/Topographic Setting

The study area is within the Peninsular Ranges Geomorphic Province (Province), a region characterized by northwest-trending structural blocks and intervening fault zones. The Province extends approximately 900 miles from the Los Angeles Basin to the southern tip of Baja California, and varies in width from approximately 30 to 100 miles. Bedrock units in the Province include Jurassic metavolcanic and metasedimentary rocks (between approximately 144 and 206 million years old) and Cretaceous igneous rocks (between approximately 65 and 144 million years old) of the Southern California Batholith (a large igneous intrusive body). Coastal areas of the Province in San Diego County, including much of the study area, are typically overlain by a sequence of Tertiary marine and non-marine sedimentary strata (between approximately 2 and 65 million years old) forming a dissected coastal plain.

Topographically, the Peninsular Ranges Province is composed of generally parallel ranges of steep-sloping hills and mountains separated by alluvial valleys. More recent uplift and erosion has produced the characteristic canyon and mesa topography present today in western San Diego County, as well as the deposition of surficial materials including Quaternary (less than approximately two million years old) alluvium, colluvium and topsoil. Topography within the study area is characterized by generally undulating terrain, with no major geomorphic features such as canyons or mountains, and an average elevation of approximately 520 feet above mean sea level. More than 95 percent of slopes within the proposed SR-11 corridors and POE sites are less than 25 percent. Elevations rise gently toward the north and east of the program area.

Stratigraphy

Geologic units underlying the study area include the Tertiary Otay Formation and the Jurassic/Cretaceous Santiago Peak Volcanics. As shown on Figure 3.11-1, the Otay Formation is mapped within much of the study area, and consists mainly of poorly cemented and massive (i.e., without distinct structure such as bedding) sandstones, siltstones and claystones, with interbedded bentonite lenses (clay formed from volcanic ash). The Santiago Peak Volcanics are present in the northeastern and southeastern portions of the study area, and consist of metavolcanic rocks and volcaniclastic deposits (sedimentary units derived from weathered volcanic rocks). This formation exhibits compositions ranging from basalt to rhyolite (the volcanic equivalent of granite), and depositional forms including volcanic flows, rubble, breccia and tuff.

Surficial materials within the study area are expected to include alluvial materials in larger drainages, colluvium (or slopewash) along the toes of slopes, and topsoils occurring as a generally thin layer in most areas. Mapped topsoils in the study area consist primarily of clay-rich soils of the Diablo Series, and loams/clay loams of the Huerhuero and Stockpen series (U.S. Soil Conservation Service 1973).

Structure and Seismicity

The study area is located within a seismically active region that encompasses several major active and potentially active faults. Active faults are defined as those exhibiting historic seismicity or displacement of Holocene deposits (less than approximately 11,000 years old), while potentially active faults have no historic seismicity and displace Pleistocene (between approximately 11,000 and 1.6 million years old), but not Holocene, strata. The Rose Canyon Fault, located approximately 13.3 miles to the west, represents the nearest known active fault and is capable of generating peak ground acceleration (or ground shaking) values of approximately 0.3 g within the study area (where g is the acceleration due to gravity). Such ground acceleration would be associated with a maximum credible earthquake of magnitude 7.2 along the Rose Canyon Fault (i.e., the maximum event considered capable of occurring under the currently understood tectonic framework).

Groundwater

As discussed in Section 3.11 of this document, shallow groundwater is not known to occur within the study area and immediate vicinity. Historical data identify groundwater depths of between approximately 350 and 485 feet in areas to the west (DWR 1986), although shallow perched groundwater could potentially occur locally.

3.11.3 Impacts

Western and Central Alternatives

As noted in the Introduction to Chapter 3, no ground-disturbing activities would occur during Phase I; therefore, no geology, soils, seismic, or topographic impacts would occur in association with either the Western Alternative or Central Alternative SR-11 Corridor or POE. Although no impacts would occur during Phase I, the identification of a preferred alternative as a result of Phase I would commit the identified SR-11 corridor and POE site for future development with these uses. No geology, soils, seismic, or topographic conditions have been identified within either alternative that would substantially differentiate the two alternatives and influence the identification of a preferred alternative.

Additional geology, soils, seismic, and topographic studies would be conducted during Phase II, as part of the engineering and environmental evaluation of the design and operational alternatives for SR-11 and the Otay Mesa East POE. Geology, soils, seismic, and topographic issues for program implementation that would likely be addressed by the lead agencies during the Phase II CEQA/NEPA review would include the potential for the alternatives addressed to alter any existing geology/soils/seismic/topographic conditions, or result in any associated hazards.

Potential seismic hazards to be addressed in detailed geotechnical studies in Phase II include ground acceleration from large earthquakes on nearby active faults, and liquefaction and/or seismically-induced settlement in alluvial or colluvial materials located in drainages or on slopes, if shallow groundwater is present. No mapped or suspected landslide deposits were located within or adjacent to the study area boundary. However, potential impacts related to manufactured slope instability in association with the Otay Formation would be addressed, as discussed below for non-seismic hazards (with such effects potentially exacerbated by seismic activity).

Potential non-seismic hazards to be addressed in detailed geotechnical studies in Phase II include bentonite lenses in the Otay Formation that could potentially be susceptible to manufactured slope failure under certain conditions (e.g., areas that are graded, saturated, or subject to static or seismic loading); Otay Formation soils (as well as other surficial deposits) within the study area that may be subject to expansive (or shrink-swell) behavior, due to the presence and water holding capacity of clay minerals; and soils within the study area related to the Otay Formation, alluvium and colluvium with corrosive characteristics, which could be unsuitable for use as fill or subgrade material.

No Action Alternative

Under the No Action Alternative, the described Phase I and Phase II actions would not be implemented, and no impacts related to geology, soils, seismic, or topographic conditions would occur.

3.11.4 Avoidance, Minimization and/or Mitigation Measures

Because no impacts were identified for Phase I implementation under any of the described alternatives, no associated avoidance, minimization or mitigation measures are proposed.

As required by NEPA, measures would be identified during Phase II to avoid, minimize or mitigate any potential impacts that may occur related to geology, soils, seismic, or topographic conditions. Precise requirements would be determined during Phase II, when specific design and operational characteristics of the proposed facilities would be known.

The program Geotechnical Study recommends that "…a comprehensive geotechnical evaluation, including development-specific subsurface exploration and laboratory testing, be conducted prior to design and construction of any structures or improvements." This evaluation, which is a standard requirement of both Caltrans and GSA for construction of their facilities, would assess subsurface conditions in proposed development areas, and provide related information/recommendations regarding engineering characteristics of associated earth materials. From these data, specific recommendations would be generated regarding grading/earthwork, surface and subsurface drainage, foundations, pavement, structural sections, and other applicable geotechnical issues to ensure conformance with applicable regulatory and design requirements. This would include evaluating the requirements approved within the Phase II SR-11 corridor for the SR-905 analysis to determine if they would be incorporated into the SR-11 design as approved, or if additional measures would be needed.

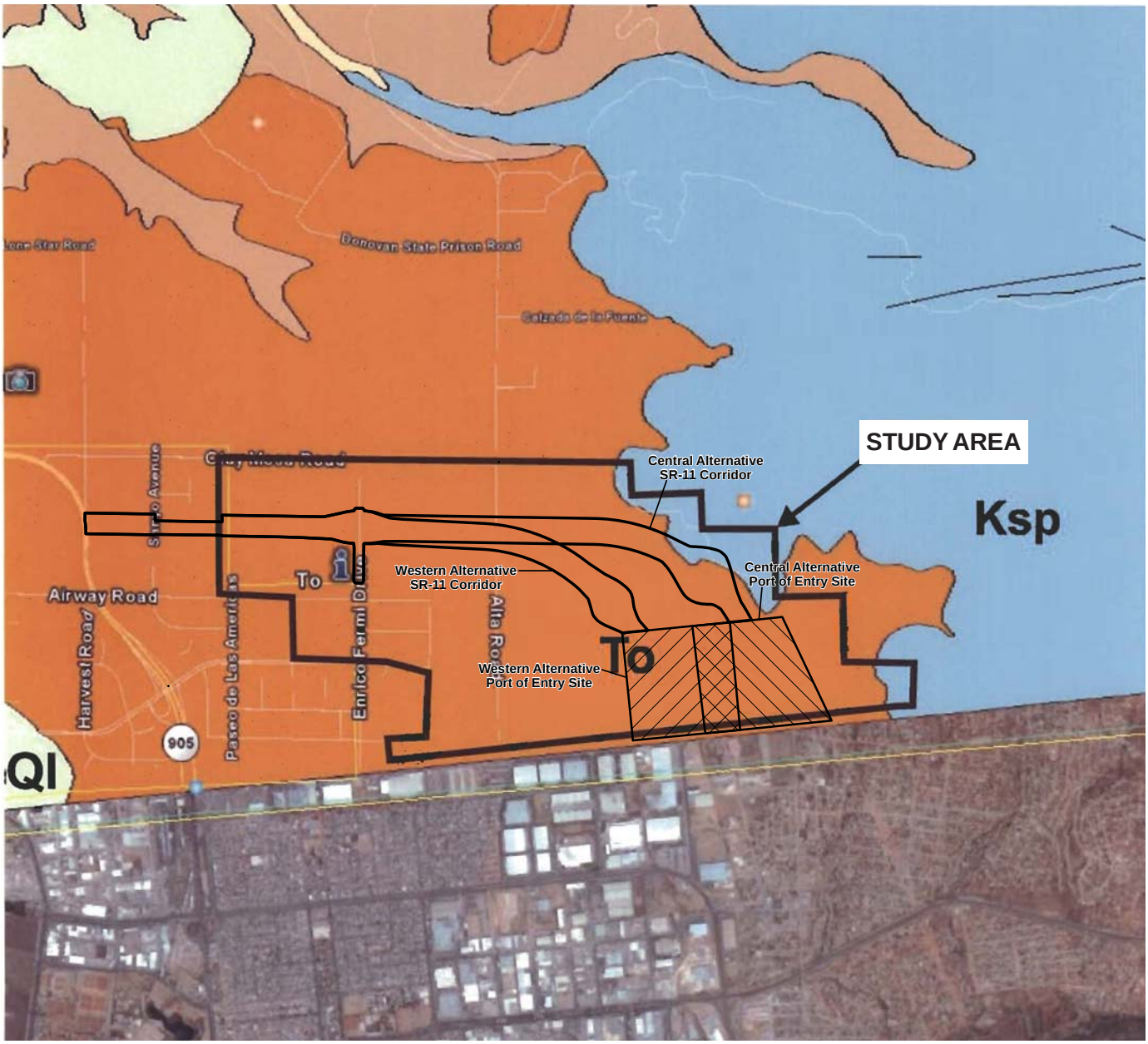
The following types of standard remedial design and construction measures may be considered in Phase II:

- Potential seismic ground acceleration and liquefaction effects could be addressed through efforts such as: (1) appropriate design of foundations and footings; (2) proper design and reinforcement of pavement and concrete structures; (3) removal and recompaction (or replacement) of potentially liquefiable soils; (4) use of positive grading/drainage techniques and/or subdrains in appropriate areas to avoid surface and subsurface saturation; and (5) use of structural measures, such as driving piles below liquefiable layers.

- Manufactured slopes in areas of the Otay Formation could be addressed through efforts such as: (1) limitations of slope heights and/or inclinations; (2) use of stabilizing structures, such as buttresses, in appropriate locations; and (3) use of pertinent landscape design (e.g., drought-tolerant vegetation) and irrigation/drainage controls.

- Expansive, corrosive, and/or other unsuitable characteristics in surficial materials could be addressed through efforts such as: (1) removal and recompaction (or replacement) of unsuitable soils; (2) selective placement and/or capping of unsuitable soils; and (3) use of corrosive-resistant materials and/or cathodic protection devices in applicable areas.

Because no impacts were identified for Phase I or Phase II implementation of the No Action Alternative, no associated avoidance, minimization or mitigation measures are proposed.



NOT TO SCALE

LEGEND	
Ql	LINDAVISTA FORMATION
To	OTAY FORMATION
Ksp	SANTIAGO PEAK VOLCANICS

Source: Ninyo & Moore 2007

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Geologic Map

STATE ROUTE 11 AND OTAY MESA EAST PORT OF ENTRY PEIR/PEIS

Figure 3.11-1

3.12 PALEONTOLOGY

The program study area (study area) for paleontological issues includes the same approximately 1,173-acre area described in Section 3.11 of this document for geology, soils, seismicity, and topography (refer to Figure 3.11-1). The use of this study area is based on the relationship between paleontological and geologic resources.

3.12.1 Regulatory Setting

Paleontology is the study of life in past geologic time based on fossil plants and animals. A number of federal statutes specifically address paleontological resources, their treatment and funding for mitigation as part of federally authorized or funded projects (e.g., the Antiquities Act of 1906 [16 USC 431-433]). Under California law, paleontological resources are protected by: CEQA; California Administrative Code, Title 14, Section 4306 et seq.; and Public Resources Code Section 5097.5.

3.12.2 Affected Environment

As described in Section 3.11 of this PEIR/PEIS, the majority of the study area is underlain by the Tertiary Otay Formation, with the Jurassic/Cretaceous Santiago Peak Volcanics mapped in the northeastern and southeastern areas (refer to Figure 3.11-1). The Otay Formation is assigned a high sensitivity rating for paleontological resources. A high sensitivity rating is generally defined to include geologic formations known to contain paleontological resources with rare, well-preserved, critical fossil materials for stratigraphic or paleoenvironmental interpretation, or fossils providing important information about the paleoclimatic, paleobiological and/or evolutionary history of animal or plant groups (County 2007b).

The Santiago Peak Volcanics can include both metavolcanic rocks and sedimentary units derived from volcanic material (volcaniclastic strata, refer to Section 3.11.2). While the volcanic members of this formation (along with all igneous rocks) exhibit no potential for the occurrence of paleontological resources due to their molten origin, the volcaniclastic units are assigned a moderate sensitivity level. A moderate sensitivity level is defined to include geologic formations known to contain paleontological sites that are judged to have a strong, but often unproven, potential to produce unique fossil remains (County 2007b).

Paleontological resource potential and sensitivity for surficial materials within the study area, including alluvium, colluvium and topsoil, are considered low, based on their high-energy and destructive (relative to paleontological resources) formation and depositional environments.

3.12.3 Impacts

Western and Central Alternatives

As noted in the Introduction to Chapter 3, no ground-disturbing activities would occur during Phase I; therefore, no impacts to paleontological resources would occur in association with either the Western Alternative or Central Alternative SR-11 Corridor or POE. Although no impacts would occur during Phase I, the identification of a preferred alternative as a result of Phase I would commit the identified SR-11 corridor and POE site for future development with these uses. No paleontological conditions have been identified within either alternative that

would substantially differentiate the two alternatives and influence the identification of a preferred alternative.

Additional paleontology studies would be conducted during Phase II, as part of the engineering and environmental evaluation of the design and operational alternatives for SR-11 and the Otay Mesa East POE. Paleontological issues for program implementation that would likely be addressed by the lead agencies during the Phase II CEQA/NEPA review would include the potential for the alternatives addressed to affect previously undisturbed areas of the high sensitivity Otay Formation, as well as previously undisturbed volcaniclastic units of the Santiago Peak Volcanics exhibiting moderate resource sensitivity. A detailed paleontological resources technical report would be prepared, which would include evaluation of any new potential impacts to paleontological resources within the footprint of the off-ramp to Enrico Fermi Drive that was previously approved as part of the SR-905 project.

No Action Alternative

Under the No Action Alternative, the described Phase I and Phase II actions would not be implemented, and no impacts related to paleontological resources would occur.

3.12.4 Avoidance, Minimization and/or Mitigation Measures

Because no impacts were identified for Phase I implementation under any of the described alternatives, no associated avoidance, minimization or mitigation measures are proposed.

As required by NEPA, measures would be identified during Phase II to avoid, minimize or mitigate any potential impacts that may occur related to paleontological resources. If it is determined in Phase II that adverse impacts to paleontological resources could occur, a Paleontological Mitigation Plan would be prepared. The Paleontological Mitigation Plan would likely include the following types of measures: the retention of a qualified principal paleontologist to consult with grading and excavation contractors, the retention of a paleontological monitor to inspect cuts for fossils during original grading of sensitive geologic formations, and recovery of fossils, if found. If fossil were discovered during the monitoring and salvage portion of the mitigation program, requirements would be specified for the fossils to be cleaned, repaired, sorted, and cataloged and deposited in a scientific institution with paleontological collections. Where feasible, selected road cuts or large finished slopes in areas of critically interesting geology could be left exposed so they could serve as important educational and scientific features. This could be possible if no substantial adverse visual impact were to result.

Because no impacts were identified for Phase II implementation of the No Action Alternative, no associated avoidance, minimization or mitigation measures are proposed.

3.13 HAZARDOUS WASTE/MATERIALS

A *Hazardous Materials and Hazardous Waste Initial Site Assessment* (ISA), dated March 2007, was completed for Phase I of the SR-11/Otay Mesa East POE, and is summarized in this section of the PEIR/PEIS. The program study area (study area) for hazardous waste/material issues includes an approximately 1,173-acre site that encompasses the two alternative corridors and associated POE sites, as well as adjacent areas that could potentially affect or be affected by hazardous waste/material concerns related to program implementation (Figure 3.13-1).

3.13.1 Regulatory Setting

Many state and federal laws regulate hazardous materials and hazardous wastes. These include not only specific statutes governing hazardous waste, but also a variety of laws regulating air and water quality, human health and land use.

The primary federal laws regulating hazardous wastes/materials are the Resource Conservation and Recovery Act (RCRA) of 1976 and the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980. The purpose of CERCLA, often referred to as Superfund, is to clean up contaminated sites so that public health and welfare are not compromised. RCRA provides for “cradle to grave” regulation of hazardous wastes. Other federal laws include:

- Community Environmental Response Facilitation Act (CERFA) of 1992;
- Clean Water Act (CWA);
- Clean Air Act (CAA);
- Safe Drinking Water Act (SDWA);
- Occupational Safety & Health Act (OSHA);
- Atomic Energy Act (AEA);
- Toxic Substances Control Act (TSCA); and
- Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA).

In addition to the acts listed above, Executive Order 12088, Federal Compliance with Pollution Control, mandates that necessary actions be taken to prevent and control environmental pollution when federal activities or federal facilities are involved.

Hazardous waste in California is regulated primarily under the authority of the federal RCRA of 1976, and the California Health and Safety Code. Other California laws that affect hazardous waste are specific to handling, storage, transportation, disposal, treatment, reduction, cleanup, and emergency planning.

Worker health and safety and public safety are key issues when dealing with hazardous materials that may affect human health and the environment. Proper disposal of hazardous material is vital if it is disturbed during project construction.

3.13.2 Affected Environment

The referenced program ISA provides an evaluation of potential hazardous waste/material concerns within the study area from implementation of the proposed program. Specific

methodology used for this analysis included: (1) an evaluation of study area history through review of available reports and historic maps/aerial photographs; (2) field reconnaissance to document the potential occurrence of, and contamination by, hazardous waste/materials within the study area; and (3) review of regulatory agency files and databases regarding the use, storage, unauthorized release, and remediation of hazardous materials within the study area and vicinity. The ISA results are summarized below, with additional information contained in the technical study.

Assessment of Study Area History

Few residential structures were present within the study area during the 1920s to 1990s, with the remaining areas primarily undeveloped. From the early 1950s through the 1980s, the majority of the study area was used for agriculture. Facilities with unauthorized releases of hazardous materials or wastes were not noted during historic records review for the study area.

Field Reconnaissance

Observed findings of the ISA report include: an automobile salvage yard in the northern portion of the study area; an agricultural staging area in the central portion of the study area; evidence of previous agricultural uses of the entire study area; loose trash and debris in several areas of the study area; and empty drums, cans and several above ground storage tanks within a junkyard in the western portion of the study area.

Regulatory Agency File/Database Review

Facilities with unauthorized releases of hazardous materials or wastes were not noted during regulatory records review for the study area. Facilities surrounding the study area were indicated in the regulatory records review, and the potential for adverse effects from hazardous waste issues/materials from these off-site areas was determined to be low.

Summary of Existing Hazardous Waste/Material Conditions

Overall, the potential for hazardous waste issues/materials within the study area is low. Due to previous and current site use, residual soil or groundwater contamination resulting from an unauthorized release or mismanagement of hazardous materials may be encountered during subsurface highway construction activities within the study area. Suspected hazardous waste issues/materials may include: petroleum hydrocarbons, volatile and semi-volatile organic compounds, and metals in shallow soil in the auto salvage yard; pesticides and herbicides in shallow soil in the vicinity of the former agricultural staging areas and throughout the entire study area; and loose trash, debris and empty drums and cans throughout the study area.

3.13.3 Impacts

Western and Central Alternatives

As noted in the Introduction to Chapter 3, no ground-disturbing activities would occur during Phase I; therefore, no hazardous waste/materials impacts would occur in association with either the Western Alternative or Central Alternative. Although no impacts would occur during Phase I, the identification of a preferred alternative as a result of Phase I would commit the identified SR-11 corridor and POE site for future development with these uses.

Additional hazardous material/waste studies would be conducted during Phase II, as part of the engineering and environmental evaluation of the design and operational alternatives for SR-11 and the Otay Mesa East POE. Issues related to hazardous materials or hazardous waste for program implementation that would likely be addressed by the lead agencies during the Phase II CEQA/NEPA review would include the potential for the alternatives addressed to encounter contamination from a number of sources, including previous agricultural operations, automobile salvage/storage, trash and debris deposits, sites listed on regulatory databases, and currently unknown sites**.** These potential impacts would be addressed through implementation of site-specific hazardous waste/materials investigations, conformance with applicable regulatory requirements and implementation of standard remedial measures.

Potential hazardous waste/materials impacts would be identical for the Western and Central alternatives west of Enrico Fermi Drive. East of Enrico Fermi Drive, the Western Alternative covers a smaller portion of the northern auto salvage yard relative to the Central Alternative. Therefore, hazardous waste impacts and clean-up costs, if required, could be less for the Western Alternative in regards to this area. Other hazardous waste related issues/materials impacts would be similar for the Western and Central Alternatives east of Enrico Fermi Drive.

No Action Alternative

Under the No Action Alternative, the described Phase I and Phase II actions would not be implemented, and no impacts related to hazardous waste/materials would occur.

3.13.4 Avoidance, Minimization and/or Mitigation Measures

Because no impacts were identified for Phase I implementation under any of the described alternatives, no associated avoidance, minimization or mitigation measures are proposed.

As required by NEPA, measures would be identified during Phase II to avoid, minimize or mitigate any potential impacts that may occur related to hazardous waste issues/materials. A Preliminary Site Investigation (PSI) would be conducted to further characterize the presence or absence of suspected hazardous waste issues/materials (petroleum hydrocarbons, pesticides, and herbicides) referenced in the ISA (auto salvage yard, agricultural staging area and previous agricultural use of the entire study area) prior to construction. During the PSI, handling and disposal of hazardous waste issues/materials would be conducted in accordance with applicable hazardous waste related Federal, State (including Department of Transportation) and local laws, regulations, practices, and standards. Other potential measures that could be identified during Phase II include: 1) preparation of a Hazardous Waste Management Plan that describes the handling and disposal of hazardous waste materials, 2) preparation of a site-specific Health and Safety Plan that includes measures to limit exposure of affected soil and/or groundwater to persons working on site and discusses use of proper Personal Protective Equipment and environmental monitoring (including air monitoring, as appropriate), and 3) the requirement for persons working with hazardous materials to have training in accordance with Title 8 of the California Code of Regulations.

Because no impacts were identified for implementation of the No Action Alternative, no associated avoidance, minimization or mitigation measures are proposed.

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SOURCE: LENSKA AERIAL IMAGE 2006

LEGEND

- 64807025 ASSESSOR PARCEL BOUNDARY
- STUDY AREA

NOTE: ALL DIRECTION, DIMENSION AND LOCATIONS ARE APPROXIMATE

LAND DESCRIPTION

- UNDEVELOPED
- LIGHT INDUSTRIAL
- PARTIALLY GRADED

N

Meters: 0 105 210 420

Feet: 0 350 700 1,400

Source: Ninyo & Moore (2007b)

I:\ArcGIS\B\BOY-04 SR11\Map\ENV\EIR\Fig3_13-1_HazMat.pmd -JP

Hazardous Waste/Materials Sites

STATE ROUTE 11 AND OTAY MESA EAST PORT OF ENTRY PEIR/PEIS

Figure 3.13-1

3.14 AIR QUALITY

3.14.1 Regulatory Setting

Criteria Pollutants

The Clean Air Act (CAA) as amended in 1990 is the federal law that governs air quality. Its counterpart in California is the California Clean Air Act (CCAA) of 1988. These laws set standards for the quantity of pollutants that can be in the air. At the federal level, these standards are called National Ambient Air Quality Standards (NAAQS). Standards have been established for the following seven criteria pollutants that have been linked to potential health concerns: carbon monoxide (CO), nitrogen dioxide (NO_2), ozone (O_3), particulate matter of 10 microns or less (PM_{10}), particulate matter of 2.5 microns or less ($PM_{2.5}$), lead (Pb), and sulfur dioxide (SO_2). In accordance with the CCAA, the California Air Resources Board (CARB) has established more stringent California Ambient Air Quality Standards (CAAQS) for the seven criteria pollutants and for additional pollutants, including sulfates and hydrogen sulfide vinyl chloride.

Under the 1990 CAA Amendments, the DOT cannot fund, authorize or approve Federal actions to support programs or projects that are not first found to conform to the State Implementation Plan (SIP) for achieving the goals of the CAA requirements. Conformity with the CAA takes place on two levels—first at the regional level, and second at the project level. A proposed project must conform at both levels to be approved.

Under the Federal Clean Air Act, the San Diego Air Basin (SDAB) is considered to be in nonattainment for the following criteria pollutants: O_3, PM_{10}, and $PM_{2.5}$ (California Air Resources Board 2007) Regional conformity is concerned with how well the region is meeting the standards set for these pollutants. California is in attainment for all other criteria pollutants. At the regional level, local districts (in this case, the San Diego Air Pollution Control District [SDAPCD]) develop and implement rules and regulations aimed at attaining the NAAQS and CAAQS. To this end, RTPs are developed that include all of the transportation projects planned for a region over a period of years, usually at least 20. Based on the projects included in the RTP, an air quality model is run to determine whether or not the implementation of those projects would conform to emissions budgets or other tests showing that attainment requirements of the CAA are met. If the conformity analysis is successful, the regional planning organization, such as SANDAG, and the appropriate federal agencies, such as FHWA, make the determination that the RTP is in conformity with the SIP for achieving the goals of the CAA. Otherwise, the projects in the RTP must be modified until conformity is attained. If the design and scope of a proposed transportation project are the same as described in the RTP, then the proposed project is deemed to meet regional conformity requirements for purposes of project-level analysis. SR-11 is identified in the *Mobility 2030 Revenue Constrained RTP* (2006 Update), the 2006 RTIP and the Draft 2007 RTP as a future four-lane freeway/toll road.

"Hot Spot" Analysis

Conformity at the project level also requires "hot spot" analysis if an area is in nonattainment or maintenance for CO and/or particulate matter. A region is a nonattainment area if one or more monitoring stations in the region fail to attain the relevant standard. Areas that were previously designated as nonattainment areas, but have recently met the standard, are called maintenance areas. The "hot spot" analysis required for conformity evaluation purposes is essentially the same as CO or particulate matter analysis performed for NEPA and CEQA purposes.

Conformity does include some specific standards for projects that require a hot spot analysis. In general, projects must not cause the CO standard to be violated and, in nonattainment areas, the project must not cause any increase in the number or severity of violations. If a known CO or PM violation is located in the project vicinity, the project must include measures, such as purchase of offsets, to reduce or eliminate the existing violation(s) as well. Because the SDAB has been in maintenance for many years, such CO violations are extremely uncommon, and have only been associated recently with wildfire emissions.

3.14.2 Other Considerations: Mobile Source Air Toxics

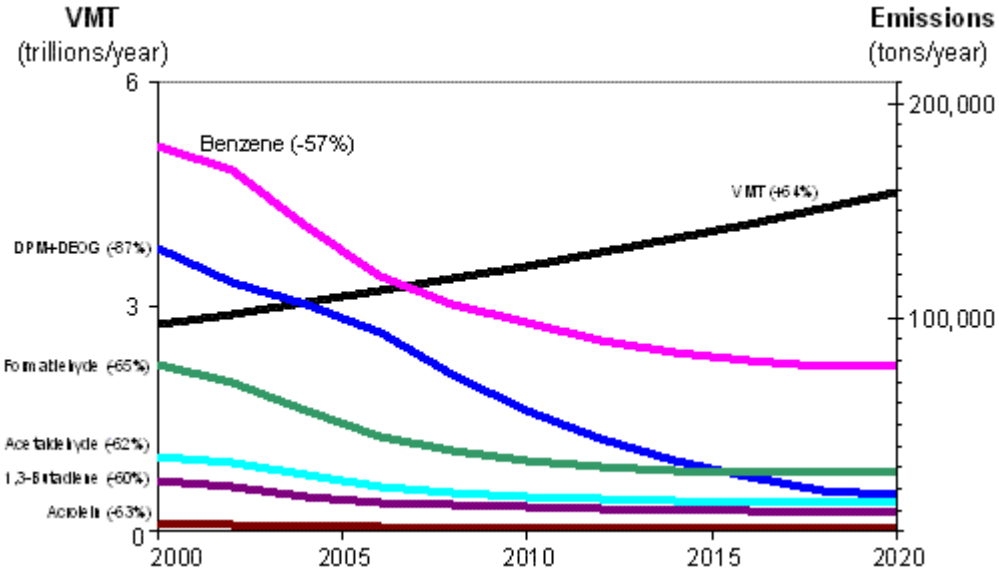
In addition to the criteria air pollutants for which there are NAAQS, EPA also regulates air toxics. Most air toxics originate from human-made sources, including on-road mobile sources, non-road mobile sources (e.g., airplanes), area sources (e.g., dry cleaners) and stationary sources (e.g., factories or refineries).

Mobile Source Air Toxics (MSATs) are a subset of the 188 air toxics defined by the CAA. The MSATs are compounds emitted from highway vehicles and non-road equipment. Some toxic compounds are present in fuel and are emitted into the air when the fuel evaporates or passes through the engine unburned. Other toxics are emitted from the incomplete combustion of fuels or as secondary combustion products. Metal air toxics also result from engine wear or from impurities in oil or gasoline.

The EPA has certain responsibilities regarding the health effects of MSATs. The EPA issued a Final Rule on Controlling Emissions of Hazardous Air Pollutants from Mobile Sources, 66 FR 17229 (March 29, 2001). This rule was issued under the authority in Section 202 of the CAA. In its rule, EPA examined the impacts of existing and newly promulgated mobile source control programs, including its reformulated gasoline (RFG) program, its national low emission vehicle (NLEV) standards, its Tier 2 motor vehicle emissions standards and gasoline sulfur control requirements, and its proposed heavy duty engine and vehicle standards and on-highway diesel fuel sulfur control requirements. Between 2000 and 2020, FHWA projects that even with a 64 percent increase in Vehicle Miles Traveled (VMT), these programs would reduce on-highway emissions of benzene, formaldehyde, 1,3-butadiene, and acetaldehyde by 57 to 65 percent, and would reduce on-highway diesel PM_{10} emissions by 87 percent, as shown in Figure 3.14-1.

As a result, EPA concluded that no further motor vehicle emissions standards or fuel standards were necessary to further control MSATs. The agency is preparing another rule under authority of CAA Section 202(l) that would address these issues and could make adjustments to the full 21 and the primary six MSATs. The FHWA has developed a tiered approach to analysis of MSATs, and has identified three levels of analysis in their *"Interim Guidance on Air Toxic Analysis for NEPA Documents."*

Figure 3.14-1
U.S. ANNUAL VEHICLE MILES TRAVELED (VMT) VS. MOBILE SOURCE AIR TOXICS EMISSIONS, 2000-2020



Notes: For on-road mobile sources. Emissions factors were generated using MOBILE6.2. MTBE proportion of market for oxygenates is held constant, at 50%. Gasoline RVP and oxygenate content are held constant. VMT: Highway Statistics 2000, Table VM-2 for 2000, analysis assumes annual growth rate of 2.5%. "DPM + DEOG" is based on MOBILE6.2-generated factors for elemental carbon, organic carbon and SO4 from diesel-powered vehicles, with the particle size cutoff set at 10.0 microns.

3.14.3 Affected Environment

Meteorology and Climate

The proposed program is located in the SDAB, which coincides with San Diego County. One of the major determinants of air quality in this region is the Pacific Ocean and its semi-permanent high-pressure systems, which result in dry, warm summers and mild, occasionally wet winters. During the summer, the Pacific High Pressure Zone is located to the north, which causes storm tracks to be directed north of California. This high-pressure cell maintains clear skies for much of the year and drives the prevailing winds. When the Pacific High moves southward during the winter, this pattern changes and low-pressure storms are brought into the region, causing widespread precipitation. The months of heaviest precipitation are November through April. Annual precipitation typically ranges from 9 to 14 inches along the coast, and increases with elevation as moist air is lifted over the mountains (University of California San Diego 2007).

The interaction of ocean, land and the Pacific High Pressure Zone influences the wind patterns of California. Local terrain is often the dominant factor inland, and winds in the inland mountainous areas tend to blow up the valleys during the day and down the hills and valleys at night. The predominant wind directions are westerly and west-southwesterly during all four seasons, and the average annual wind speed is 5.6 miles per hour.

In conjunction with the two characteristics of onshore/offshore wind patterns, two types of temperature inversions (reversals of the normal decrease of temperature with height) occur within the region, which affect atmospheric dispersive capability and act to degrade local air quality. During the summer, an inversion at approximately 1,100 to 2,500 feet is formed over

the entire coastal plain, when the warm air mass over land is undercut by a shallow layer of cool marine air flowing onshore. During the winter, a nightly shallow inversion layer (at about 800 feet) forms between the cooled air at the ground and the warmer air above, which traps vehicular pollutants. Inversion layers are therefore important elements of local air quality because they inhibit the dispersion of pollutants, thus resulting in a temporary degradation of air quality.

The predominant onshore/offshore wind pattern is sometimes interrupted by so-called Santa Ana conditions, when high pressure over the Nevada-Utah area overcomes the prevailing western winds, sending strong, steady, hot and dry winds from the east over the mountains and out to sea. Strong Santa Ana's tend to blow pollutants out over the ocean, producing very clear days. However, at the onset of these conditions, or if the Santa Ana is weak, prevailing northwesterly winds reassert themselves and send a cloud of contamination from the Los Angeles Basin ashore in the SDAB (SDAPCD 2007).

Existing Air Pollution Sources

Air quality in the SDAB, as measured at the Otay Mesa-Paseo International station in the existing Otay Mesa POE and the Chula Vista station (which is the nearest station that measures $PM_{2.5}$) is currently classified as nonattainment for the 8-hour NAAQS for ozone, and the 24-hour and annual CAAQS for PM_{10}. The area is in attainment of all other criteria pollutant standards. The immediate area surrounding the proposed program is primarily undeveloped, and is planned for primarily industrial development pursuant to the EOMSP. Refer to Section 3.1 for a more detailed description of existing and planned land uses in the area. Existing major transportation facilities in the Otay Mesa area include I-5, I-805, SR-905 and the recently completed SR-125. An extension of SR-905 between I-805 and SR-125 has been approved, but has not yet been constructed. Section 3.6 provides a more detailed description of the existing and planned transportation network within the program area. There are three existing border crossings in the region; San Ysidro, Otay Mesa and Tecate. These border crossings and the current issues regarding long wait times at each crossing are described in Chapter 1. These existing extensive wait times are associated with increased idle times by passenger vehicles and trucks, with increased levels of pollutants being emitted into the air and to the surrounding communities, and have caused a great deal of concern about public health issues. These conditions are projected to worsen due to continued growth in the numbers of passenger vehicles and trucks crossing the border.

3.14.4 Impacts

Regional Air Quality Conformity

This Phase I analysis is exempt from conformity, because it would not involve construction or physical impacts, and there would be no generation of pollutants that would substantially impact air quality. Phase II conformity would be assessed during the Phase II environmental review, based on the Phase II alternative design/operational characteristics.

Western and Central Alternatives

As noted in the Introduction to Chapter 3, no ground-disturbing activities would occur during Phase I; therefore, no air quality impacts would occur in association with either the Western Alternative or Central Alternative.

An air quality technical study(s) would be prepared to address the Phase II design/operational alternatives for SR-11 and the POE. Issues that would be addressed by the lead agencies for the Phase II environmental documents would include the potential for the alternatives addressed to benefit or adversely affect air quality, which would depend on the specific design, construction and operational characteristics of the Phase II alternatives that have not yet been identified. The Phase II environmental review would include, as part of the future NEPA/CEQA environmental process, an analysis of Federal, state and local standards for criteria pollutants for the overall assessment area. The analysis would also utilize FHWA guidance to determine the appropriate approach to analysis of MSATs. The analysis would address the potential for the proposed Phase II alternatives to enhance the movement of people, services and goods within the region to improve traffic flow and reduce border wait times, thereby benefiting the air quality within the region. The study would also determine whether substantial border wait times could persist or new traffic congestion problems could be created during Phase II, and would analyze a variety of pollutants to assess the projects' potential to impact the environment.

No Action Alternative

Under the No Action Alternative, the proposed program would not be implemented, a preferred corridor would not be identified, a route would not be adopted, a Presidential Permit would not be granted, and site reservation for the future Otay Mesa East POE would not occur. Although increasingly stringent emissions requirements may have a positive effect, air quality near the areas surrounding the POE exits is expected to decline over time, based on the lack of improvement to the present circulation elements, the expected increase in population growth, and the forecasted increase in bi-national vehicular movement of people, goods and services. As these changes occur, without the benefit of SR-11 and the Otay Mesa East POE, adverse effects to regional air quality could occur.

3.14.5 Avoidance, Minimization and/or Mitigation Measures

Because no impacts were identified for Phase I implementation under any of the described alternatives, no associated avoidance, minimization or mitigation measures are proposed.

As required by NEPA, measures would be identified during Phase II to avoid, minimize or mitigate impacts that may occur related to air quality. If air quality impacts are identified during the Phase II environmental analysis, then appropriate measures would be incorporated into the proposed program to avoid, minimize or mitigate those impacts. This could include consideration of ways to minimize impacts through design commitments and other infrastructure and efficiency-based improvements to reduce truck idling and improve throughput at the POE. Caltrans is currently conducting a study to investigate border crossing delays and idling emissions that result from cross border travel, including an evaluation of potential methods to allow the proposed Otay Mesa East POE to become a "smart border crossing" through enhanced technological applications and possible tolling, which would minimize potential impacts to air quality. The final report is anticipated in June 2008.

Avoidance, minimization or mitigation of the potential air quality impacts associated with potential traffic congestion under the No Action alternative is not required under CEQA or NEPA.

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3.15 NOISE AND VIBRATION

3.15.1 Regulatory Setting

NEPA and CEQA provide the broad basis for analyzing and abating the noise and vibration effects of the proposed program. The intent of these laws is to promote the general welfare and to foster a healthy environment.

For highway transportation projects with FHWA involvement, the Federal-Aid Highway Act of 1970 and the associated implementing regulations (23 CFR 772) govern the analysis and abatement of traffic noise impacts. The regulations require that potential noise impacts in areas of frequent human use be identified during the planning and design of a highway project. The regulations contain noise abatement criteria (NAC) that are used to determine when a noise impact would occur.

Table 3.15-1
NOISE ABATEMENT CRITERIA

Activity Category	Hourly A-Weighted Sound Level dBA, Leq(h)	Description of Activity Categories
A	57 exterior	Lands where serenity and quiet are of extraordinary significance and serve an important public need, and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B	67 exterior	Picnic area, recreation areas, playgrounds, active sport areas, parks, residences, motels, hotels, schools, churches, libraries, and hospitals.
C	72 exterior	Developed lands, properties or activities not included in Categories A or B above.
D	--	Undeveloped lands.
E	52 (interior)	Residences, motels, hotels, public meeting rooms, schools, churches, libraries, hospitals, and auditoriums.

3.15.2 Affected Environment

A study of the program area by land use type identified industrial, commercial and low-density residential as the existing usages, with the proposed SR-11 corridors and POE sites being primarily surrounded by undeveloped land. A vehicle auction yard is located at the southwest corner of Otay Mesa Road and Alta Road, and two vehicle/container storage lots are located in the southwestern corner of the program area, along with a CVEF operated in cooperation with the existing Otay Mesa POE by the CHP. Much of the western edge of the program area is developed with industrial uses, including a power plant located in the northwest corner of the program area within the City of San Diego. Two small commercial zones, developed primarily with hotel/motel/restaurant uses, also are located on the western edge of the program area. The only residential uses in the vicinity are three single-family residences grouped together on the north side of Otay Mesa Road, between SR-905 and Alta Road.

A complete noise analysis would be prepared for Phase II to identify potential traffic noise impacts and abatement considered, if necessary. A determination would be made as to whether sensitive receptors exist at that time.

3.15.3 Impacts

Western and Central Alternatives

As noted in the Introduction to Chapter 3, no ground-disturbing activities or construction would occur during Phase I; therefore, no noise or vibration impacts would occur in association with either the Western or Central Alternatives.

Implementing Regulation 23 CFR 772, which governs the analysis and abatement of traffic noise impacts, applies to Type I or Type II projects. FHWA defines a Type I project as a proposed Federal or Federal-aid highway project for the construction of a highway on a new location, or the physical alteration of an existing highway, that significantly changes either the horizontal or vertical alignment or increases the number of through-traffic lanes. A Type II project is a noise barrier retrofit project that involves no changes to highway capacity or alignment. Because Phase I of the proposed program includes only corridor preservation, route adoption and R/W acquisition, it is not considered a Type I or II project, and therefore no noise or vibration analysis is required. However, Phase I would commit the SR-11 Corridor and POE site for the future development of these uses in Phase II. Since the closest residences are 1,100 feet away from both the Western and Central Alternatives, and both alternatives would equally affect the existing industrial buildings that are adjacent to the SR-11 Corridor, east of Sanyo Avenue, there are no potential Phase II impacts associated with the proposed program that would influence the identification of a preferred alternative in Phase I.

Phase II noise and vibration impacts would depend on the characteristics and precise locations of the design/operational alternatives to be studied during Phase II, as well as any changes in the affected environment by the time that Phase II is initiated, and cannot be predicted at this time. Complete noise and vibration studies would be conducted as part of the Phase II NEPA/CEQA review to address project-level and cumulative impacts. If sensitive receptors were determined to exist, measurements of existing noise levels at representative locations would be taken and future noise levels would be predicted at those receptors. The Phase II studies would analyze the potential noise impacts from the proposed SR-11 and POE alternatives, project consistency with the applicable NACs, and potential abatement measures.

No Action Alternative

Under the No Action Alternative, the described Phase I and Phase II actions would not be implemented, and no impacts related to noise or vibration would occur. Noise level increases from the proposed program would not impact surrounding commercial, industrial and residential uses and abatement measures would not be required.

3.15.4 Avoidance, Minimization and/or Mitigation Measures

Phase I under both program alternatives does not propose or address specific design, construction, operational characteristics, or location of SR-11 or the POE. Noise level increases would not occur for commercial, industrial and residential uses during this phase of the program, so abatement measures would not be considered.

As required by NEPA, measures would be identified during Phase II to avoid, minimize or mitigate impacts that may occur related to noise. A complete noise analysis would be prepared for Phase II to identify potential noise impacts and abatement considered (if necessary). Once potential impacts are determined, the appropriate abatement measures would be determined, and, if necessary, incorporated into the SR-11 and POE projects as design measures.

Because no impacts were identified for implementation of the No Action Alternative, no associated avoidance, minimization or mitigation measures are proposed.

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BIOLOGICAL ENVIRONMENT

3.16 NATURAL COMMUNITIES

This section of the document discusses natural communities of concern. The focus of this section is on biological communities, not individual plant or animal species; information on wildlife corridors and habitat fragmentation is also included. Wildlife corridors are areas of habitat used by wildlife for seasonal or daily migration. Habitat fragmentation involves the potential for dividing sensitive habitat, and thereby lessening its biological value.

Wetlands and other waters are discussed below in Section 3.17. Habitat areas that have been designated as critical habitat under the FESA are discussed in Section 3.20, *Threatened and Endangered Species*.

3.16.1 Regulatory Setting

The proposed program is subject to a number of Federal and State regulatory requirements related to the biological environment, as described below and in subsequent sections.

National Environmental Protection Act

NEPA directs "a systematic, interdisciplinary approach" to planning and decision-making and requires environmental statements for "major Federal actions significantly affecting the quality of the human environment." Implementing regulations by the Council on Environmental Quality (CEQ) (40 CFR Parts 1500-1508) require Federal agencies to identify and assess reasonable alternatives to proposed actions that will restore and enhance the quality of the human environment and avoid or minimize adverse environmental impacts. NEPA issues relevant to natural communities may include potential impacts to sensitive natural communities, migration routes, fish passage, wildlife corridors, habitat fragmentation, and regional conservation plans, such as Habitat Conservation Plans (HCPs) or MSCPs.

Title 23 United States Code Section 109 - Standards

The goal of 23 USC 109(h) is to ". . . assure that possible adverse economic, social, and environmental effects relating to any proposed project on any Federal-aid system have been fully considered in developing such project, and that the final decisions on the project are made in the best overall public interest, taking into consideration the need for fast, safe and efficient transportation, public services, and the costs of eliminating or minimizing such adverse effects." Among the potential adverse effects to be considered is the "destruction or disruption of… natural resources," which could include natural communities.

California Environmental Quality Act Guidelines

CEQA identifies the following potential CEQA issues relevant to natural communities: substantial adverse effects on sensitive natural communities, substantial interference with the movement of any resident or migratory fish or wildlife species, and conflict with local policies or ordinances or with the provisions of an adopted habitat conservation plan.

Multiple Species Conservation Program

The NCCP initiated by the State of California in 1991 resulted in the promulgation of the special 4(d) rule of the FESA. This rule focuses on conserving coastal sage scrub habitat in order to avoid the need for future federal and state listing of each individual coastal sage scrub-dependent species. The City of San Diego, the County of San Diego, USFWS, California Department of Fish and Game (CDFG) and other local jurisdictions joined together in the late 1990s to develop the MSCP, a program to ensure the viability of covered habitat (generally upland) and species throughout the region, while still permitting some level of continued development. The County of San Diego MSCP Subarea Plan (Subarea Plan) was created to avoid or reduce adverse effects to regionally sensitive biological resources through efforts such as avoiding or minimizing development in coastal sage scrub habitat, as well as mitigating impacts by habitat revegetation, creation and/or preservation. The MSCP Subarea Plan regulates effects on natural communities throughout the region, including those on East Otay Mesa. Although the program alternatives are located within the South County Segment of the MSCP Subarea Plan, Caltrans is not an enrolled agency under the MSCP. While Caltrans strives to be consistent with the MSCP, it is not required to comply with the local plan. Rather, because the SR-11 program has a federal nexus, Phase II would be permitted under Section 7 of the FESA.

Each segment of the MSCP Subarea Plan has been mapped according to the sensitivity of its biological resources, with named designations identified to reflect each mapped area's relative level of constraint for proposed development in the County. Although the proposed program is not subject to these processes, because Caltrans is not an enrolled agency under the MSCP and the program does not require County approval, the designations reflect the relative sensitivity of the biological resources in each mapped area (see Figure 3.16-1). The program alternatives contain three such designations: Take Authorized, Minor Amendment Area and Minor Amendment Area Subject to Special Considerations. The Take Authorized area includes Enrico Fermi Drive. The majority of the rest of the program alternatives are in a Minor Amendment Area where habitat can be partially or completely eliminated without significantly affecting the overall goal of the County's Subarea Plan (County 1997). Minor Amendment Areas Subject to Special Considerations occur in the southeastern portion of the program area, within the proposed POE sites. These are subject to certain requirements of the County's EOMSP, including the preparation and County approval of a Resource Conservation Plan prior to any development that includes clearing or grading. Caltrans would not be required to produce a Resource Conservation Plan because it is not an enrolled agency under the MSCP. However, a discussion of the project's context within the MSCP is included since Caltrans strives to be consistent with the MSCP. Figure 3.16-1 illustrates the MSCP designations that correspond to the program alternatives.

3.16.2 Affected Environment

A *Biological Resources Existing Conditions Report* (2008) was prepared for the subject program and applicable portions have been summarized in this section of the PEIR/PEIS. The *Biological Resources Existing Conditions Report* for the subject program presents the results of surveys conducted in 2006 for a defined 872-acre survey area, supplemented with historic biological data from prior surveys conducted in 2001, 2002 and 2005. Prior surveys were also used for areas to the west and east of the 2006 survey area, as needed. Figure 3.16-2 shows the various survey areas and dates relative to the program alternatives. As shown, most of the area west of

Enrico Fermi Drive was not surveyed in 2006. In this area, the SR-11 corridors overlap with the approved off-ramp from the SR-905/SR-125 Interchange to Enrico Fermi Drive. As discussed at the beginning of Chapter 3, the portion of the SR-11 Corridor shown on Figure 3.16-2, has been previously addressed through the CEQA/NEPA process and approved for development with the SR-905 project, with the exception of a small sliver of developed land along the south side of the SR-11 Corridor that was not included within the SR-905 project. No potential biological impacts would be associated with this additional developed area. The impacts to biological resources within this western portion of the SR-11 corridor are already approved and mitigation has been negotiated with the resources agencies. This area is delineated on Figure 3.16-3. The remainder of the biology sections focus on the remaining eastern portions of the two alternatives, which would have the potential for new impacts associated with the proposed program.

Western Alternative

Natural Communities

Two natural community types occur within the portion of the program area covered by the Western Alternative SR-11 Corridor/POE site: wetland and grassland.

Generally, wetlands are lands where saturation with water is the dominant factor determining the nature of soil development and the types of plant and animal communities living in the soil and on its surface (Cowardin 1979). The wetlands occurring within the Western Alternative include waters of the U.S./streambed and disturbed mule fat scrub. A detailed wetlands discussion is provided in Section 3.17, *Wetlands and Other Waters*.

Grassland is characterized by grass or grass-like vegetation as the dominant form of plant life. The dominant grassland community occurring throughout the SR-11 corridor and Otay Mesa East POE site under the Western Alternative is non-native grassland; one small patch of native grassland occurs along the edge of the proposed Siempre Viva Interchange area within the Western SR-11 Corridor.

Although it is interspersed with small wetland areas, the grassland natural community dominates the vegetated land in the Western Alternative. Disturbed habitat and developed land are also present in the corridor and POE site, as described below.

Vegetation Communities

Figure 3.16-3 shows the most current available vegetation mapping for the Western and Central Alternatives and adjacent areas between Enrico Fermi Drive and the international border. Five vegetation communities occur within the eastern portions of the Western Alternative, as listed in Table 3.16-1 and described below (see Figure 3.16-4, Vegetation Map).

Mule Fat Scrub-Disturbed

Disturbed mule fat scrub is described in Section 3.17, *Wetlands and Other Waters*. Two patches of mule fat scrub totaling 0.25 acre are located midway through the Western SR-11 Corridor, as noted in Table 3.16-1. No mule fat scrub occurs within the Western POE Site (Figure 3.16-4).

Table 3.16-1
VEGETATION COMMUNITIES WITHIN THE WESTERN ALTERNATIVE

Vegetation Community	SR-11 Corridor (acres)*	POE Site (acres)	TOTAL (acres)
Mule Fat Scrub-Disturbed	0.25	--	0.25
Native Grassland	<0.01	--	<0.01
Non-native Grassland	69.44	89.57	159.01
Disturbed Habitat	1.63	5.23	6.86
Developed	7.48	4.65	12.12
TOTAL	**78.80**	**99.45**	**178.25**

*Includes only the eastern portions of SR-11 shown on Figure 3.16-4

Native Grassland

Native grassland is a community dominated by perennial native bunchgrasses, often mixed with annual and perennial forbs. The majority of native grasslands in California have been displaced by non-native grassland dominated by introduced annual species; however, native grasslands persist in areas as small isolated islands. Considered sensitive by the CDFG (Holland 1986) and the County (1991), native grasslands are one of the most heavily impacted plant communities in California. Less than 0.01 acre of native grassland occurs within the Western SR-11 Corridor, along the southwest edge of the future Siempre Viva Interchange area, as shown on Figure 3.16-4 and in Table 3.16-1. This small patch of native grassland is dominated by saltgrass (*Distichlis spicata*), intermingled with upland non-native grasses such as oats (*Avena* spp.). Native grassland does not occur in the Western POE site.

Non-native Grassland

Areas that currently support non-native grassland may have historically supported native grassland, but now consist of a dense to sparse cover of introduced grasses and often numerous species of showy-flowered, native, annual forbs (Holland 1986). This habitat is commonly associated with deep, fine-textured soils with some clay content. Introduction of exotic grasses in California due to grazing and agricultural practices, coupled with severe droughts, has contributed to the conversion of native grasslands to non-native grasslands (Jackson 1985). Whereas native grasslands support mostly perennials, such as needlegrass (*Nassella* sp.), non-native grasslands (including those throughout the program area) support mostly annuals. Regardless of species composition, grasslands throughout the County (including non-native) are considered sensitive, as they provide important foraging habitat for many sensitive birds of prey such as the burrowing owl (*Athene cunicularia*), northern harrier (*Circus cyaneus*) and white-tailed kite (*Elanus leucurus*). These and other raptor species have been observed within the program area. Non-native grasslands may also support native forbs, adding to the value of this habitat. Characteristic species of the non-native grasslands found on site include oats, red brome (*Bromus madritensis* ssp. *rubens*), ripgut (*Bromus diandrus*), ryegrass (*Lolium* spp.), and mustard (*Brassica* sp.). Non-native grassland is the dominant vegetation community throughout the Western Alternative, occupying a total of 159.01 acres, with 69.44 acres within the SR-11 corridor and 89.57 acres within the POE site (Figure 3.16-4 and Table 3.16-1).

Disturbed Habitat

Disturbed habitat includes unvegetated or sparsely vegetated areas, particularly where the soil has been heavily compacted by prior development or vehicular activity. Characteristic species include mustard, star-thistle (*Centaurea melitensis*), fennel (*Foeniculum vulgare*), and Russian thistle (*Salsola tragus*). As indicated on Figure 3.16-4, disturbed areas in the Western Alternative total 6.87 acres, consisting primarily of dirt road segments and areas cleared of vegetation for future development. Approximately 1.63 acres of disturbed habitat occur in the Western SR-11 Corridor and 5.23 acres occur in the Western POE Site (Table 3.16-1).

Developed

Developed land occurs where permanent human structures or pavement have been installed or where landscaping is clearly tended and maintained, preventing growth of native vegetation. The Western Alternative includes developed areas consisting of a paved road, portions of an auto auction lot and utilities. This developed area acreage includes 7.48 acres in the western and north-central portions of the Western SR-11 Corridor, and 4.64 acres along the southern border of the Western POE Site, for a total of 12.12 acres (Figure 3.16-4 and Table 3.16-1).

Multiple Species Conservation Program

The Western Alternative includes lands with three different MSCP Subarea Plan designations (Take Authorized Area; Minor Amendment Area; and Minor Amendment Area Subject to Special Considerations; refer to Figure 3.16-1). As noted previously, Caltrans is not an enrolled agency under the MSCP and is not required to comply with the MSCP Subarea Plan, but does strive to be consistent with the MSCP.

Wildlife Corridors

The primary function of a wildlife corridor is to connect at least two significant habitat areas, facilitating dispersal of individuals between substantive patches of remaining habitat and allowing for long-term genetic interchange (Bond 2003). Two wildlife corridors occur north of the program area: Johnson Canyon and, farther north, O'Neal Canyon. These two canyons connect Otay Mountain with the Otay River Valley (Figure 3.16-5).

The entire program area is bordered by development and agriculture to the west and the U.S./Mexico Border fence to the south. These features inhibit movement across the whole of the Western Alternative to the west and south. Wildlife approaching the Western SR-11 Corridor/POE site from the east could eventually reach Johnson Canyon, a regional wildlife corridor approximately 4,000 ft. northwest of the eastern portion of the program area, by moving in a northwest direction up past the Western POE Site and parallel to the Western SR-11 Corridor on the northeast (Figure 3.16-5). However, given the limited vegetative cover in the Western Alternative and in the overall program area (even most of the coastal sage scrub to the east is sparsely shrub-covered), it is more likely that wildlife would largely remain east of the program area, bypassing the Western Alternative altogether. Wildlife moving toward O'Neal Canyon from southerly areas also would likely bypass the entire program area for a more easterly route.

Central Alternative

Natural Communities

Four natural community types occur within the Central Alternative: wetland, shrubland, grassland, and woodland.

Wetland and grassland natural communities are briefly described above under the Western Alternative discussion; a more detailed wetlands discussion is provided in Section 3.17. Wetlands and other waters occurring within the Central SR-11 Corridor include disturbed mule fat scrub and waters of the U.S./streambed, with emergent wetland, freshwater marsh, disturbed wetland, and waters of the U.S./streambed located within the Central POE Site. Grassland occurring within the Central Alternative consists solely of non-native grassland.

Shrubland is a natural community dominated by woody shrubs. A shrub is a perennial woody plant that branches at ground level to form several stems. Shrublands form in several different biomes, and may be either a permanent habitat type (one that is stable over time) or a transitional one, caused when another habitat type is disturbed by natural or human causes such as fire. Shrublands occurring within both the Central SR-11 Corridor and POE Site include Diegan coastal sage scrub (including disturbed). Tamarisk scrub occurs only within the Central SR-11 Corridor.

Woodland is land covered with trees, sometimes defined as an open stand of widely spaced trees without a continuous canopy cover. A grouping of large eucalyptus (*Eucalyptus* sp.) trees comprises the only woodland occurring within the Central Alternative, occurring only within the SR-11 corridor.

The majority of the land within the Central Alternative is occupied by grassland. In addition to the other three upland natural communities (wetland, shrubland and woodland), basins with fairy shrimp, disturbed habitat, and developed land occur intermittently throughout the Central SR-11 Corridor and POE site, as described below.

Vegetation Communities

Twelve vegetation communities occur within the study portion of the Central Alternative, between Enrico Fermi Drive and the international border, as shown on Figure 3.16-4 and listed in Table 3.16-2. These vegetation communities are described below; in some cases the reader is referred to the prior discussion for the Western Alignment.

The general descriptions of the non-native grassland, disturbed habitat and developed land provided above for the Western Alternative are also generally applicable to the Central Alternative. Non-native grassland is also the dominant vegetation community within the Central Alternative, occupying a total of 175.32 acres (91.74 acres in the SR-11 corridor and 83.57 acres in the POE site). Disturbed habitat, consisting primarily of dirt roads intermittent throughout the Central Alternative, totals 4.92 acres (1.87 acres in the SR-11 corridor and 3.05 acres in the POE site). Developed areas, totaling 14.88 acres within the Central Alternative (11.02 acres in the SR-11 corridor and 3.86 acres in the POE site), include portions of paved roads, an auto auction lot and utilities (see Figure 3.16-4). Similar to the Western Alternative, the wetland communities that occur in the Central Alternative are included in Table 3.16-2, but discussed in Section 3.17, *Wetlands and Other Waters*. Following is a description of the

additional non-wetland/waters habitats that occur within the Central Alternative, but do not occur within the Western Alternative and therefore were not described above.

Table 3.16-2
VEGETATION COMMUNITIES WITHIN THE CENTRAL ALTERNATIVE

Vegetation Community	SR-11 Corridor (acres)*	POE Site (acres)	TOTAL (acres)
Basin with Fairy Shrimp**	0.01	<0.01	0.01
Mule Fat Scrub-Disturbed	0.25	--	0.25
Emergent Wetland	--	<0.01	<0.01
Freshwater Marsh	--	0.03	0.03
Disturbed Wetland	--	0.05	0.05
Tamarisk Scrub	0.08	--	0.08
Diegan Coastal Sage Scrub	0.68	5.17	5.85
Diegan Coastal Sage Scrub-Disturbed	1.26	4.30	5.56
Non-native Grassland	91.74	83.57	175.32
Eucalyptus Woodland	0.04	--	0.04
Disturbed Habitat	1.87	3.05	4.92
Developed	11.02	3.86	14.88
TOTAL	**106.95**	**100.04**	**206.99**

* Includes only the eastern portions of SR-11 shown on Figure 3.16-4
** Basin that is not a vernal pool, but is included as a vegetation community because it supports federally endangered fairy shrimp.

Basins with Fairy Shrimp

As noted in Table 3.16-2, basin with fairy shrimp is not a vernal pool nor a true vegetation community, but is included herein because it supports federally endangered fairy shrimp species. Slightly more than 0.01 acre of basin with fairy shrimp occurs within the Central Alternative (Figure 3.16-4); one basin occurs within the POE site (observed prior to 2006) and three are found along dirt roads in the northern portion of the Central SR-11 Corridor. Basin with fairy shrimp is described in greater detail in Section 3.20, *Threatened and Endangered Species.*

Diegan Coastal Sage Scrub (including disturbed)

Diegan coastal sage scrub (including disturbed) occurs over 11.41 acres on hillsides in the eastern-most portion of the Central Alternative (Table 3.16-2 and Figure 3.16-4). Diegan Coastal Sage Scrub (including disturbed) is discussed in greater detail within Section 3.20, *Threatened and Endangered Spe*cies, because it is considered ideal habitat for and is included in the designated final critical habitat units for the federally endangered Quino checkerspot butterfly (*Euphydryas editha quino*), which overlaps with portions of the Western and Central alternatives. Diegan coastal sage scrub also occupies the majority of the designated final critical habitat units for the federally threatened coastal California gnatcatcher (*Polioptila californica californica*), which are adjacent to the eastern portion of the Central SR-11 Corridor.

Eucalyptus Woodland

Eucalyptus woodland is dominated by one or more species of eucalyptus (*Eucalyptus* spp.), all of which are non-native trees that produce substantial leaf and bark litter. The chemical and

physical characteristics of this litter limit the ability of other species to grow in its understory, resulting in limited floristic diversity. Eucalyptus trees have been planted extensively in San Diego County for use as wind blocks, ornamental landscaping and for hardwood production; this vegetation community is not considered sensitive. Given sufficient levels of moisture, these trees naturalize and can expand their range. Within the Central Alternative, 0.04 acre of eucalyptus woodland occurs in the southeast portion of the central corridor (Table 3.16-2). The eastern half of this same stand of trees, in addition to two additional stands of this vegetation community, also occur within the program area; however, they are each found outside the limits of the Central SR-11 Corridor. No eucalyptus woodland occurs in the Central POE Site (Figure 3.16-4).

Tamarisk Scrub

Tamarisk scrub is a shrubby vegetation community consisting of any of several non-native tamarisk species (*Tamarix* spp.) that replace native vegetation subsequent to major disturbance. For this reason, tamarisk scrub species are considered invasive; therefore, this habitat is discussed further in Section 3.21, *Invasive Species*. Approximately 0.08 acre of tamarisk scrub occurs in the central portion of the Central SR-11 Corridor. No tamarisk scrub is found within the Central POE Site (Table 3.16-2 and Figure 3.16-4).

Multiple Species Conservation Program

The Central Alternative includes the same three MSCP Subarea Plan designations as the Western Alternative. Take Authorized Area occurs within the Central SR-11 Corridor along Enrico Fermi Drive, and Minor Amendment Areas and Minor Amendment Area Subject to Special Considerations occur within both the Central SR-11 Corridor and POE Site (Figure 3.16-1). As noted previously, Caltrans is not an enrolled agency under the MSCP and is not required to comply with the MSCP Subarea Plan, but does strive to be consistent with the MSCP.

Wildlife Corridors

As described for the Western Alternative, it is expected that wildlife would generally approach the Central Alternative from the east, reaching Johnson Canyon by moving in a northwest direction along the eastern side of the Central Alternative (Figure 3.16-5). Although wildlife could also cross the Central Alternative, given the limited vegetative cover within the Central Alternative, it is more likely that wildlife would bypass the Central Alternative and largely remain to the east of the program area. Wildlife moving towards O'Neal Canyon from southerly areas also would likely bypass the entire program area in favor of a more easterly route towards O'Neal Canyon.

3.16.3 Impacts

Western and Central Alternatives

As noted in the Introduction to Chapter 3, no ground-disturbing activities would occur during Phase I; therefore, no direct or indirect impacts to natural communities, vegetation communities, MSCP designations, or wildlife corridors would occur in association with either the Western Alternative or Central Alternative SR-11 Corridor or POE and no environmental permits would be required. Although no impacts would occur during Phase I, the identification of a preferred alternative as a result of Phase I would commit the identified SR-11 corridor and POE site for future development with these uses.

Additional biological resources studies would be conducted during Phase II, as part of the engineering and environmental evaluation of the design and operational alternatives for SR-11 and the Otay Mesa East POE. Issues related to natural communities associated with program implementation that would likely be addressed by the lead agencies during the Phase II CEQA/NEPA review would include the potential for the alternatives addressed to result in: direct impacts to the habitats identified as being within the "Affected Environment" of the SR-11 Corridor or POE Site, indirect impacts to adjacent habitats (including "edge effects"), habitat fragmentation, impacts to MSCP areas, and/or impacts to wildlife corridors. A Phase II Natural Environment Study would be required at this stage to evaluate such potential impacts. For the purpose of comparing the potential future Western and Central alternative impacts, and to provide guidance for future Phase II planning, it is assumed that any of the resources present within each program alternative could be impacted during Phase II (refer to Tables 3.16-1 and 3.16-2 for acreages of vegetation communities present within each alternative). Impacts to native grassland and non-native grassland would likely be adverse because grasslands offer foraging habitat for sensitive birds of prey such as the burrowing owl, northern harrier and white-tailed kite. Based on the location of the Western and Central Alternatives relative to the wildlife corridors depicted in Figure 3.16-5, no adverse effects to wildlife corridors would be expected in Phase II. Potential impacts to disturbed mule fat scrub are evaluated in Section 3.17.

No Action Alternative

No direct or indirect impacts (including habitat fragmentation) on natural or vegetation communities would occur under the No Action Alternative, as no ground-disturbing activities are proposed and no environmental permits are required. Similarly, no adverse effects related to the MSCP Subarea Plan or wildlife movement and wildlife corridor functionality would occur.

3.16.4 Avoidance, Minimization and/or Mitigation Measures

Because no impacts were identified for Phase I implementation under any of the described alternatives, no associated avoidance, minimization or mitigation measures are proposed.

As required by NEPA, measures would be identified during Phase II to avoid, minimize or mitigate impacts that may occur related to natural communities. Avoidance, minimization and mitigation recommendations for implementation of the SR-11 Corridor and/or POE Site under Phase II for both development alternatives would begin with the completion of a Natural Environment Study updating existing conditions information and evaluating in detail the potential impacts of the Phase II alternatives within the identified SR-11 and POE alternatives. This study would be completed in conformance with applicable Caltrans requirements, and would include specific measures to avoid, minimize or mitigate development impacts.

Typical measures to avoid or minimize adverse impacts and plan for potential future mitigation requirements during Phase II could include the following (precise measures would be determined during Phase II; measures related to wetlands and other waters are provided in Section 3.17):

- Impacts to any patch of habitat that is subject to fragmentation should be avoided, if possible. Any impacts to this sensitive habitat would require mitigation through revegetation, creation and/or preservation.

- Impacts to non-native grassland would require mitigation through revegetation, creation and/or preservation.

- Impacts to Diegan coastal sage scrub within the SR-11 Corridor or POE site should be minimized to the extent possible. Any impacts to this sensitive habitat would require mitigation through revegetation creation, and/or preservation.

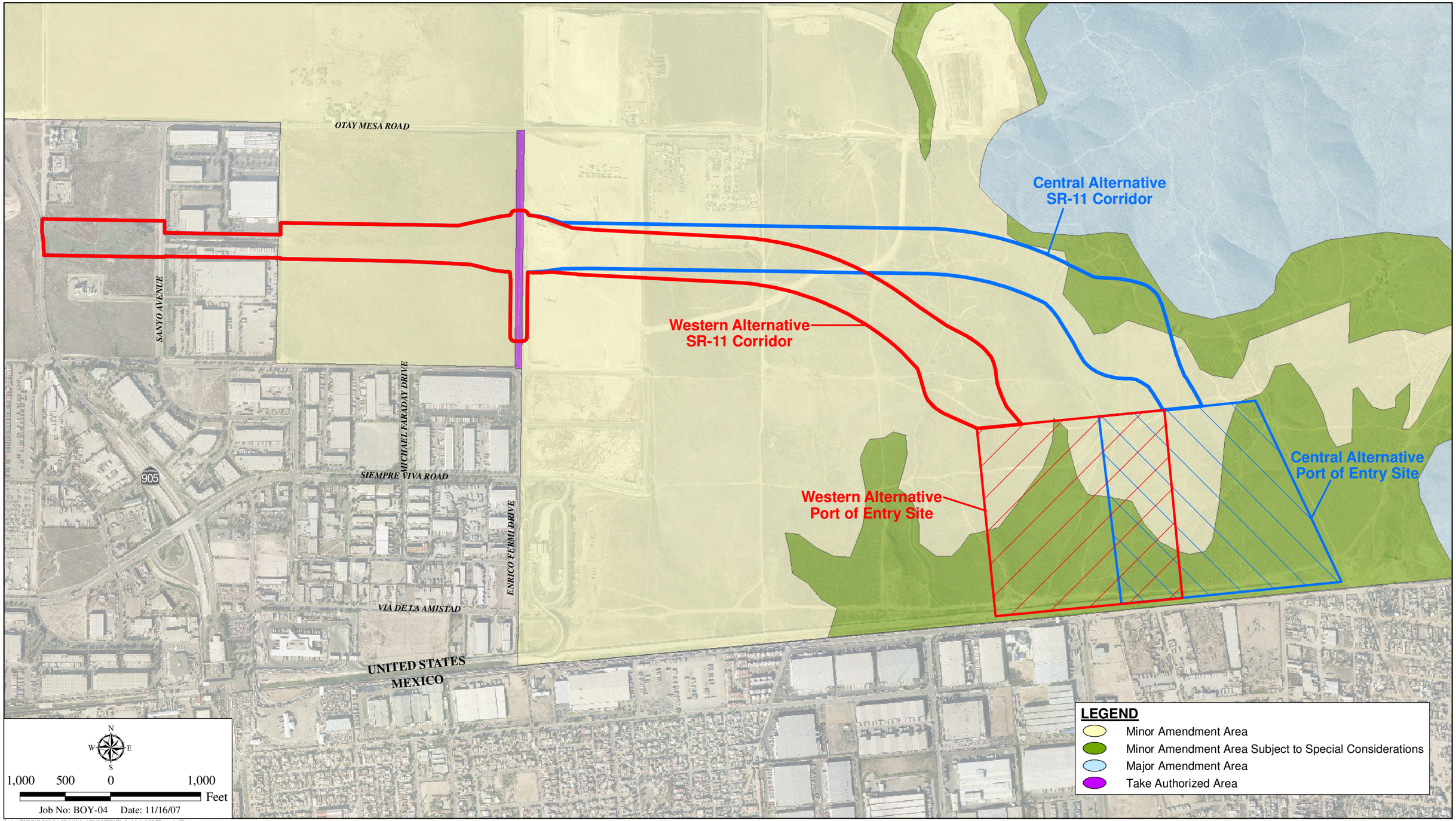
- For SR-11 Corridor and POE Site areas that overlap with an MSCP Minor Amendment Area Subject to Special Considerations, take authorization could occur through a Section 7 consultation and no MSCP-related impacts would occur. Furthermore, impacts to biological resources present within the MSCP designations during Phase II could be mitigated through negotiations with the USFWS under Section 7, and would reference the guidelines of the MSCP Subarea Plan.

- A number of measures are available to reduce edge effects during construction of SR-11 and the POE, including use of construction fencing to clearly delineate the edge of allowable clearing and grading, requiring construction personnel to remain in fenced areas, prohibiting pets on construction sites, and construction monitoring to ensure compliance. Precise measures would be determined during Phase II.

Specific mitigation ratios and measures would be determined in conjunction with the Phase II environmental document and through consultation with the appropriate permitting and resource agencies.

Mitigation planning in Phase II may be affected by the strategy for binational planning related to transportation, housing, economic development, and environmental conservation that is being developed for the Otay Mesa-Mesa de Otay binational corridor by SANDAG and the City of Tijuana's Municipal Planning Institute (IMPlan), in collaboration with the State of Baja California's Secretariat of Infrastructure and Urban Development and Caltrans District 11. The current action that has been proposed is to "conduct an environmental baseline assessment to identify legal mechanisms for habitat conservation in Mexico and compile available data on biological resources that can be conserved as a consequence of foreseeable impacts of the proposed SR 11 and East Otay Mesa POE" (SANDAG 2007b). Tasks for this action would include legal analysis of the mechanisms and processes needed for long-term conservation and management of lands in Mexico, an evaluation of cross-border mitigation needs for transportation projects, and identification of potential mitigation areas and prioritization of land acquisition.

Avoidance, minimization or mitigation of the potential impacts to natural communities under the No Action alternative is not required under CEQA or NEPA.



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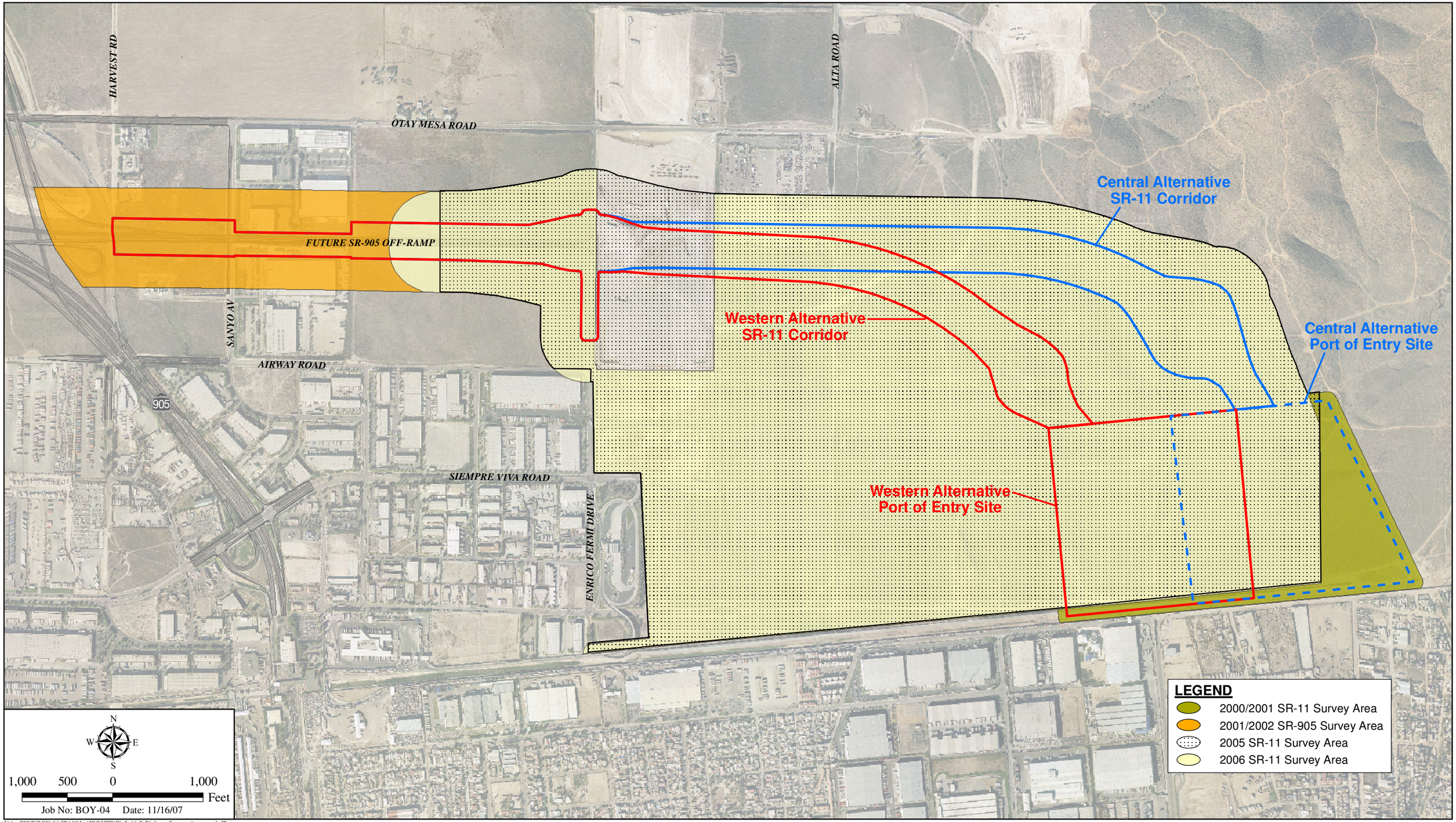
MSCP Designations

STATE ROUTE 11 AND OTAY MESA EAST PORT OF ENTRY PEIR/PEIS

Figure 3.16-1



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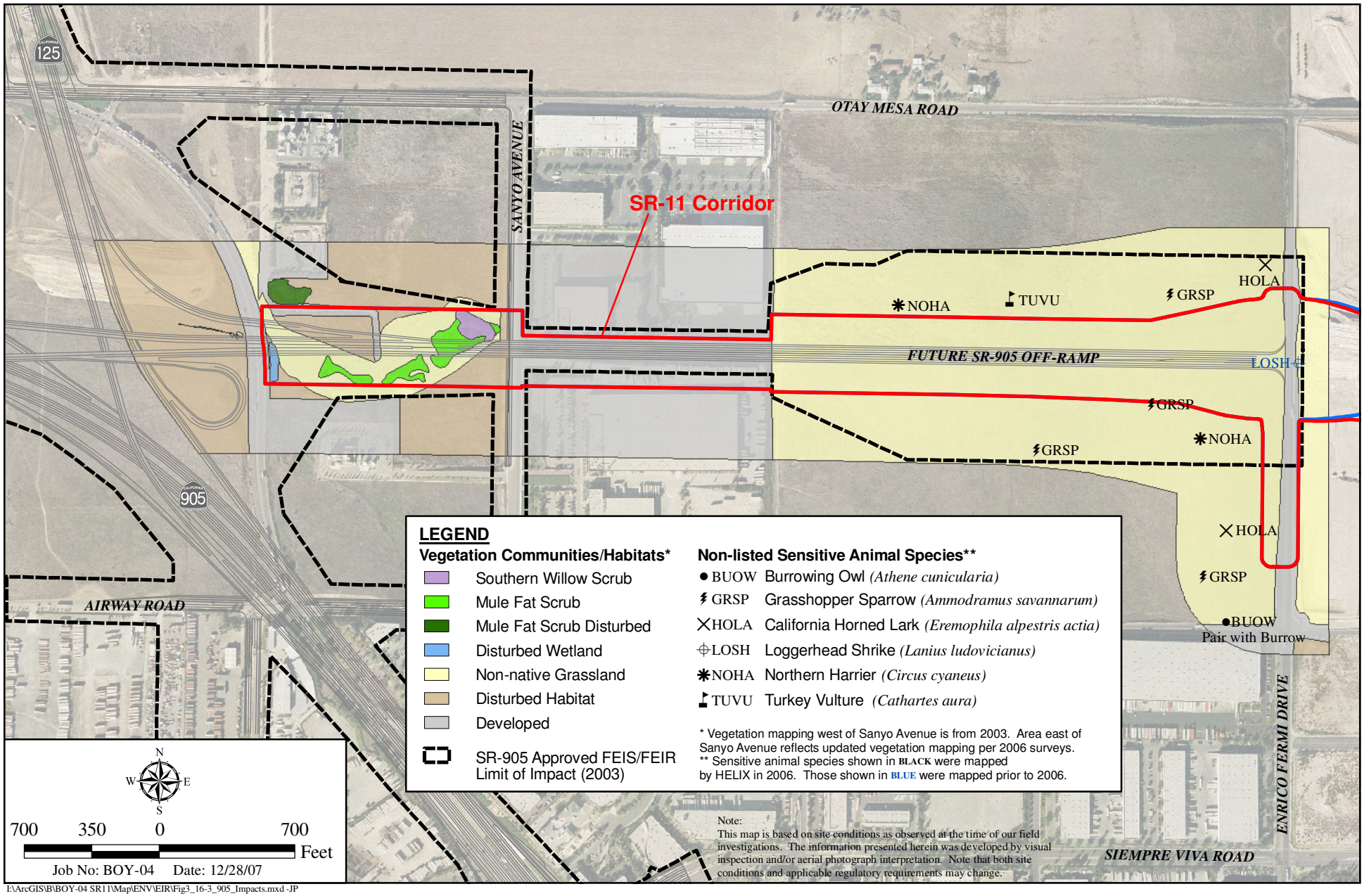
Biology Survey Areas

STATE ROUTE 11 AND OTAY MESA EAST PORT OF ENTRY PEIR/PEIS

Figure 3.16-2



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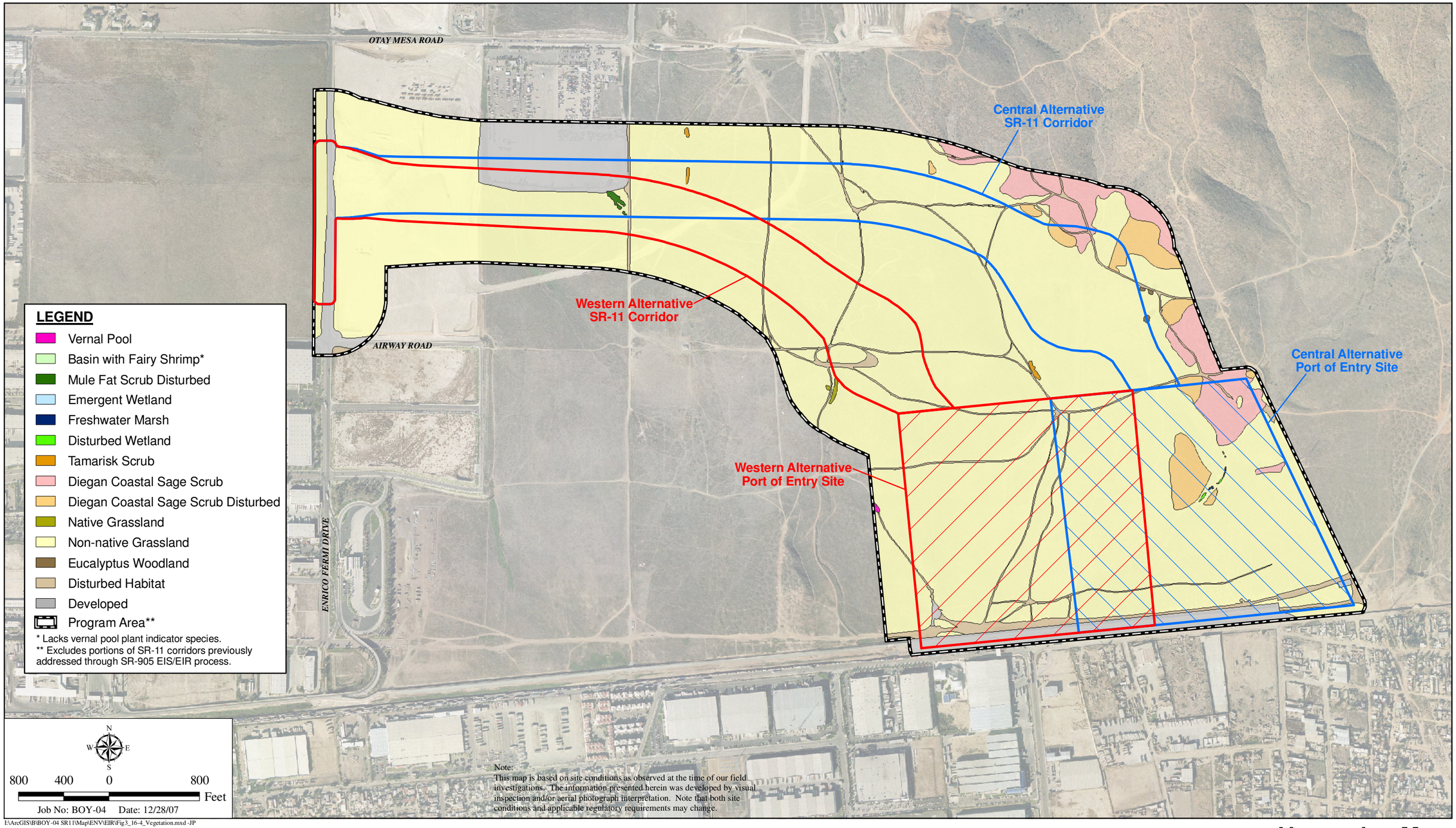
Previously Approved SR-905 Impacts

STATE ROUTE 11 AND OTAY MESA EAST PORT OF ENTRY PEIR/PEIS

Figure 3.16-3



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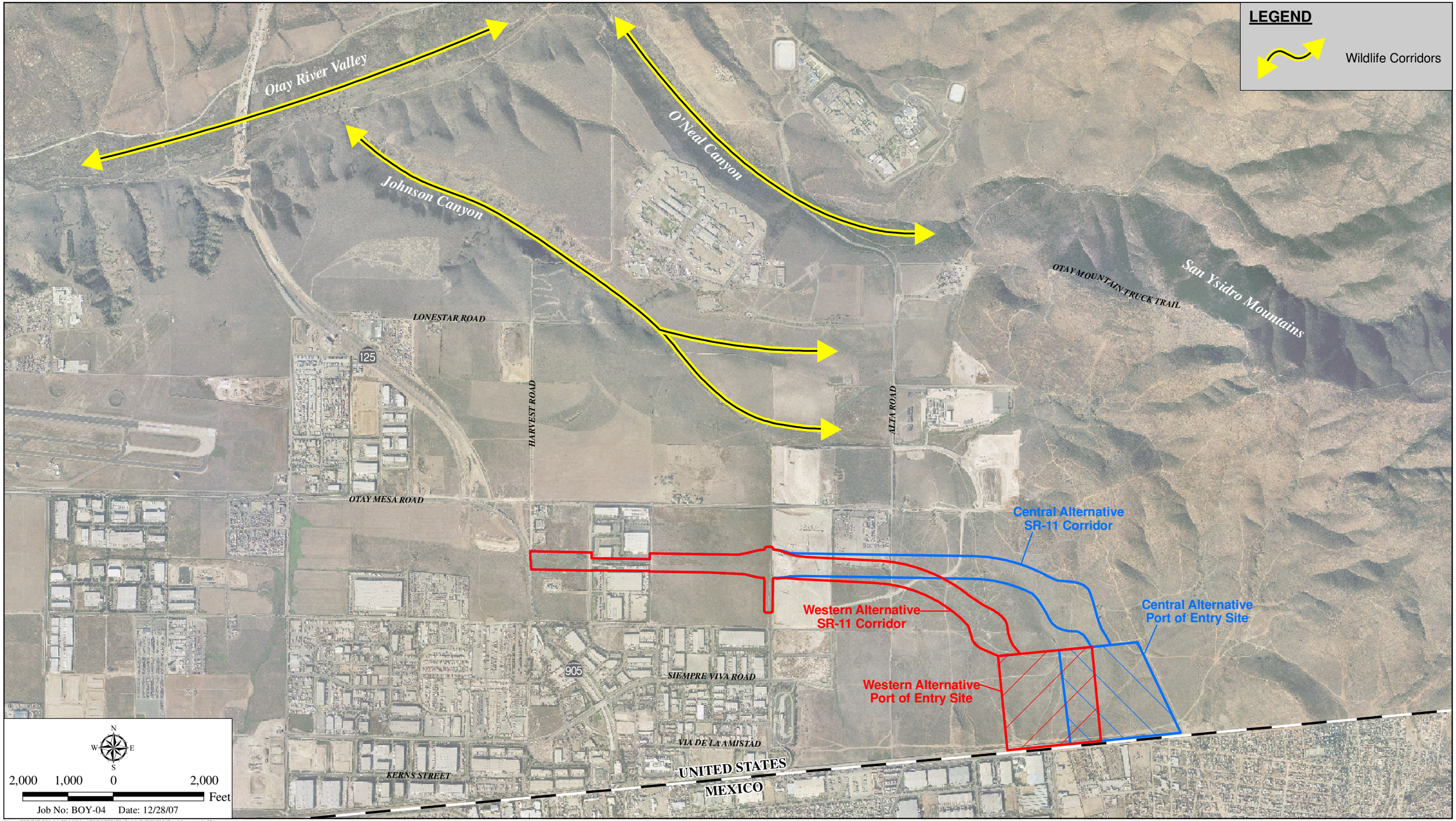
Vegetation Map

STATE ROUTE 11 AND OTAY MESA EAST PORT OF ENTRY PEIR/PEIS

Figure 3.16-4



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Wildlife Corridors

STATE ROUTE 11 AND OTAY MESA EAST PORT OF ENTRY PEIR/PEIS

Figure 3.16-5

3.17 WETLANDS AND OTHER WATERS

This section addresses wetlands and other waters, including regulatory requirements associated with potential impacts, as well as general avoidance, minimization and mitigation measures.

The *Biological Resources Existing Conditions Report,* dated January 2008, and *Jurisdictional Delineation Report*, dated January 2007, were completed for Phase I of the SR-11/Otay Mesa East POE, and are summarized in this section of the PEIR/PEIS.

3.17.1 Regulatory Setting

Federal Regulations

Wetlands and other waters are protected under a number of laws and regulations. At the Federal level, the Clean Water Act (33 U.S.C. 1344) is the primary law regulating wetlands and waters. The Clean Water Act (CWA) regulates the discharge of dredged or fill material into waters of the United States (waters of the U.S. or WUS), including wetlands. Waters of the U.S. include navigable waters, interstate waters, territorial seas, and other waters that may be used in interstate or foreign commerce. To classify wetlands for the purposes of the CWA, a three-parameter approach is used that includes the presence of hydrophytic (water-loving) vegetation, wetland hydrology and hydric soils (soils subject to saturation/inundation). All three parameters must be present, under normal circumstances, for an area to be designated as a jurisdictional wetland under the CWA. In addition, the U.S. Army Corps of Engineers (ACOE) issued guidance especially applicable to wetlands in the arid West in June 2007, including detailed procedures for the application of the “significant nexus” test in jurisdictional determinations. The ACOE Los Angeles District has indicated that delineations verified between June 5, 2005 and June 5, 2007 are not subject to the significant nexus analysis or Arid West Supplement. ACOE verified the majority of the delineation in March 2006, and therefore these regulations do not apply.

Section 404 of the CWA establishes a regulatory program that provides that no discharge of dredged or fill material can be permitted if a practicable alternative exists that is less damaging to the aquatic environment or if the nation’s waters would be significantly degraded. The Section 404 permit program is run by the ACOE, with oversight by the EPA.

The Executive Order for the Protection of Wetlands (E.O. 11990) also regulates the activities of federal agencies with regard to wetlands. Essentially, this executive order states that a federal agency, such as FHWA, cannot undertake or provide assistance for new construction located in wetlands, unless the head of the agency finds that: 1) there is no practicable alternative to the construction and 2) the proposed project includes all practicable measures to minimize harm. E.O 11990 does not apply to Phase I, but would be addressed in conjunction with the Phase II environmental document.

State Regulations

At the State level, wetlands and waters are regulated primarily by CDFG and the applicable RWQCB. Sections 1600-1607 of the Fish and Game Code require any agency that proposes a project that will substantially divert or obstruct the natural flow of or substantially change the bed or bank of a river, stream or lake to notify CDFG before beginning construction. If CDFG

determines that the project may substantially and adversely affect fish or wildlife resources, a Lake or Streambed Alteration Agreement (LSAA) will be required. CDFG jurisdictional limits are usually defined by the tops of the stream or lake banks, or the outer edge of riparian vegetation, whichever is wider. Wetlands under jurisdiction of the ACOE may or may not be included in the area covered by a LSAA obtained from the CDFG.

The RWQCBs were established under the Porter-Cologne Water Quality Control Act to oversee water quality. The RWQCB also issues water quality certifications in compliance with Section 401 of the CWA. In the absence of regulation under Section 401, the RWCQB may regulate water related features and habitats as waters of the State. Please refer to Section 3.12, *Water Quality and Storm Water Runoff*, for additional details.

3.17.2 Affected Environment

Figure 3.16-1 shows the 872-acre 2006 survey area relative to the program alternatives. As shown, most of the area west of Enrico Fermi Drive was not surveyed in 2006. In this area, the SR-11 corridors overlap with the approved off-ramp from the SR-905/SR-125 Interchange to Enrico Fermi Drive, as addressed in the SR-905 EIR/EIS. It is assumed that this off-ramp will be constructed before SR-11 would be built in this area, resulting in a developed condition. As discussed at the beginning of Chapter 3, the portion of the SR-11 Corridor shown on Figure 3.16-2, has been previously addressed through the CEQA/NEPA process and approved for development with the SR-905 project, with the exception of a small sliver of developed land along the south side of the SR-11 Corridor that was not included within the SR-905 project. No potential biological impacts would be associated with this additional developed area. Since the impacts to biological resources within the western portion of the SR-11 corridor are already approved and mitigation has been negotiated with the resources agencies, the discussion below focuses on the remaining eastern portions of the two alternatives, which would have the potential for new impacts associated with the proposed program. This area is delineated on Figure 3.16-3 in Section 3.16, *Natural Communities*.

Western Alternative

Jurisdictional Habitats

Two types of jurisdictional habitats occur within the portion of the program area covered by the Western Alternative SR-11 Corridor/POE site: disturbed mule fat scrub and ACOE non-wetland WUS/CDFG streambed. ACOE jurisdictional areas are listed in Table 3.17-1 and shown on Figure 3.17-1. CDFG jurisdictional areas are listed in Table 3.17-2 and shown on Figure 3.17-2. As discussed above, it is assumed that the impacts associated with the Enrico Fermi Drive off-ramp would occur prior to implementation of SR-11, leaving a developed condition within the off-ramp limits west of Enrico Fermi Drive; thus no impacts to any jurisdictional areas west of Enrico Fermi Drive would result from Phases I and II of the SR-11 Corridor program. The remainder of this discussion therefore focuses on the eastern portions of the Western Alternative that would have the potential for new impacts associated with the proposed program.

Table 3.17-1
ACOE (WUS) JURISDICTIONAL AREAS – WESTERN ALTERNATIVE

HABITAT	SR-11 Corridor (acres)	SR-11 Corridor (linear feet)	POE Site (acres)	POE Site (linear feet)	TOTAL* (acres)	TOTAL* (linear feet)
Non-wetland WUS						
Ephemeral Drainage A	0.03	721	0	0	0.03	721
Ephemeral Drainage C – Reach C3	0	0	0.08	1,815	0.08	1,815
Intermittent Drainage D	0	0	0.10	1,292	0.10	1,292
TOTAL*	**0.03**	**721**	**0.18**	**3,107**	**0.21**	**3,828**

*Totals may reflect rounding.

Table 3.17-2
CDFG JURISDICTIONAL HABITATS- WESTERN ALTERNATIVE

HABITAT	SR-11 Corridor (acres)	POE Site (acres)	TOTAL* (acres)
Mule fat scrub - disturbed	0.25	0	**0.25**
Streambed A	0.03	0	**0.03**
Streambed C – Reach C3	0	0.12	**0.12**
Streambed D	0	0.10	**0.10**
Streambed E – Reach E1	0.03	0	**0.03**
TOTAL*	**0.31**	**0.22**	**0.53**

*Totals may reflect rounding.

Disturbed Mule Fat Scrub

Mule fat scrub is a depauperate, shrubby, riparian scrub community dominated by mule fat and interspersed with shrubby willows (*Salix* sp.). This habitat occurs along intermittent stream channels with a fairly coarse substrate and moderate depth to the water table, in addition to areas that receive urban or irrigation runoff. Two patches of mule fat scrub, totaling approximately 0.25 acre, are located midway through the Western SR-11 Corridor (Figures 3.16-3 and 3.17-2); this habitat is considered disturbed due to the high percentage of non-native cover. Species present included mule fat (*Baccharis salicifolia*), tamarisk (*Tamarix* sp.), black willow (*Salix gooddingii*), scarlet pimpernel (*Anagallis arvensis*), mustard (*Brassica* sp.), bull thistle (*Cirsium vulgare*), and cocklebur (*Xanthium strumarium*). No indicators of wetland hydrology or hydric soil were present. This habitat established as the result of urban run-off from a nearby culvert outlet and irrigation run-off from the adjacent landscaped berm. Because it occurs in an area of historic natural flood conveyance associated with the nearby culvert outlet and landscaped berm, it is considered CDFG habitat. This habitat met only one of the ACOE wetland criteria (vegetation) and does not exhibit an ordinary high water mark (OHWM); and therefore, is not considered ACOE jurisdictional. No mule fat scrub occurs within the Western POE Site.

Non-wetland Waters of the U.S./CDFG Streambed

The Western Alternative supports portions of four unnamed drainages, three of which would be regulated by the ACOE as non-wetland WUS, and all of which would be regulated by the CDFG as streambeds. Drainages exhibiting an OHWM, but lacking adjacent wetland vegetation, were considered ephemeral. Several dirt roads are present on site, and some bisect portions of on-site streambeds. Culverts are not present and flow is conveyed overland across the roads; portions of streambeds within the study area that cross over roadways do not exhibit OHWM indicators or bed and bank topography. Drainages were considered intermittent where hydrophytic vegetation was dominant. One intermittent drainage, ranging from 1 to 5 feet in width, occurs in the southeast corner of the program area (Drainage D; Figures 3.17-1 and 3.17-2). The westernmost extent of Drainage D comprises the portion of this drainage located in the Western POE Site. The remaining drainages in the Western Alternative are ephemeral in nature. Drainage A, which stretches between the northern and southern program area boundaries, bisects the Western SR-11 Corridor on the north end of the eastern interchange area. The portion of Drainage A within the Western Alternative ranges from 1 to 5 feet in width. Drainage C comprises three jurisdictional reaches in the eastern portion of the program area. The only one of these reaches to fall within the Western Alternative is two-foot-wide Drainage C3, which bisects the Western SR-11 POE Site from the northeast to southwest. Only the areas shown in Figures 3.17-1 and 3.17-2 exhibit an OHWM and fall under ACOE/CDFG jurisdiction. Drainages A and C are both ACOE and CDFG jurisdictional, as they are naturally occurring conveyances that drain to Mexico via culverts along the border fence. Drainage E, which receives stormwater runoff through a culvert outlet on the south side of the auto auction lot, comprises two jurisdictional reaches in the western portion of the program area, including one (E2) that is entirely outside of either alternative. Drainage E1, however, passes through the western end of the Western SR-11 Corridor and ranges from 1 to 5 feet in width. Although it exhibits an OHWM in its upper reaches, the drainage quickly fades into non-native grassland once it is outside the corridor. This drainage was considered an isolated feature and therefore not jurisdictional to the ACOE. It is, however, a CDFG streambed, because CDFG jurisdiction is not based on connectivity to other habitats downstream. Drainage B consists of two short ACOE/CDFG jurisdictional reaches, each less than one foot wide, and is located near the northwest corner of the program area, to the north and entirely outside of either alternative.

Federal Jurisdiction Summary

Areas under ACOE jurisdiction within the Western Alternative consist of 0.21 acre of non-wetland WUS (Table 3.17-1; Figure 3.17-1). Approximately 0.03 acre occurs in the Western SR-11 Corridor and 0.18 acre is found in the Western POE Site. The northern half of Drainage A, Reaches C2 and C3 of Drainage C and all of Drainage D downstream of the southernmost disturbed wetland were verified in the field by Stacey Jensen and Laurie Ikuta of the ACOE on March 30, 2006.

State Jurisdiction Summary

Areas under CDFG jurisdiction within the Western Alternative total 0.53 acre, consisting of 0.25 acre of wetlands (disturbed mule fat scrub) and 0.28 acre of streambed (Table 3.17-2; Figure 3.17-2). Approximately 0.31 acre of CDFG jurisdictional features occur in the Western SR-11 Corridor and 0.22 acre in the Western POE Site.

Central Alternative

Jurisdictional Habitats

Six jurisdictional habitat types occur within the portion of the program area covered by the Central Alternative SR-11 Corridor/POE site: disturbed mule fat scrub, freshwater marsh, emergent wetland, disturbed wetland, vernal pools, and ACOE non-wetland WUS/CDFG streambed. ACOE jurisdictional areas are listed in Table 3.17-3 and shown on Figure 3.17-1. CDFG jurisdictional areas are listed in Table 3.17-4 and shown on Figure 3.17-2. The disturbed mule fat scrub occurs in the western portion of the central corridor, in the same location as described above for the Western Alternative (Figures 3.16-4 and 3.17-2), and is not addressed further under the Central Alternative section. As previously discussed, it is assumed that the impacts associated with the Enrico Fermi Drive off-ramp would occur prior to implementation of SR-11, leaving a developed condition within the off-ramp limits west of Enrico Fermi Drive; thus no impacts to any jurisdictional areas west of Enrico Fermi Drive would result from Phases I and II of the SR-11 Corridor program. The remainder of this discussion therefore focuses on the eastern portions of the Central Alternative that would have the potential for new impacts associated with the proposed program.

Table 3.17-3
ACOE (WUS) JURISDICTIONAL AREAS – CENTRAL ALTERNATIVE

Habitat	SR-11 Corridor (acres)	SR-11 Corridor (linear feet)	POE Site (acres)	POE Site (linear feet)	Total* (acres)	Total* (linear feet)
Wetlands						
Freshwater marsh	0	0	0.03	135	**0.03**	**135**
Emergent wetland	0	0	<0.01	40	**<0.01**	**40**
Disturbed wetland	0	0	0.05	175	**0.05**	**175**
Subtotal	**0**	**0**	**0.09**	**350**	**0.09**	**350**
Non-wetland WUS						
Ephemeral Drainage A	0.02	667	0	0	0.02	667
Ephemeral Drainage C – Reach C2	0.01	417	0	0	0.01	417
Ephemeral Drainage C – Reach C3	0	0	0.05	406	0.05	406
Intermittent Drainage D	0	0	0.06	1,880	0.06	1,880
Subtotal	**0.03**	**1,084**	**0.11**	**2,286**	**0.14**	**3,370**
TOTAL*	**0.03**	**1,084**	**0.20**	**2,636**	**0.23**	**3,720**

*Totals may reflect rounding.

Table 3.17-4
CDFG JURISDICTIONAL HABITATS-
CENTRAL ALTERNATIVE

Habitat	SR-11 Corridor (acres)	POE Site (acres)	Total (acres)
Mule fat scrub - disturbed	0.25	0	0.25
Freshwater marsh	0	0.03	0.03
Emergent wetland	0	<0.01	<0.01
Disturbed wetland	0	0.05	0.05
Streambed A	0.03	0	0.03
Streambed C – Reach C2	0.01	0	0.01
Streambed C – Reach C3	0	0.05	0.05
Streambed D	0	0.07	0.07
Streambed E – Reach E1	0.02	0	0.02
TOTAL	**0.31**	**0.20**	**0.52**

Freshwater Marsh

Freshwater marsh is dominated by perennial emergent monocots that can reach a height of between 12 and 15 feet. This vegetation type occurs along the coast and in coastal valleys near river mouths and around the margins of lakes and springs. These areas are permanently flooded by fresh water, yet lack a significant current (Holland 1986). Approximately 0.03 acre of freshwater marsh was recorded in the central portion of the Central POE Site. Wetland species observed include broad-leaved cattail (*Typha latifolia*), slender creeping spike-rush (*Eleocharis montevidensis*), rabbitsfoot grass (*Polypogon monspeliensis*), curly dock (*Rumex crispus*), and African brass-buttons (*Cotula coronopifolia*). Wetland hydrology was indicated by inundation and drainage patterns in wetlands. Hydric soils were indicated by the presence of an aquic moisture regime; water ponding in this portion of the drainage supports a thick growth of obligate and facultative wetland plants that are indicative of a water table at or near the surface for extended periods of time. This habitat met all three wetland criteria and is ACOE and CDFG jurisdictional.

Emergent Wetland

Emergent wetland is a low-growing, herbaceous community that is dominated by a variety of native wetland species, and typically occurs in seasonally wet areas with heavy soils. No emergent wetland occurs within the Central SR-11 Corridor. Approximately 0.005 acre of his habitat, however, was documented in the eastern portion of the Central POE Site. The emergent wetland supports species such as slender creeping spike-rush, grass poly (*Lythrum hyssopifolium*) and salt heliotrope (*Heliotropium curassavicum*). Wetland hydrology was indicated by drainage patterns in wetlands. A soil pit revealed the presence of low-chroma colors, a hydric soil indicator. This habitat met all three wetland criteria and is ACOE and CDFG jurisdictional.

Disturbed Wetland

This vegetation community is typically dominated by exotic wetland species that have likely become established following previous disturbance(s), although this habitat may also contain

native species. The composition of disturbed wetland is highly variable, based on the hydrology, soils, and type and frequency of disturbance. Within the Central Alternative, disturbed wetland only occurs near freshwater marsh in the upstream portions of Drainage D in the Central POE Site. Species present include rabbitsfoot grass and curly dock. Wetland hydrology was indicated by soil saturation and drainage patterns in wetlands. A soil pit revealed the presence of low-chroma colors, a hydric soil indicator. This habitat met all three wetland criteria and is ACOE and CDFG jurisdictional.

Non-wetland WUS/CDFG Streambed

The Central Alternative supports portions of four unnamed drainages, three of which would be regulated by the ACOE as non-wetland WUS, and all of which would be regulated by the CDFG as streambeds. One intermittent drainage occurs within the Central POE Site (Drainage D; Figures 3.17-1 and 3.17-2); it ranges from 1 to 5 feet in width and supports freshwater marsh, emergent wetland and disturbed wetland in its upper reaches. The remaining drainages in the Central Alternative are ephemeral in nature; one is found only in the Central SR-11 Corridor (Drainage A) and another in both the Central SR-11 Corridor and Central POE Site (Drainage C). Drainage A, which stretches between the northern and southern study area boundaries, bisects the Central SR-11 Corridor just east of its mid-point. The entire extent ranges from 1 to 6 feet in width, but the portion within the corridor is 2 feet wide. Drainage C comprises three jurisdictional reaches, ranging from less than 1 foot to 2 feet wide in the eastern portion of the program area. Only the areas shown in Figures 3.17-1 and 3.17-2 exhibit an OHWM and fall under ACOE/CDFG jurisdiction. Drainage C1 is found north of the Central SR-11 Corridor and thus not within either alternative; the majority of C2 falls within the Central SR-11 Corridor in the eastern interchange area and is 1 foot wide; C3 is 2 feet wide and entirely within the Western POE Site (as described above), but its northernmost extent also overlaps with the Central POE Site. Drainage E1, the northern reach of Drainage E found within the Central Alternative, is approximately 5 feet wide and located in the western portion of the Central SR-11 Corridor (Figure 3.17-2). Drainages A, C and D are both ACOE and CDFG jurisdictional. As noted above, Drainage E receives stormwater runoff through a culvert outlet on the south side of the auto auction lot, but the drainage quickly fades into non-native grassland and is considered an isolated feature, not jurisdictional to the ACOE. It is, however, a CDFG streambed. Drainage B consists of two short jurisdictional reaches less than 1 foot wide in the northeastern portion of the program area, to the north and outside of either alternative.

Federal Jurisdiction Summary

Areas under ACOE jurisdiction within the Central Alternative total 0.23 acre, consisting of approximately 0.09 acre of wetlands and 0.14 acre of non-wetland WUS (Table 3.17-3 and Figure 3.17-1). Approximately 0.03 acre of these ACOE jurisdictional areas occur in the Central SR-11 Corridor and 0.20 acre occurs in the Central POE Site. As noted above, the northern half of Drainage A, Reaches C2 and C3 of Drainage C and all of Drainage D downstream of the southernmost disturbed wetland were verified in the field by Stacey Jensen and Laurie Ikuta of the ACOE on March 30, 2006.

State Jurisdiction Summary

Areas under CDFG jurisdiction within the Central Alternative total 0.52 acre, consisting of approximately 0.34 acre of wetlands and 0.18 acre of streambed (Table 3.17-4; Figure 3.17-2).

Approximately 0.31 acre of these CDFG jurisdictional areas are found in the Central SR-11 Corridor and nearly 0.21 acre are found in the Central POE Site.

3.17.3 Impacts

Western and Central Alternatives

As noted in the Introduction to Chapter 3, no ground-disturbing activities would occur during Phase I; therefore, no impacts to wetlands and other waters would occur in association with either the Western or Central Alternative. Although no impacts would occur during Phase I, the identification of a preferred alternative as a result of Phase I would commit the identified SR-11 corridor and POE site for future development with these uses.

Additional biological resources studies would be conducted during Phase II, as part of the engineering and environmental evaluation of the design and operational alternatives for SR-11 and the Otay Mesa East POE. Wetlands-related issues associated with program implementation that would likely be addressed by the lead agencies during the Phase II CEQA/NEPA review would include the potential for the alternatives addressed to result in direct or indirect impacts to any of the jurisdictional wetland communities described in the Affected Environment discussion above, including the jurisdictional habitats identified on Figures 3.17-1 and 3.17-2 and in Tables 3.17-1 through 3.17-4. Direct impacts to any of the ACOE and CDFG jurisdictional drainages located within the Western or Central SR-11 Corridor and POE Site could result from program implementation in Phase II. Such impacts would be adverse, as WUS/streambed is considered sensitive by the resource agencies. Specific Phase II impacts would depend on the future alternative designs/operational characteristics of the Phase II alternatives, and would be evaluated in detail during the Phase II NEPA and CEQA processes. A Phase II Natural Environment Study would be required at this stage to evaluate such potential impacts.

No Action Alternative

No direct or indirect impacts to jurisdictional habitats would occur under the No Action Alternative, as no ground-disturbing activities are proposed and no environmental permits are required.

3.17.4 Avoidance, Minimization and/or Mitigation Measures

Because no impacts were identified for Phase I implementation under any of the described alternatives, no associated avoidance, minimization or mitigation measures are proposed.

As required by NEPA, measures would be identified during Phase II to avoid, minimize or mitigate any potential impacts that may occur related to wetlands and other waters. Avoidance, minimization and mitigation recommendations for implementation of the SR-11 corridor and/or POE site under either Phase II development alternative would begin with the completion of a Natural Environment Study updating existing conditions information and evaluating in detail the potential impacts of the Phase II alternatives within the identified SR-11 and POE alternatives. This study would be completed in conformance with applicable Caltrans requirements, and would include specific measures to avoid, minimize or mitigate development impacts.

Typical measures that could be considered during Phase II to avoid, minimize or mitigate adverse impacts to wetlands and other waters include the following (precise measures would be determined during Phase II):

- Impacts to disturbed mule fat scrub and non-wetland WUS/streambed should be avoided and minimized to the maximum extent practicable through project design.
- Impacts to disturbed mule fat scrub and non-wetland WUS/streambed would require mitigation.
- Compliance with Federal and State "no net loss" policies would require mitigation for direct impacts to disturbed mule fat scrub and/or non-wetland WUS/streambed to include a creation component at a minimum 1:1 ratio. The balance of required mitigation could be met through enhancement, restoration or a combination of the two.
- A number of measures are available to reduce edge effects during construction of SR-11 and the POE, including use of BMPs to avoid degradation of downstream water quality, using construction fencing to clearly delineate the edge of allowable clearing and grading, requiring construction personnel to remain in fenced areas, prohibiting pets on construction sites, and construction monitoring to ensure compliance.

Specific mitigation ratios and measures would be determined in conjunction with the Phase II environmental document and through consultation with the appropriate permitting and resource agencies. Agency coordination that has occurred to date is documented below.

Avoidance, minimization or mitigation of the potential impacts to wetlands and other waters under the No Action alternative is not required under CEQA or NEPA.

Documentation of Agency Coordination

Federal Permitting

Impacts to WUS are regulated by the ACOE under Section 404 of the CWA (33 U.S.C. 401 et seq.; 33 U.S.C. 1344; U.S.C. 1413; and Department of Defense, Department of the Army, Corps of Engineers 33 CFR Part 323). A federal CWA Section 404 Permit would be required for the project to place fill in WUS. Impacts equal to or less than 0.5 acre of WUS are generally processed with a Nationwide Permit and impacts greater than 0.5 acre of WUS are processed with an Individual Permit. A CWA Section 401 Water Quality Certification administered by the SWRCB or RWQCB must be issued prior to any 404 Permit. All areas considered ACOE jurisdiction would be covered under the 401 Certification.

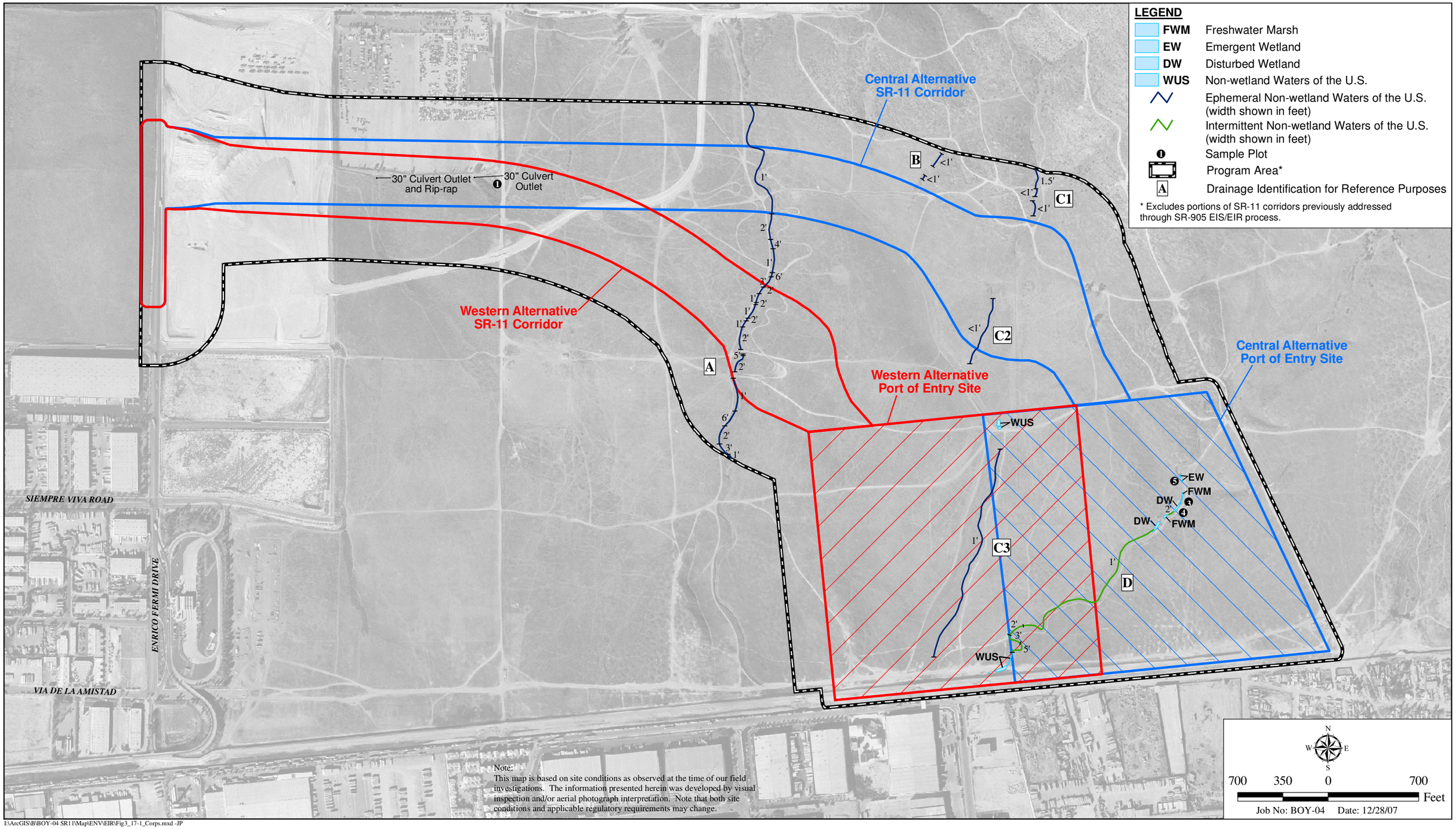
Coordination with federal agencies occurred on March 30, 2006, when several of the onsite drainages were field-verified by Stacey Jensen and Laurie Ikuta of the ACOE. Additional agency coordination has occurred during bi-monthly Interagency Working Group meetings at Caltrans District 11 offices, the Notice of Intent/Notice of Preparation process and the SAFETEA-LU process. Refer to Chapter 6.0 for additional information.

State Permitting

The CDFG regulates alterations or impacts to streambeds or lakes under California Fish and Game Code 1602. The CDFG requires an LSAA for projects that would divert or obstruct the

natural flow of water; change the bed, channel or bank of any stream; or use any material from a streambed. The LSAA is a contract between the applicant and CDFG stating what activities can occur in the riparian zone and stream course (California Association of Resource Conservation Districts 2002). Any impacts to CDFG habitat would be regulated under California Fish and Game Code 1602 and require an LSAA.

Agency coordination with CDFG has occurred during bi-monthly Interagency Working Group meetings at Caltrans District 11 offices, the Notice of Intent/Notice of Preparation process and the SAFETEA-LU process. Refer to Chapter 6.0 for additional information.



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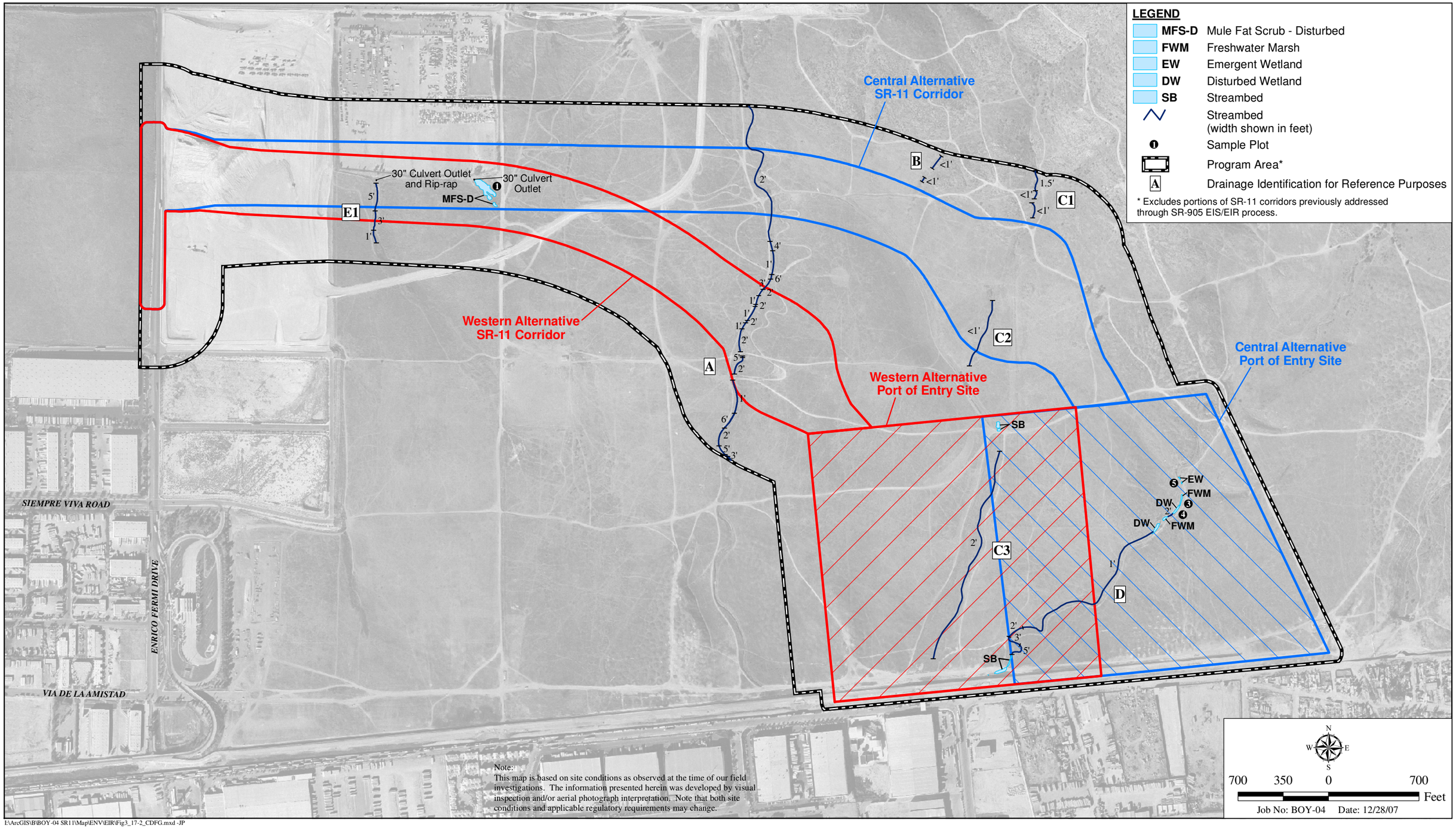
ACOE Jurisdictional Features

STATE ROUTE 11 AND OTAY MESA EAST PORT OF ENTRY PEIR/PEIS

Figure 3.17-1



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CDFG Jurisdictional Features

STATE ROUTE 11 AND OTAY MESA EAST PORT OF ENTRY PEIR/PEIS

Figure 3.17-2

3.18 PLANT SPECIES

This section addresses sensitive plant species that are not federally or state listed. Refer to Section 3.20 for a discussion of threatened and endangered plant species, as well as critical habitat.

3.18.1 Regulatory Setting

The USFWS and CDFG share regulatory responsibility for the protection of special-status plant species. "Special-status" species are selected for protection because they are rare and/or subject to population and habitat declines. Special status is a general term for species that are afforded varying levels of regulatory protection. The highest level of protection is given to threatened and endangered species, which are species that are formally listed or proposed for listing as endangered or threatened under the FESA and/or the CESA. Please see Section 3.20, *Threatened and Endangered Species* in this document for detailed information regarding these species.

This section of the document discusses all the other special-status plant species, including CDFG fully protected species and species of special concern, USFWS candidate species, non-listed CNPS rare and endangered plants, and MSCP narrow endemic species.

The regulatory requirements for FESA can be found at United States Code 16 (USC), Section 1531, et seq. (see also 50 CFR Part 402). The regulatory requirements for CESA can be found at California Fish and Game Code, Section 2050, et seq. Caltrans projects are also subject to the Native Plant Protection Act, found at Fish and Game Code, Section 1900-1913, and the California Environmental Quality Act, Public Resources Code, Sections 2100-21177.

3.18.2 Affected Environment

A *Biological Resources Existing Conditions Report* was completed in January 2008 to present the results of surveys conducted in 2006 for a defined 872-acre survey area, supplemented with historic biological data from prior surveys completed in 2000, 2001, 2002, and 2005. Prior surveys were also used for areas to the west and east of the 2006 survey area, as needed. The relevant survey data from the *Biological Resources Existing Conditions Report* are summarized below. As discussed at the beginning of Chapter 3, the portion of the SR-11 Corridor shown on Figure 3.16-2, has been previously addressed through the CEQA/NEPA process and approved for development with the SR-905 project, with the exception of a small sliver of developed land along the south side of the SR-11 Corridor that was not included within the SR-905 project. No potential biological impacts would be associated with this developed area. Since the impacts to biological resources within this western portion of the SR-11 corridor are already approved and mitigation has been negotiated with the resources agencies, the discussion below focuses on the remaining eastern portions of the two alternatives, which would have the potential for new impacts associated with the proposed program. This area is delineated on Figure 3.16-3 in Section 3.16, *Natural Communities*.

Rare plant surveys were conducted within the program alternatives in 2000, 2001, 2005, and 2006 to identify and record all special-status plant species occurring within the program area. The studies that were conducted were determined based on knowledge of species occurrences in the program area from previous surveys and a habitat-based analysis. A mandatory species list letter was requested from the USFWS in 2006 (refer to Appendix F). This letter confirms

that the surveys conducted in 2006 covered all of the mandatory species that occur, or may occur, in the program area.

Sensitive plant species are mapped in Figures 3.18-1 through 3.18-3, based on a compilation of all data collected from the above-listed surveys. An effort was made to eliminate multiple observations (from different years) of the same sensitive species from the same locations in the program area, so as to not over-report their presence. As indicated by the key map on each figure, maps are not provided for the portions of the program area where no sensitive plants were found.

Because vegetative cover and individual species occurrence may fluctuate from year to year, due to variations in rainfall levels and other environmental factors, updated rare plant surveys conducted for future environmental studies may document additional sensitive species.

Non-listed sensitive plant species that are known to occur or have the potential to occur in the program area are listed in Table 3.18-1. These species are either known from environmental settings similar to those found in the program area, or have been historically recorded in or near the program area. Sensitive plant species that were observed within the Western and Central Alternatives during rare plant surveys are also indicated in Table 3.18-1.

Western Alternative

No non-listed sensitive plant species were observed within the Western Alternative during the 2006 rare plant surveys; and only two species, the small-flowered morning glory (*Convolvulus simulans*) and San Diego marsh-elder (*Iva hayesiana)*, were observed in previous surveys within the Western Alternative (Table 3.18-1). Refer to the program's *Biological Resources Existing Conditions Report* for a discussion of these species.

Central Alternative

Four non-listed sensitive plant species were observed in the Central Alternative during the 2006 rare plant surveys, as well as in previous surveys: California adolphia (*Adolphia californica*), variegated dudleya (*Dudleya variegata*), San Diego barrel cactus (*Ferocactus viridescens*), and San Diego County viguiera (*Viguiera laciniata*), as shown in Table 3.18-1. An additional two sensitive plant species also were observed within the Central Alternative prior to 2006: small-flowered morning glory (*Convolvulus simulans*) and San Diego marsh-elder (*Iva hayesiana*). Locations of non-listed plant species observed within the Central Alternative are noted in Figures 3.18-1 to 3.18-3.

Because the variegated dudleya is the most sensitive of the non-listed species within the program area, and has come under recent scrutiny, a discussion of this species is provided below. Refer to the program's *Biological Resources Existing Conditions Report* for a discussion of the remaining species.

Table 3.18-1
NON-LISTED, SENSITIVE PLANT SPECIES POTENTIALLY OCCURRING OR KNOWN TO OCCUR IN THE PROGRAM AREA AND ALTERNATIVES

Common Name/ *Scientific Name*	Status	General Habitat Description	Detected or Potential to Occur in the Program Area	Western Alternative				Central Alternative			
				When Detected		Where Detected		When Detected		Where Detected	
				2006 Survey	Previous Survey	SR-11 Corridor	POE Site	2006 Survey	Previous Survey	SR-11 Corridor	POE Site
California adolphia/ *Adolphia californica*	CNPS List 2.1	Clay soil in sage scrub; occasionally, the periphery of vernal pools	Detected in 2006					X	X		X
San Diego bursage/ *Ambrosia chenopodiifolia*	CNPS List 2.1	Coastal sage scrub; known from only 10 locations in California	Low potential to occur in program area; not observed in multiple focused rare plant surveys.								
Orcutt's brodiaea/ *Brodiaea orcuttii*	CNPS List 1B.1 MSCP Covered	Closed-cone coniferous forest, chaparral, cismontane woodland, meadows and seeps, valley and foothill grassland, vernal pools with clay and sometimes serpentine soils	Low potential to occur in program area; not observed in multiple focused rare plant surveys								
Small-flowered morning glory/ *Convolvulus simulans*	CNPS List 4.2	Chaparral, coastal scrub openings and valley/foothill grasslands	Detected in previous survey		X	X			X	X	
Western dichondra/ *Dichondra occidentalis*	CNPS List 4.2	Southern mixed chaparral, sage scrub, rock outcrops in grassland	Low potential to occur in Diegan coastal sage scrub in program area; not observed in multiple focused rare plant surveys								
Variegated dudleya/ *Dudleya variegata*	CNPS List 1B.2 MSCP Narrow Endemic MSCP Covered	Chaparral, sage scrub, woodland, grassland, vernal pools with clay soils	Detected in 2006					X	X		X

CNPS = California Native Plant Society; MSCP = Multiple Species Conservation Program

Table 3.18-1 (cont.)
NON-LISTED, SENSITIVE PLANT SPECIES POTENTIALLY OCCURRING OR KNOWN TO OCCUR IN THE PROGRAM AREA AND ALTERNATIVES

Common Name/ *Scientific Name*	Status	General Habitat Description	Detected or Potential to Occur in the Program Area	Western Alternative				Central Alternative			
				When Detected		Where Detected		When Detected		Where Detected	
				2006 Survey	Previous Survey	SR-11 Corridor	POE Site	2006 Survey	Previous Survey	SR-11 Corridor	POE Site
San Diego barrel cactus/ *Ferocactus viridescens*	CNPS List 2.1 MSCP Covered	Chaparral, coastal scrub, valley and foothill grasslands, and vernal pools	Detected in 2006					X	X	X	X
Palmer's grapplinghook/ *Harpagonella palmeri*	CNPS List 4.2	Clay soils in grassland, sage scrub and chaparral	Low potential to occur in program area; not observed in multiple focused rare plant surveys								
Graceful tarplant/ *Holocarpha virgata* ssp. *elongata*	CNPS List 4.2	Chaparral, cismontane woodlands, coastal sage scrub, and grasslands	Low potential to occur in program area; not observed in multiple focused rare plant surveys								
San Diego marsh-elder/ *Iva hayesiana*	CNPS List 2.2	Creeks or intermittent streambeds	Detected in 2006		X	X			X	X	
Southwestern spiny rush/ *Juncus acutus* ssp. *leopoldii*	CNPS List 4.2	Coastal salt marshes at brackish locales, alkaline meadows, riparian marshes	Low potential to occur in program area; not observed in multiple focused rare plant surveys								
San Diego golden star/ *Muilla clevelandii*	CNPS List 1B.1 MSCP Covered	Clay soils in chaparral, coastal scrub, valley and foothill grassland and in the vicinity of vernal pools	Detected in 2006								
Little mousetail/ *Myosurus minimus* ssp. *apus*	CNPS List 3.1	Grassland and vernal pools	Low potential to occur in program area; not observed in multiple focused rare plant surveys								

CNPS = California Native Plant Society; MSCP = Multiple Species Conservation Program

Table 3.18-1 (cont.)
NON-LISTED, SENSITIVE PLANT SPECIES POTENTIALLY OCCURRING OR KNOWN TO OCCUR IN THE PROGRAM AREA AND ALTERNATIVES

Common Name/ *Scientific Name*	Status	General Habitat Description	Detected or Potential to Occur in the Program Area	Western Alternative				Central Alternative			
				When Detected		Where Detected		When Detected		Where Detected	
				2006 Survey	Previous Survey	SR-11 Corridor	POE Site	2006 Survey	Previous Survey	SR-11 Corridor	POE Site
Coulter's matilija poppy/ *Romneya coulteri*	CNPS List 4.2	Post-burn sage scrub or chaparral or along water courses	Low potential to occur in program area; not observed in multiple focused rare plant surveys								
Munz's sage/ *Salvia munzii*	CNPS List 2.2	Chaparral and sage scrub	Low potential to occur in program area; not observed in multiple focused rare plant surveys. Species was observed east of program area in 2005 (URS 2005)								
San Diego County viguiera/ *Viguiera laciniata*	CNPS List 4.2	Sage scrub	Detected in 2006					X	X	X	X

CNPS = California Native Plant Society; MSCP = Multiple Species Conservation Program

Variegated dudleya

Variegated dudleya is a CNPS List 1B.2 species and MSCP narrow endemic species. This species is a perennial herb that occurs at elevations of approximately 10 to 1,900 feet AMSL in chaparral, sage scrub, woodland, grassland, and vernal pools habitats with clay soil. Variegated dudleya is found in San Diego County and Baja California, Mexico, and has a blooming period of May through June.

Approximately 481 individuals of variegated dudleya were found within non-native grassland in the eastern half of the Central POE Site in 2006. Approximately 375 individuals of this species were observed in Diegan coastal sage scrub (northeast portion of POE) and non-native grassland (southeast portion of POE) areas of the Central POE Site prior to 2006 (Figure 3.18-3). No variegated dudleya individuals were observed in the Central SR-11 Corridor.

3.18.3 Impacts

Western and Central Alternatives

As noted in the Introduction to Chapter 3, no ground-disturbing activities would occur during Phase I; therefore, no direct or indirect impacts to plant species would occur in association with either the Western Alternative or Central Alternative, and no environmental permits would be required. Although no impacts would occur during Phase I, the identification of a preferred alternative as a result of Phase I would commit the identified SR-11 corridor and POE site for future development with these uses.

Additional biological resources studies would be conducted during Phase II, as part of the engineering and environmental evaluation of the design and operational alternatives for SR-11 and the Otay Mesa East POE. Such studies would include an analysis of the potential for the alternatives addressed to result in direct impacts to sensitive plant species. For the purpose of comparing the potential future Western and Central alternative impacts, and to provide guidance for future Phase II planning, it is assumed that any of the resources present within each program alternative, as presented in Table 3.18-1, could be impacted during Phase II; such impacts would be considered adverse. Because vegetative cover and individual species occurrence may fluctuate from year to year, depending on climatic and hydrologic variations and other environmental factors, direct impacts also could occur to the 14 other special-status plant species not observed to date in the Western or Central Alternatives, but with the potential to occur within the program area (Table 3.18-1). Any such impacts to additional sensitive plant species documented in future surveys for Phase II also would be considered adverse. In addition, potential indirect impacts or “edge effects” could adversely affect sensitive plant species occurring adjacent to the SR-11 Corridors and POE Sites. Such impacts would be greatest for the Central Alternative, due to its proximity to existing sensitive habitats and known populations of sensitive plants along the eastern edges of this alternative.

No Action Alternative

No direct or indirect impacts to sensitive plant species would occur under the No Action Alternative, as no ground-disturbing activities would occur, no environmental permits would be required, and no SR-11 corridor/POE site would be identified for future development.

3.18.4 Avoidance, Minimization and/or Mitigation Measures

Because no impacts were identified for Phase I implementation under any of the described alternatives, no associated avoidance, minimization or mitigation measures are proposed.

As required by NEPA, measures would be identified during Phase II to avoid, minimize or mitigate any anticipated impacts to sensitive plant species. Avoidance, minimization and mitigation recommendations for implementation of the SR-11 corridor and/or POE site under both Phase II development alternatives would begin with the completion of a Natural Environment Study updating existing conditions information and evaluating in detail the potential impacts of the Phase II alternatives within the identified SR-11 and POE alternatives. This study would be completed in conformance with applicable Caltrans requirements, and would include rare plant surveys conducted to update existing data, as well as specific measures to avoid, minimize or mitigate development impacts.

If potential adverse direct impacts to sensitive plants are identified during Phase II, potential measures to avoid or minimize such impacts could include: design of Phase II alternatives to avoid impacts to known populations of sensitive plants, especially variegated dudleya, the most sensitive non-listed plant species in the program area; mitigation of impacts to sensitive plants through habitat restoration, creation and/or preservation; and translocation of plants from the impact area to an existing or planned preserve. Potential measures available to reduce edge effects during Phase II construction of SR-11 and the POE, if necessary, could include use of construction fencing to clearly delineate the edge of allowable clearing and grading, requiring construction personnel to remain in fenced areas, prohibiting pets on construction sites, and construction monitoring to ensure compliance. Precise measures would be determined during Phase II. Potential Phase II measures related to threatened and endangered species are provided in Section 3.20.

Specific mitigation measures would be determined in conjunction with the Phase II environmental document and through consultation with the appropriate permitting and resource agencies.

Avoidance, minimization or mitigation of the potential impacts to plant species under the No Action alternative is not required under CEQA or NEPA.

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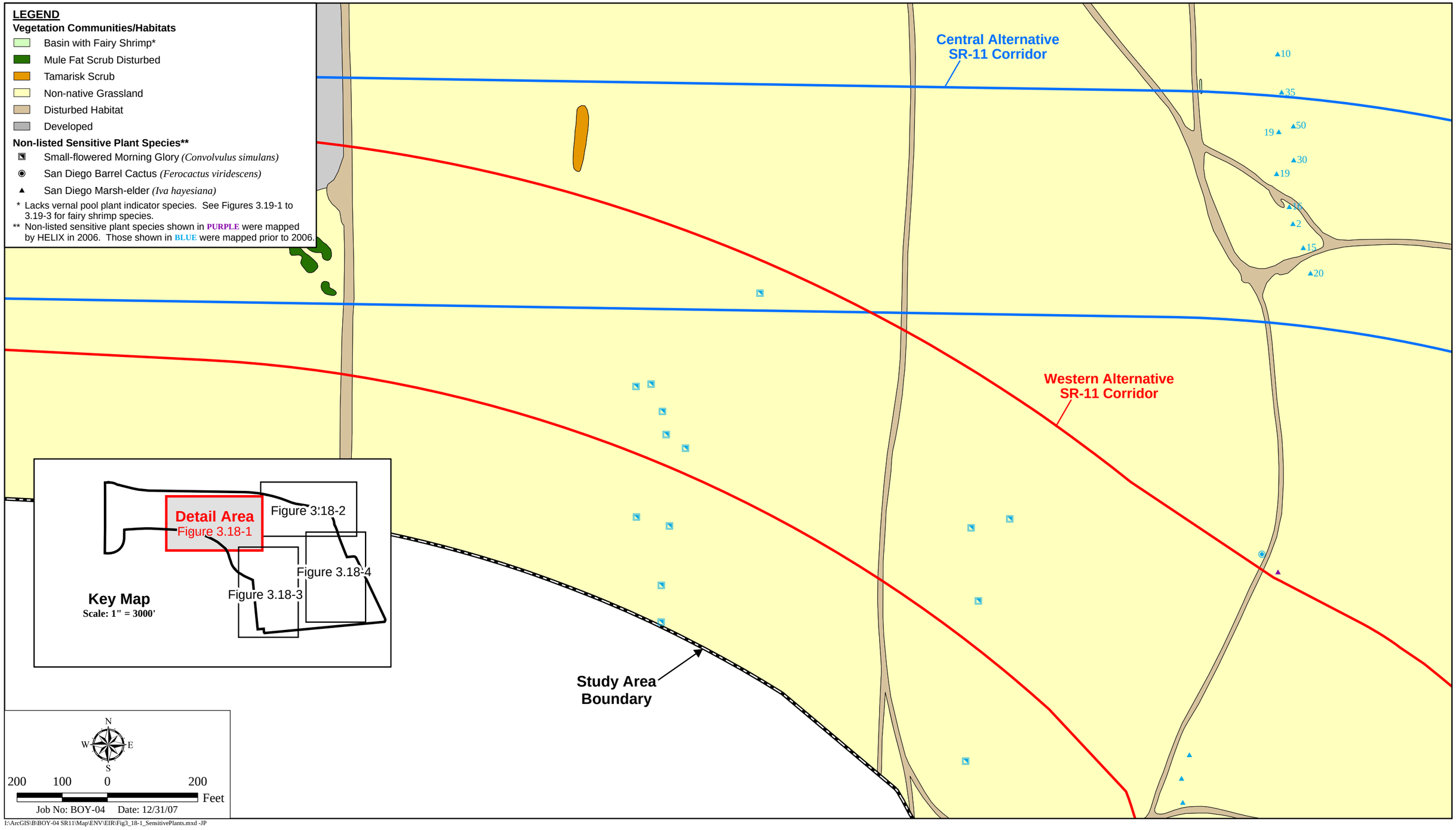
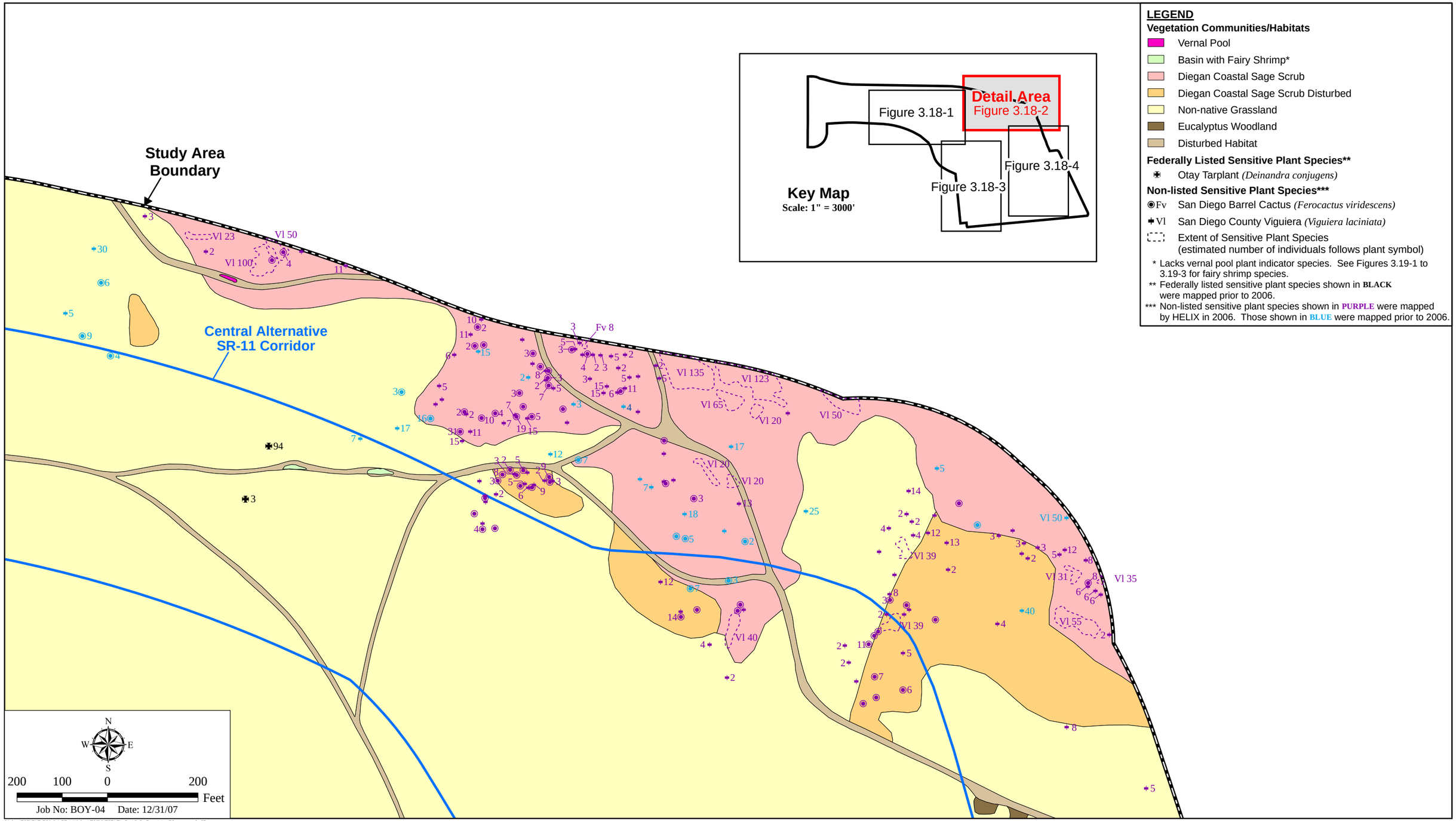


Sensitive Plant Species

STATE ROUTE 11 AND OTAY MESA EAST PORT OF ENTRY PEIR/PEIS

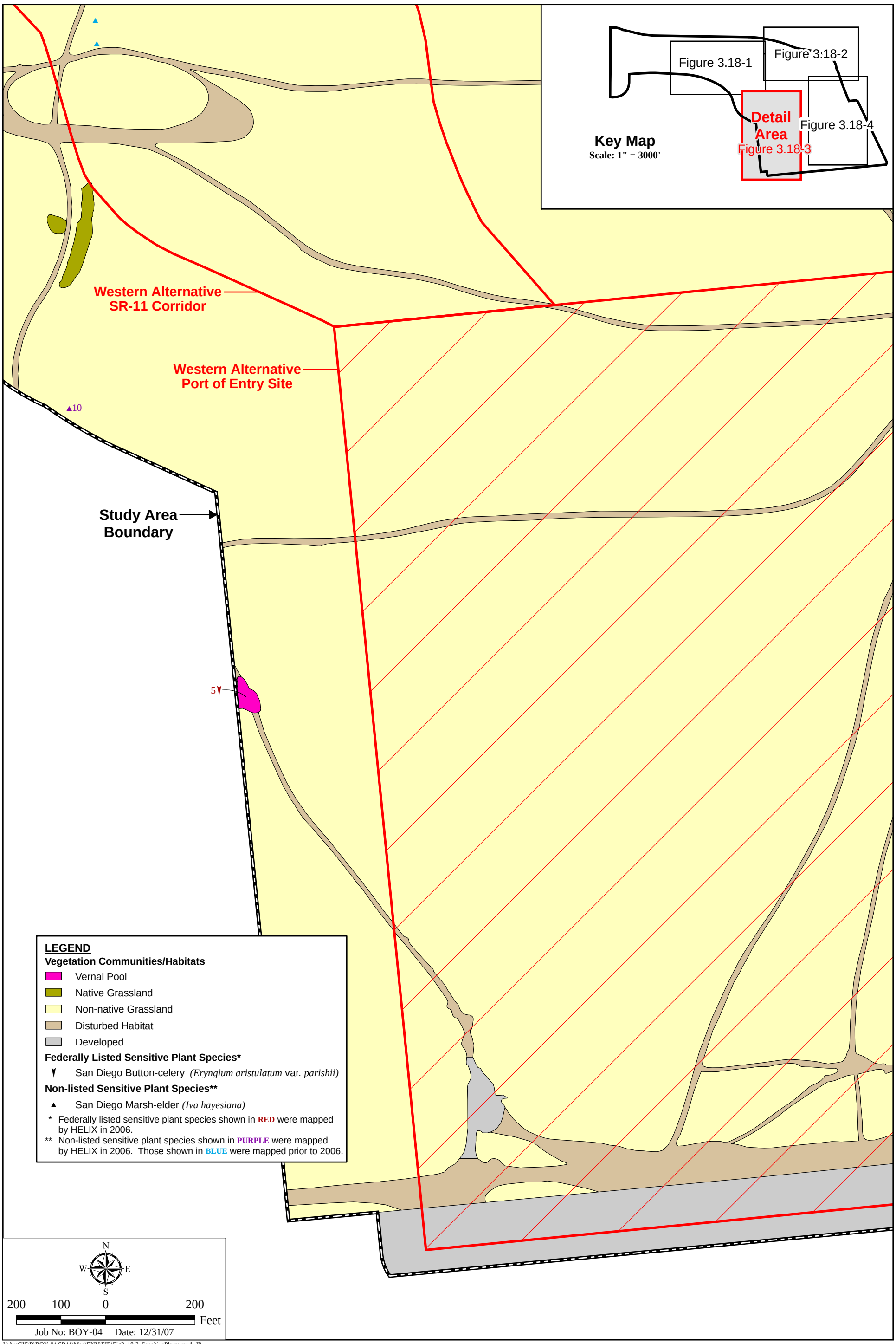
Figure 3.18-1



Sensitive Plant Species

STATE ROUTE 11 AND OTAY MESA EAST PORT OF ENTRY PEIR/PEIS

Figure 3.18-2



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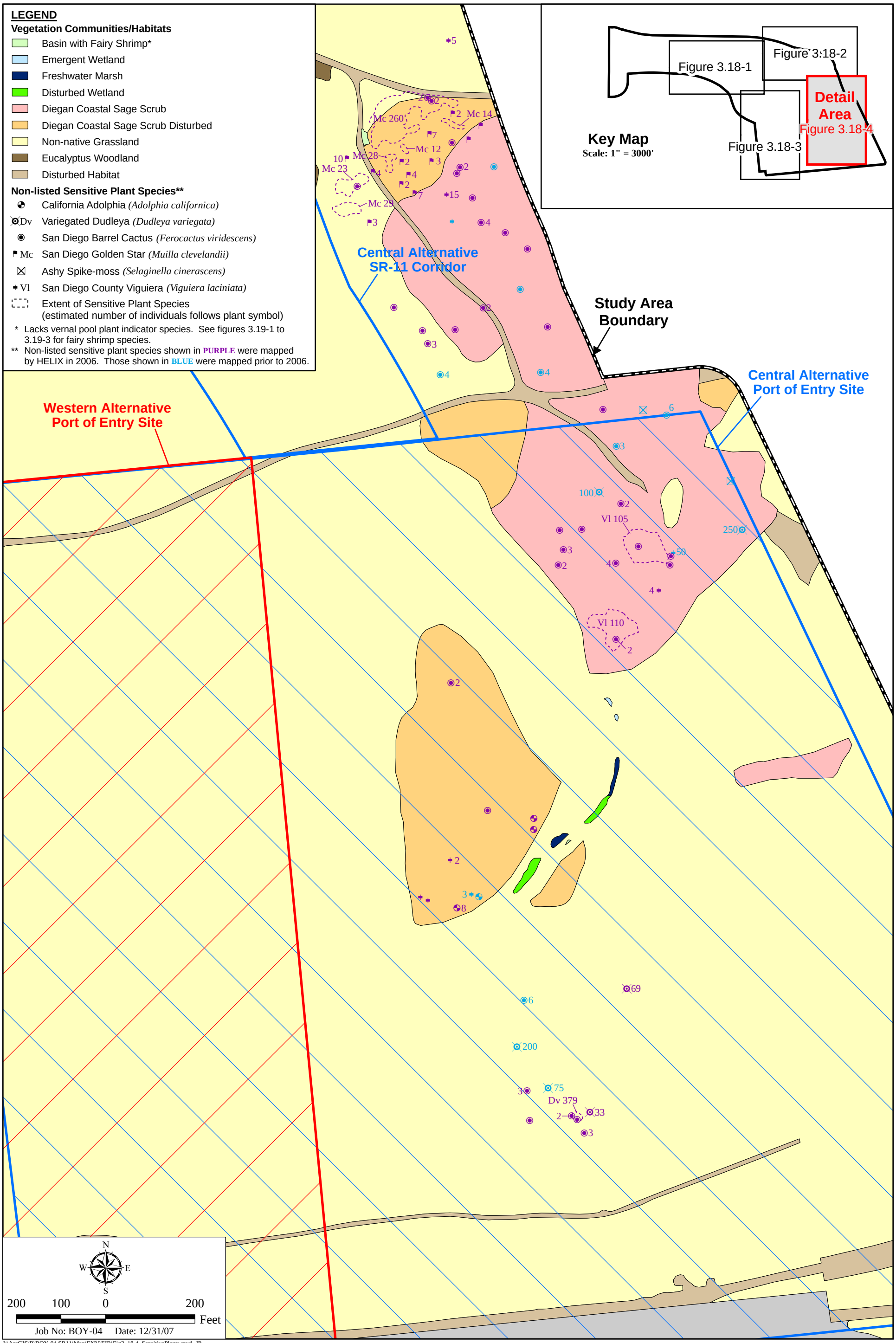
Sensitive Plant Species

STATE ROUTE 11 AND OTAY MESA EAST PORT OF ENTRY PEIR/PEIS

Figure 3.18-3



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Sensitive Plant Species

STATE ROUTE 11 AND OTAY MESA EAST PORT OF ENTRY PEIR/PEIS

Figure 3.18-4

3.19 ANIMAL SPECIES

This section addresses sensitive animal species that are not federally or state listed. Refer to Section 3.20 for a discussion of threatened and endangered animal species, as well as critical habitat.

3.19.1 Regulatory Setting

Many Federal and State laws regulate impacts to wildlife. The USFWS, the National Oceanic and Atmospheric Administration (NOAA Fisheries) and the CDFG are responsible for implementing these laws. This section discusses potential impacts and permit requirements associated with wildlife not listed or proposed for listing under the FESA and/or CESA. Species listed or proposed for listing as threatened or endangered are discussed in Section 3.20. All other sensitive animal species are discussed herein, including USFWS or NOAA Fisheries candidate species, and CDFG fully protected species and species of special concern.

Federal laws and regulations pertaining to wildlife include the following:

- NEPA,
- Migratory Bird Treaty Act (MBTA),
- Fish and Wildlife Coordination Act (FWCA), and
- Marine Mammal Protection Act (MMPA).

State laws and regulations pertaining to wildlife include the following:

- CEQA,
- Sections 2080 of the Fish and Game Code, and
- Section 4150 and 4152 of the Fish and Game Code

In addition to State and Federal laws regulating impacts to wildlife, there are often local regulations that need to be considered when developing projects. Local regulations pertaining to wildlife include the following:

- County of San Diego MSCP Subarea Plan

3.19.2 Affected Environment

A *Biological Resources Existing Conditions Report* was completed in January 2008 to present the results of surveys conducted in 2006 for a defined 872-acre survey area, supplemented with historic biological data from prior surveys in 2000, 2001, 2002 and 2005. Figure 3.16-1 shows the various survey areas relative to the program alternatives. As shown, most of the area west of Enrico Fermi Drive was not surveyed in 2006. In this area, the SR-11 corridors overlap with the approved off-ramp from the SR-905/SR-125 interchange to Enrico Fermi Drive.

The biological resource surveys that were conducted in the program area in 2006 include general wildlife surveys for a defined 872-acre survey area, and focused surveys for fairy shrimp (wet and dry season), Quino checkerspot butterfly, coastal California gnatcatcher, and burrowing owl (Figure 3.16-2). As explained further in Section 3.20, a mandatory species list

letter was requested from the USFWS in 2006 (refer to Appendix F). This letter confirmed that the surveys conducted in 2006 covered all of the mandatory species that occur, or may occur, in the program area.

As discussed at the beginning of Chapter 3, the portion of the SR-11 Corridor shown on Figure 3.16-3, has been previously addressed through the CEQA/NEPA process and approved for development with the SR-905 project, with the exception of a small sliver of developed land along the south side of the SR-11 Corridor that was not included within the SR-905 project. No potential biological impacts would be associated with this developed area. Since the impacts to biological resources within this western portion of the SR-11 corridor are already approved and mitigation has been negotiated with the resources agencies, the discussion below focuses on the remaining eastern portions of the two alternatives, which would have the potential for new impacts associated with the proposed program. This area is delineated on Figure 3.16-3 in Section 3.16, *Natural Communities*.

Information presented in this section is documented in the *Biological Resources Existing Conditions Report* (January 2008) and incorporated by reference. The relevant portions of the report are summarized below.

A compilation of the animal species data collected from these surveys is included in Figures 3.19-1 through 3.19-3. As was done for sensitive plant species, an effort was made to eliminate multiple observations (from different years) of the same sensitive animal species from the same locations in the program area, so as to not over-report their presence.

Non-listed sensitive animal species that are known to occur or have the potential occur in the program area are listed in Table 3.19-1. These species are either known from environmental settings similar to those found in the program area, or have been historically recorded in or near the program area. Sensitive animal species that were observed within the Western and Central Alternatives are also indicated in Table 3.19-1.

As previously discussed, the western portion of the SR-11 corridor, shown on Figure 3.16-3, is assumed to have a fully developed existing condition. The remainder of this discussion therefore focuses on the eastern portions of the two build alternatives that would have the potential for new impacts associated with the proposed program, as delineated in Figures 3.19-1 through 3.19-3.

Table 3.19-1
NON-LISTED, SENSITIVE ANIMAL SPECIES POTENTIALLY OCCURRING OR KNOWN TO OCCUR WITHIN THE PROGRAM AREA AND ALTERNATIVES

Common Name/ *Scientific Name*	Status	General Habitat Description	Detected or Potential to Occur in the Program Area	Western Alternative				Central Alternative			
				When Detected		Where Detected		When Detected		Where Detected	
				2006 Survey	Previous Survey	SR-11 Corridor	POE Site	2006 Survey	Previous Survey	SR-11 Corridor	POE Site
Vertebrates											
Amphibians											
Reptiles											
Western Spadefoot toad/*Spea hammondi*	SSC	Coastal sage scrub, chaparral and grassland habitats, but most common in grasslands with vernal pools or mixed grassland/coastal sage scrub areas	Detected in previous survey						X	X	
Coastal western whiptail/ *Cnemidophorus tigris multiscutatus*	Formerly SSC; County Sensitive	Open coastal sage scrub, chaparral and woodlands; frequently found along the edges of dirt roads traversing its habitats	Detected in previous survey		X		X		X		X
Red-diamond rattlesnake/ *Crotalus exsul*	SSC; County Sensitive	Found in chaparral, coastal sage scrub, or along creek banks, particularly among rock outcrops or piles of debris with a supply of burrowing rodents for prey	Detected in 2006	X		X		X		X	

Table 3.19-1 (cont.)
NON-LISTED, SENSITIVE ANIMAL SPECIES POTENTIALLY OCCURRING OR KNOWN TO OCCUR WITHIN THE PROGRAM AREA AND ALTERNATIVES

Common Name/ *Scientific Name*	Status	General Habitat Description	Detected or Potential to Occur in the Program Area	Western Alternative				Central Alternative			
				When Detected		Where Detected		When Detected		Where Detected	
				2006 Survey	Previous Survey	SR-11 Corridor	POE Site	2006 Survey	Previous Survey	SR-11 Corridor	POE Site
Vertebrates (cont.)											
Amphibians (cont.)											
Reptiles (cont.)											
Coast horned lizard/ *Phrynosoma coronatum blainvillei*	SSC; County Sensitive; MSCP Covered	Coastal sage scrub and open areas in chaparral, oak woodlands and coniferous forests with sufficient basking sites, adequate scrub cover and areas of loose soil; require native ants, especially harvester ants (*Pogonomyrmex* sp.)	High potential to occur in sage scrub in the program area; detected east of the program area in 2005								
Two-striped garter snake/*Thamnophis hammondi*	SSC; County Sensitive	Closely associated with streams with rocky beds and bordered by willows; also ponds, lakes, wetlands and vernal pools, mixed oak woodlands, and chaparral	Detected in previous survey		X	X					
Orange-throated whiptail/ *Cnemidophorus hyperythrus beldingi*	SSC; County Sensitive; MCSP Covered	Coastal sage scrub, chaparral, edges of riparian woodlands, and washes; also found in weedy, disturbed areas adjacent to these habitats	High potential to occur in the eastern portion of the program area								

Table 3.19-1 (cont.)
NON-LISTED, SENSITIVE ANIMAL SPECIES POTENTIALLY OCCURRING OR KNOWN TO OCCUR WITHIN THE PROGRAM AREA AND ALTERNATIVES

Common Name/ *Scientific Name*	Status	General Habitat Description	Detected or Potential to Occur in the Program Area	Western Alternative				Central Alternative			
				When Detected		Where Detected		When Detected		Where Detected	
				2006 Survey	Previous Survey	SR-11 Corridor	POE Site	2006 Survey	Previous Survey	SR-11 Corridor	POE Site
Vertebrates (cont.)											
Birds											
Southern California rufous-crowned sparrow/*Aimophila ruficeps canescens*	SSC; County Sensitive; MSCP Covered	Coastal sage scrub and open chaparral, as well as shrubby grasslands	Detected in 2006								
Grasshopper sparrow/ *Ammodramus savannarum*	County Sensitive	Grassland	Detected in 2006	X			X		X	X	
Bell's sage sparrow/ *Amphispiza belli belli*	SSC; County Sensitive	Patchy distribution throughout the county, which often shifts to include partially recovered burned areas	Low potential to occur in the program area								
Burrowing owl/*Athene cunicularia*	BCC SSC; County Sensitive; MSCP Covered	Shortgrass prairies, grasslands, lowland scrub, agricultural lands (particularly rangelands), prairies, coastal dunes, desert floors, and some artificial, open areas; may also use golf courses, cemeteries, airports, vacant lots in residential areas and university campuses, fairgrounds, abandoned buildings, and irrigation ditches	Detected in 2006	X		X	X	X	X	X	X

Table 3.19-1 (cont.)
NON-LISTED, SENSITIVE ANIMAL SPECIES POTENTIALLY OCCURRING OR KNOWN TO OCCUR WITHIN THE PROGRAM AREA AND ALTERNATIVES

Common Name/ *Scientific Name*	Status	General Habitat Description	Detected or Potential to Occur in the Program Area	Western Alternative				Central Alternative			
				When Detected		Where Detected		When Detected		Where Detected	
				2006 Survey	Previous Survey	SR-11 Corridor	POE Site	2006 Survey	Previous Survey	SR-11 Corridor	POE Site
Vertebrates (cont.)											
Birds (cont.)											
Turkey vulture/*Cathartes aura*	County Sensitive	Foraging habitat includes most open habitats with breeding occurring in crevices among boulders	Detected in 2006								
Northern harrier/*Circus cyaneus*	SSC; County Sensitive; MSCP Covered	Open grassland and marsh	Detected in 2006	X	X	X	X	X	X		X
Yellow warbler/*Dendroica petechia brewsteri*	SSC; County Sensitive	Mature riparian woodland	Detected in 2006								
White-tailed kite/ *Elanus leucurus*	FP; County Sensitive	Riparian woodlands; oak, sycamore or other tree groves adjacent to grassland	Detected in 2006	X	X		X	X	X	X	X
California horned lark/*Eremophila alpestris actia*	SSC; County Sensitive	Coastal strand, arid grasslands and sandy desert floors	Detected in 2006	X			X	X	X		X
Prairie falcon/*Falco mexicanus*	BCC SSC; County Sensitive	Nesting occurs on inland cliff or bluff ledges or occasionally in old hawk or raven (*Corvus corax*) nests; foraging occurs in grassland or desert habitats	Low potential to forage the program area; no potential to nest there								

Table 3.19-1 (cont.)
NON-LISTED, SENSITIVE ANIMAL SPECIES POTENTIALLY OCCURRING OR KNOWN TO OCCUR WITHIN THE PROGRAM AREA AND ALTERNATIVES

Common Name/ *Scientific Name*	Status	General Habitat Description	Detected or Potential to Occur in the Program Area	Western Alternative				Central Alternative			
				When Detected		Where Detected		When Detected		Where Detected	
				2006 Survey	Previous Survey	SR-11 Corridor	POE Site	2006 Survey	Previous Survey	SR-11 Corridor	POE Site
Vertebrates (cont.)											
Birds (cont.)											
Loggerhead shrike/*Lanius ludovicianus*	BCC SSC; County Sensitive	Grassland, open sage scrub, chaparral, and desert scrub	Detected breeding in the program area in 2006	X	X	X	X	X	X	X	X
Mammals											
San Diego black-tailed jackrabbit/ *Lepus californicus bennettii*	SSC; County Sensitive	Occurs primarily in open habitats, including coastal sage scrub, chaparral, grasslands, croplands, and open, disturbed areas, if there is at least some shrub cover present	Detected in 2006	X			X	X			X
American badger/ *Taxidea taxus*	SSC; County Sensitive; MSCP Covered	Open plains and prairies, farmland and sometimes edges of woods	Low to moderate potential to occur in areas with California ground squirrel (*Spermophilus beecheyi*) burrows								

Status: Bird of (federal) Conservation Concern (BCC)*; State Species of Special Concern (SSC); State Fully Protected (FP)

*'Birds of Conservation Concern' is a designation used by the USFWS to identify migratory and non-migratory bird species (beyond those already designated as Federally threatened or endangered) that represent their highest conservation priorities and draw attention to species in need of conservation action (USFWS 2002c). While all of the BCC-designated bird species are priorities for conservation action, this designation makes no finding with regard to whether they warrant consideration for ESA listing. The goal is to prevent or remove the need for additional ESA bird listings by implementing proactive management and conservation actions.

Ten (10) sensitive animal species occur within the eastern portions of the Western Alternative, as listed in Table 3.19-1 and shown in Figures 3.19-1 through 3.19-3. Species observed in the Western Alternative during the 2006 wildlife surveys include: burrowing owl (*Athene cunicularia*), loggerhead shrike (*Lanius ludovicianus),* red-diamond rattlesnake (*Crotalus exsul*), California horned lark (*Eremophila alpestris actia*), grasshopper sparrow (*Ammodramus savannarum*), northern harrier (*Circus cyaneus*), San Diego black-tailed jackrabbit (*Lepus californicus bennettii*), and white-tailed kite (*Elanus leucurus*). With the exception of the burrowing owl and red-diamond rattlesnake, these same species were observed in the Western Alternative prior to 2006, as were two additional species, the two-striped garter snake (*Thamnophis hammondii*) and coastal western whiptail (*Cnemidophorus tigris multiscutatus*).

Ten (10) sensitive animal species occur within the study portion of the Central Alternative, as shown in Figures 3.19-1 through 3.19-3 and listed in Table 3.19-1. Species observed in the Central Alternative during the 2006 wildlife surveys include: burrowing owl, loggerhead shrike*,* red-diamond rattlesnake, white-tailed kite, California horned lark, northern harrier, and San Diego black-tailed jackrabbit. With the exception of the red-diamond rattlesnake and San Diego black-tailed jackrabbit, these same species were observed in the Central Alternative prior to 2006, as were the coastal western whiptail, grasshopper sparrow and western spadefoot toad (*Spea hammondii*). Except the western spadefoot toad, the other nine species were also observed within the Western Alternative.

Because the burrowing owl is the most sensitive of the non-listed species and has come under recent scrutiny, a discussion of this species is provided below. Refer to the program's *Biological Resources Existing Conditions Report* for a discussion of the remaining species.

<u>Burrowing Owl</u>

The burrowing owl is a federal Bird of Conservation Concern, State Species of Special Concern, and County sensitive species. Burrowing owl habitat includes shortgrass prairies, grasslands, lowland scrub, agricultural lands (particularly rangelands), prairies, coastal dunes, desert floors, and some artificial, open areas. They may also use golf courses, cemeteries, airports, vacant lots, undeveloped portions of university campuses, fairgrounds, abandoned buildings, and irrigation ditches. The burrowing owl requires large, open expanses of sparsely vegetated areas on gently rolling or level terrain with an abundance of active small mammal burrows. They also may use pipes, culverts and nest boxes where burrows are scarce. Breeding burrowing owls remain tenuously in five areas of San Diego County (Unitt 2004), including Otay Mesa. The greatest concentration of owls on Otay Mesa is at the mesa's extreme east end where the scrub is kept open by frequent fires (Unitt 2004).

The methodology used in the program's burrowing owl surveys took into consideration the survey methods discussed in the Staff Report on Burrowing Owl Mitigation (CDFG 1995) and the Burrowing Owl Survey Protocol and Mitigation Guidelines (California Burrowing Owl Consortium 1993). Two burrowing owl family groups (one associated with one burrow; the other associated with more than one burrow [e.g., a burrow complex]) were observed in 2006 within the south portion of the auto auction lot in the Western SR-11 Corridor (Figure 3.19-1). An active burrow (with no owl[s] present, but showing clear indication of recent owl use) was also found in the southeast corner of the auto lot in the Western SR-11 Corridor. An owl pair with a burrow complex and an individual with burrow also were observed during 2006 surveys within grassland in the southern portion of the Western POE Site (Figure 3.19-3). No burrowing owls were observed or detected during the pre-2006 surveys in either the Western SR-11 Corridor or

POE Site. Refer to Appendix I of the *Biological Resources Existing Conditions Report* (January 2008) for the spring season 2006 Burrowing Owl Survey Report.

Within the Central Corridor, the three 2006 burrowing owl sightings coincide with the 2006 corridor sightings described for the Western Alternative, and include two families and an active burrow at the south edge of the auto auction lot (Figure 3.19-1). Three 2006 observations of burrowing owls within the southeast corner of the Central POE Site were in non-native grassland and included two pair, each with a burrow, and one family with a burrow (Figure 3.19-3). In surveys prior to 2006, no burrowing owls or active burrows were noted in the Central SR-11 Corridor, and two individuals were observed within non-native grassland in the easternmost portion of the Central POE Site.

3.19.3 Impacts

Western and Central Alternatives

As noted in the Introduction to Chapter 3, no ground disturbing activities would occur during Phase I; therefore, no direct or indirect impacts to sensitive animal species would occur in association with the Western or Central Alternative SR-11 Corridors or POE Sites, and no environmental permits would be required. Although no impacts would occur during Phase I, the identification of a preferred alternative as a result of Phase I would commit the identified SR-11 corridor and POE site for future development with these uses.

Additional biological resources studies would be conducted during Phase II, as part of the engineering and environmental evaluation of the design and operational alternatives for SR-11 and the Otay Mesa East POE. Such studies would include an analysis of the potential for the alternatives addressed to result in direct impacts to sensitive animal species. For the purpose of comparing the potential future Western and Central alternative impacts, and to provide guidance for future Phase II planning, it is assumed that any of the resources present within each program alternative, as presented in Table 3.19-1, could be impacted during Phase II. Specific impacts would be evaluated during the Phase II NEPA and CEQA processes.

Direct Impacts

Identification of the Western Alternative for Phase II implementation could result in adverse direct impacts to any of the sensitive animal species described in the Affected Environment discussion, including those identified on Figures 3.19-1 through 3.19-3 and in Table 3.19-1 as having been observed within the Western or Central Alternatives. Such impacts would be adverse because each species discussed herein is considered sensitive by the resource agencies and/or the County. Furthermore, burrowing owl impacts within the Western Alternative would be substantial and adverse, because the East Otay Mesa area is one of the few remaining areas of the County where a breeding burrowing owl population remains.

It should not be assumed that potential future direct impacts to animal species would be limited to only those species observed within the alternative SR-11 Corridors and POE Sites. The presence of sensitive animal species within the habitat areas that include the two alternatives indicates occupation of that habitat area by the noted animal species. Furthermore, the occurrence of an animal species in any given location may be dependent upon the local ecology, including vegetative cover, water supply and availability of prey. It is therefore possible that direct impacts could occur to any of the 19 sensitive animal species with the potential to occur in the program area (Table 3.19-1).

Indirect Impacts

Potential indirect impacts or "edge effects" could adversely impact sensitive animal species adjacent to the SR-11 Corridor and POE Site during Phase II. Potential causes of indirect impacts include human and pet activity/intrusion in the area (e.g., parking on shoulders and exiting vehicles; traffic incidents resulting in road kill incidents) and increased U.S. Border Patrol activity surrounding the new roadway and POE. Noise and vibration impacts, including blasting from the construction and operation of SR-11 and the POE could adversely impact sensitive animals, including nesting raptors and other bird species. Other indirect impacts to sensitive animal species could occur as a result of night lighting, habitat degradation and/or fragmentation, and introduction of non-native plant or animal species (further addressed in Section 3.21, *Invasive Species*).

No direct or indirect impacts to sensitive animal species would occur under the No Action Alternative, as no ground-disturbing activities are proposed and no environmental permits would be required.

3.19.4 Avoidance, Minimization and/or Mitigation Measures

Because no impacts were identified for Phase I implementation under any of the described alternatives, no associated avoidance, minimization or mitigation measures are proposed.

As required by NEPA, measures would be identified during Phase II to avoid, minimize or mitigate any anticipated impacts that may occur related to sensitive animal species. Avoidance, minimization and mitigation recommendations for implementation of the SR-11 corridor and/or POE site under both Phase II development alternatives would begin with the completion of a Natural Environment Study updating existing conditions information and evaluating in detail the potential impacts of the Phase II alternatives within the identified SR-11 and POE alternatives. This study would be completed in conformance with applicable Caltrans requirements, and would include specific measures to avoid, minimize or mitigate development impacts.

If potential adverse direct impacts to sensitive animals are identified during Phase II, potential measures to avoid or minimize such impacts could include avoidance of impacts to burrowing owl populations, passive or active relocation of owls that occur in areas where disturbance is unavoidable, and habitat-based mitigation for substantial impacts to sensitive species. If potential adverse indirect impacts are identified during Phase II, potential measures to address such impacts would include avoidance of construction adjacent to sensitive nesting birds during the breeding season or use of noise barriers to avoid substantial impacts to nesting birds; use of construction fencing to clearly delineate the edge of allowable clearing and grading; requiring construction personnel to remain in fenced areas; prohibiting pets on construction sites; and construction monitoring to ensure compliance. Measures related to threatened and endangered species are provided in Section 3.20.

Specific mitigation measures would be determined in conjunction with the Phase II environmental document and through consultation with the appropriate permitting and resource agencies.

As noted in Section 3.16, the strategy for binational planning of environmental conservation and cross-border mitigation would need to be considered in development of mitigation measures in Phase II.

Avoidance, minimization or mitigation of the potential impacts to animal species under the No Action alternative is not required under CEQA or NEPA.

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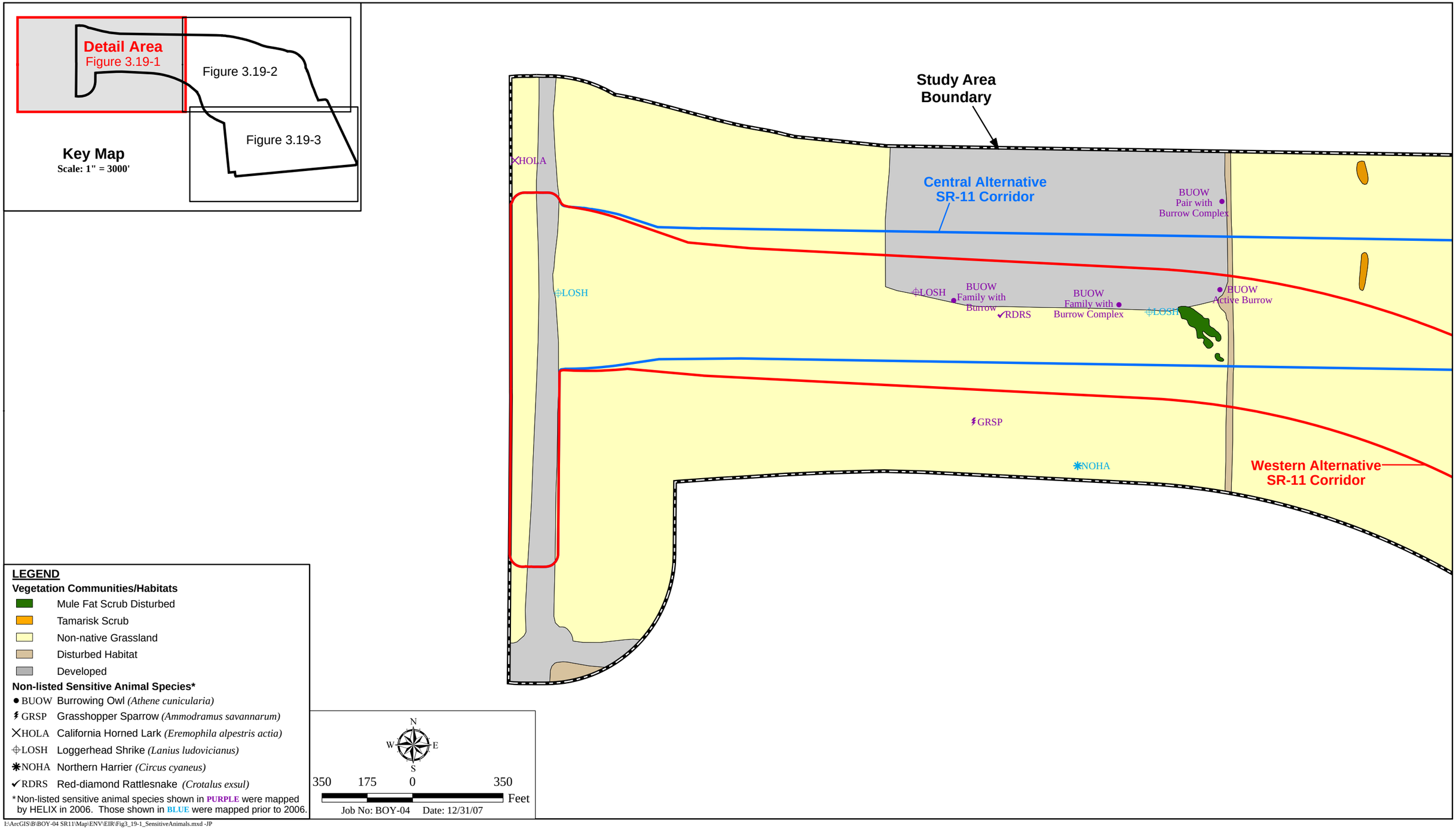

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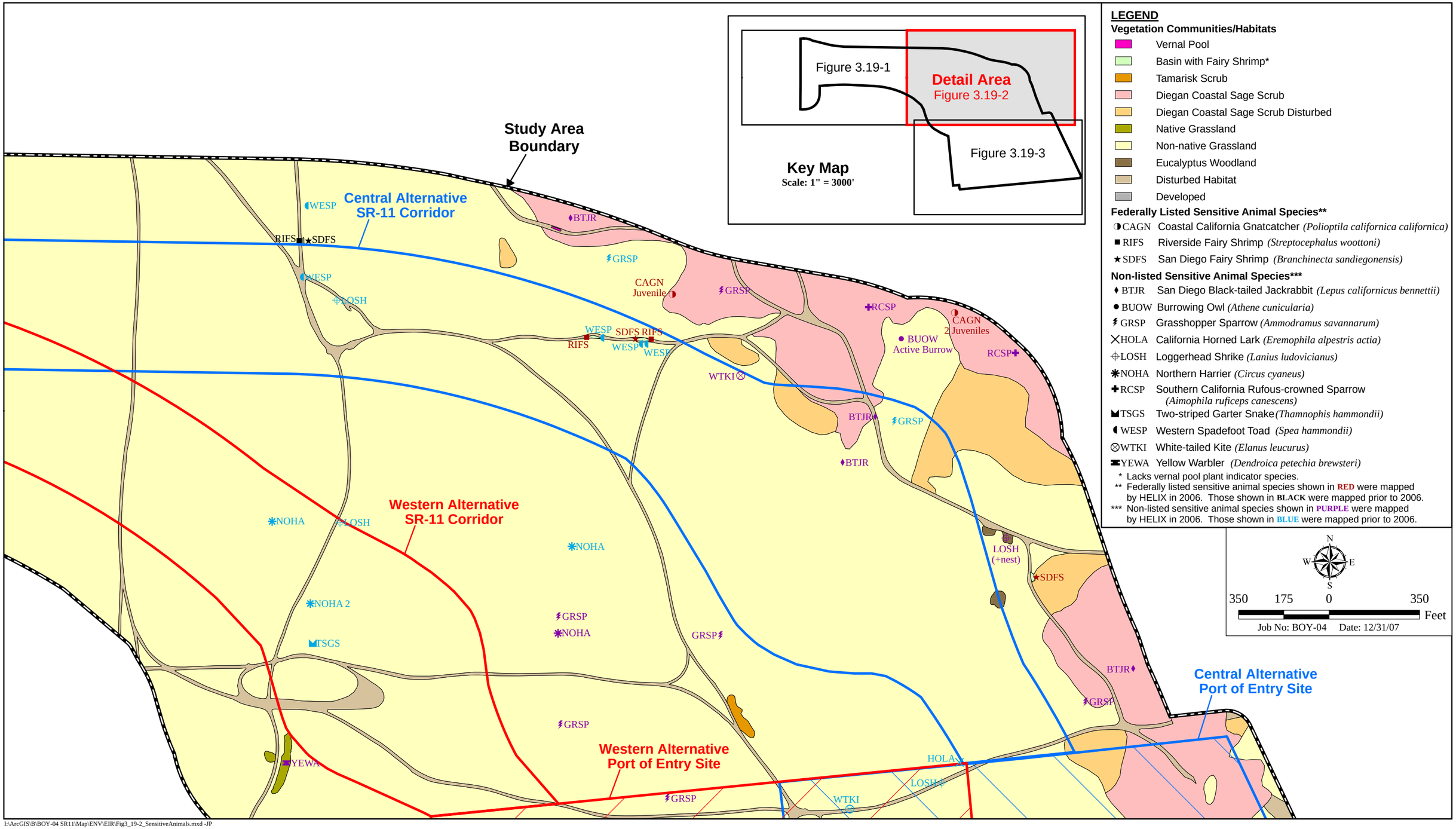
Sensitive Animal Species

STATE ROUTE 11 AND OTAY MESA EAST PORT OF ENTRY PEIR/PEIS

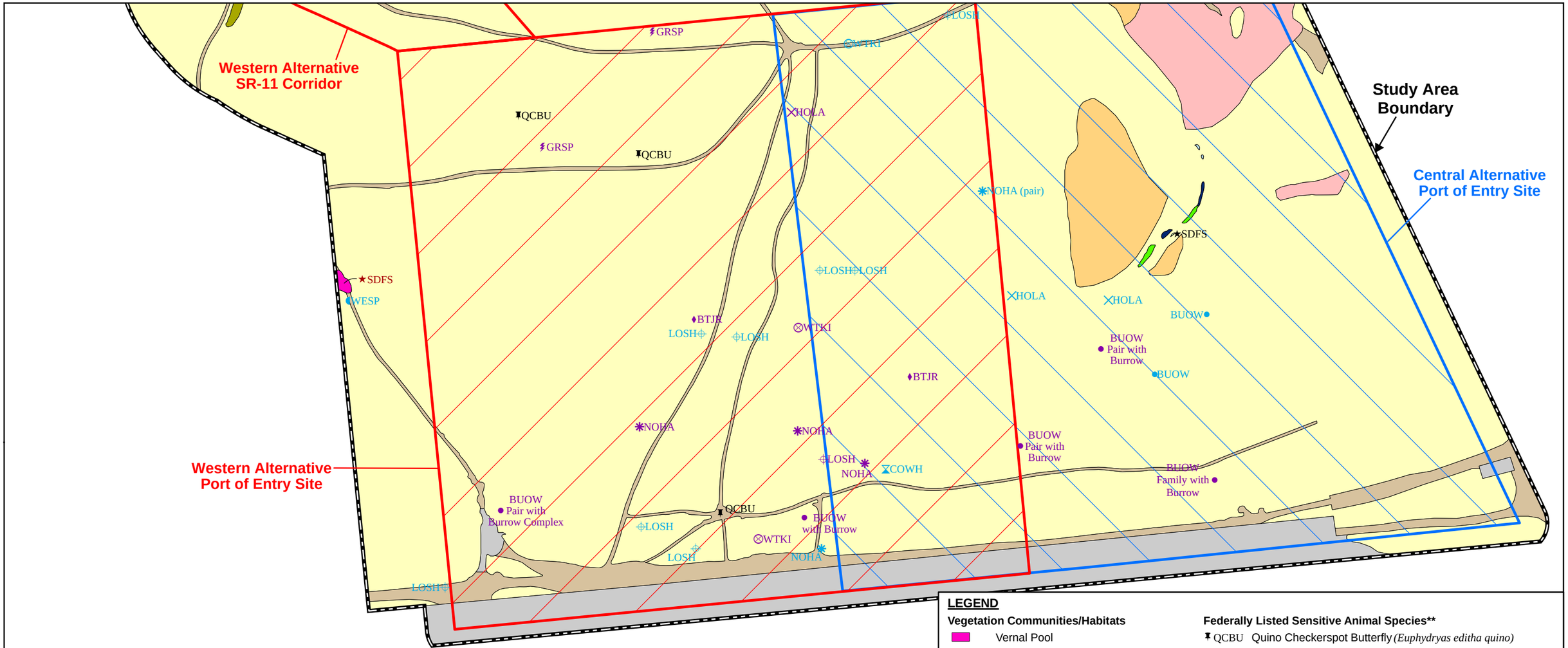
Figure 3.19-1

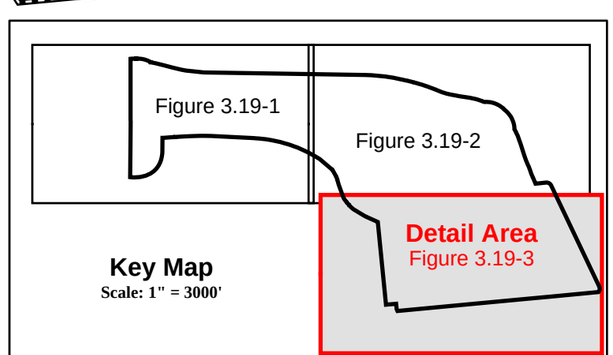


Sensitive Animal Species

STATE ROUTE 11 AND OTAY MESA EAST PORT OF ENTRY PEIR/PEIS

Figure 3.19-2





LEGEND

Vegetation Communities/Habitats

- Vernal Pool
- Basin with Fairy Shrimp*
- Emergent Wetland
- Freshwater Marsh
- Disturbed Wetland
- Tamarisk Scrub
- Diegan Coastal Sage Scrub
- Diegan Coastal Sage Scrub Disturbed
- Native Grassland
- Non-native Grassland
- Disturbed Habitat
- Developed

Federally Listed Sensitive Animal Species**

- QCBU Quino Checkerspot Butterfly *(Euphydryas editha quino)*
- SDFS San Diego Fairy Shrimp *(Branchinecta sandiegonensis)*

Non-listed Sensitive Animal Species***

- BTJR San Diego Black-tailed Jackrabbit *(Lepus californicus bennettii)*
- BUOW Burrowing Owl *(Athene cunicularia)*
- GRSP Grasshopper Sparrow *(Ammodramus savannarum)*
- HOLA California Horned Lark *(Eremophila alpestris actia)*
- LOSH Loggerhead Shrike *(Lanius ludovicianus)*
- NOHA Northern Harrier *(Circus cyaneus)*
- WESP Western Spadefoot Toad *(Spea hammondii)*
- WTKI White-tailed Kite *(Elanus leucurus)*

* Lacks vernal pool plant indicator species.
** Federally listed sensitive animal species shown in **RED** were mapped by HELIX in 2006. Those shown in **BLACK** were mapped prior to 2006.
*** Non-listed sensitive animal species shown in **PURPLE** were mapped by HELIX in 2006. Those shown in **BLUE** were mapped prior to 2006.

N W E S

350 175 0 350 Feet

Job No: BOY-04 Date: 12/31/07

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Sensitive Animal Species

STATE ROUTE 11 AND OTAY MESA EAST PORT OF ENTRY PEIR/PEIS

Figure 3.19-3

3.20 THREATENED AND ENDANGERED SPECIES

This section addresses threatened and endangered plant and animal species.

3.20.1 Regulatory Setting

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

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

3.20.2 Affected Environment

A *Biological Resources Existing Conditions Report* was completed in January 2008 to present the results of surveys conducted in 2006 for a defined 872-acre survey area, supplemented with historic biological data from prior surveys in 2001, 2002 and 2005. Figure 3.16-1 shows the various survey areas relative to the program alternatives. As shown, most of the area west of Enrico Fermi Drive was not surveyed in 2006. In this area, the SR-11 corridors overlap with the approved off-ramp from the SR-905/SR-125 interchange to Enrico Fermi Drive, as described in Section 3.16. Relevant portions of the *Biological Resources Existing Conditions Report* are summarized in this section of the PEIR/PEIS.

As detailed below under the FESA Consultation Summary discussion, a number of biological resource surveys have been conducted in the program area, including basins/vernal pool mapping, rare plant surveys, and focused surveys for fairy shrimp (wet and dry season), Quino checkerspot butterfly (Quino) and coastal California gnatcatcher. Each of these surveys was conducted in 2006, and was deemed necessary based on knowledge of species occurrences in the program area from previous surveys and a habitat-based analysis. The mapped locations of sensitive plant and animal species (including listed species) from these surveys are included in Figures 3.18-1 through 3.18-3 (sensitive plant species) and Figures 3.19-1 through 3.19-3 (sensitive animal species). An effort was made to eliminate multiple observations (from different

years) of the same listed species from the same locations in the program area, so as to not over-report their presence.

Federally or State listed plant and animal species that are known to occur or have the potential to occur in the program area are listed in Tables 3.20-1 and 3.20-2, respectively. These species are either known from environmental settings similar to those found in the program area, or have been historically recorded in or near the program area. Listed/proposed plant and animal species that were observed in the Western or Central Alternative SR-11 Corridors or POE Sites are highlighted in the tables.

Table 3.20-1
Listed/Proposed Plant Species Potentially Occurring or Known to Occur Within the Program Area

Common Name	Scientific Name	Status	General Habitat Description	Habitat or Plant Present/ Absent	Rationale	Detected in 2006 or Previous Survey
San Diego thornmint	*Acanthomintha ilicifolia*	FT SE CNPS List 1B.1	Chaparral, sage scrub, valley/foothill grassland, and in the vicinity of vernal pools on clay soil	HP	Potential habitat present	Not detected
Otay tarplant	*Deinandra conjugens*	FT SE CNPS List 1B.1	Clay soils in grasslands or open sage scrub	HP, P, CH	Detected in previous survey	Detected in previous survey in the Central Alternative SR-11 Corridor
San Diego button-celery	*Eryngium aristulatum* var. *parishii*	FE SE CNPS List 1B.1	Vernal pools	HP, P	Detected in previous survey in the program area but not within the alternatives	Detected in 2006 in the program area but not within the alternatives
Willowy monardella	*Monardella viminea*	FE SE CNPS List 1B.1	Rocky washes in chaparral, sage scrub and riparian communities; known from only three locations in San Diego County, all in the Miramar area	HP	Potential habitat present	Not detected
Spreading navarretia	*Navarretia fossalis*	FT CNPS List 1B.1	Chenopod scrub, marshes, swamps, playas and vernal pools	HP	Potential habitat present	Not detected
California orcutt grass	*Orcuttia californica*	FE SE CNPS List 1B.1	Vernal pools	HP	Potential habitat present	Not detected
Otay mesa mint	*Pogogyne nudiuscula*	FE SE CNPS List 1B.1	Vernal pools	HP	Potential habitat present	Not detected

Absent [A] - no habitat present and no further work needed. Habitat Present [HP] - habitat is, or may be present. The species may be present. Present [P] - the species is present. Critical Habitat [CH] - project footprint is located within a designated critical habitat unit, but does not necessarily mean that appropriate habitat is present. Gray highlight – species detected within Western or Central Alternative. Status: Federal Endangered (FE); Federal Threatened (FT); Federal Proposed Endangered or Threatened (FPE, FPT); Federal Candidate (FC), Federal Species of Concern (FSC); State Endangered (SE); State Threatened (ST); Fully Protected (FP); State Rare (SR); State Species of Special Concern (SSC); California Native Plant Society (CNPS)

Table 3.20-2
Listed/Proposed Animal Species Potentially Occurring or Known to Occur Within the Program Area

Common Name	Scientific Name	Status	General Habitat Description	Habitat or Animal Present/ Absent	Rationale	Detected in 2006 or Previous Survey
Invertebrates						
San Diego fairy shrimp	*Branchinecta sandiegonensis*	FE	Vernal pools or other water-holding basins	HP, P	Detected in previous survey	Detected in 2006 in Central SR-11 Corridor and POE Site
Quino checkerspot butterfly	*Euphydryas editha quino*	FE	Primary larval host plants in San Diego are dwarf plaintain (*Plantago erecta*) at lower elevations, woolly plantain (*P. patagonica*) and white snapdragon (*Antirrhinum coulterianum*) at higher elevations; owl's clover (*Castilleja exserta*) is considered a secondary host plant if primary host plants have senesced; potential habitat includes vegetation communities with areas of low-growing and sparse vegetation; these habitats include open stands of sage scrub and chaparral, adjacent open meadows, old foot trails, and dirt roads	HP, P, CH	Detected in previous survey	Detected in previous survey in Western SR-11 Corridor and POE Site
Riverside fairy shrimp	*Streptocephalus woottoni*	FE	Vernal pools or other water-holding basins	HP, P	Detected in previous survey	Detected in 2006 in Central SR-11 Corridor
Vertebrates						
Amphibians						
Arroyo toad	*Bufo californicus*	FE SSC	Restricted to riparian environments in the middle reaches of streams; known to breed, forage and/or aestivate in aquatic, riparian, coastal sage scrub, oak, and chaparral habitats; thought to be restricted to the headwaters of large streams with persistent water from March to mid-June that have shallow, gravelly pools and adjacent sandy terraces	A	No habitat present; no further work needed	Not detected

Absent [A] - no habitat present and no further work needed. Habitat Present [HP] - habitat is, or may be present; the species may be present. Present [P] - the species is present. Critical Habitat [CH] - project footprint is located within a designated critical habitat unit, but does not necessarily mean that appropriate habitat is present. Gray highlight – species detected within Western or Central Alternative. Status: Federal Endangered (FE); Federal Threatened (FT); Federal Proposed Endangered or Threatened (FPE, FPT); Federal Candidate (FC), Federal Species of Concern (FSC); State Endangered (SE); State Threatened (ST); Fully Protected (FP); State Rare (SR); State Species of Special Concern (SSC); California Native Plant Society (CNPS)

Table 3.20-2 (cont.)
Listed/Proposed Animal Species Potentially Occurring or Known to Occur Within the Program Area

Common Name	Scientific Name	Status	General Habitat Description	Habitat or Animal Present/ Absent	Rationale	Detected in 2006 or Previous Survey
Vertebrates						
Birds						
Golden eagle	*Aquila chrysaetos*	FP SSC	Nesting occurs on cliff ledges or in trees on steep slopes, with foraging occurring primarily in grassland and sage scrub	HP	High potential to forage in the program area	Detected northeast of the program area in 2005
Southwestern willow flycatcher	*Empidonax traillii extimus*	FE SE	Restricted to riparian woodlands along streams and rivers with mature, dense stands of willows, cottonwoods (*Populus* spp.) or smaller, spring fed or boggy areas with willows or alders (*Alnus* spp.)	A	No habitat present; no further work needed	Not detected
Coastal California gnatcatcher	*Polioptila californica californica*	FT SSC	Coastal sage scrub	HP, P, CH	Detected in previous survey	Detected in 2006 adjacent to the Central SR-11 Corridor
Least Bell's vireo	*Vireo bellii pusillus*	FE SE	Riparian habitats that typically feature dense vegetative cover near the ground and a dense, stratified canopy; typically associated with southern willow scrub, cottonwood forest, mule fat scrub, sycamore alluvial woodland, coast live oak riparian forest, arroyo willow riparian forest, wild blackberry, or mesquite in desert localities	A	No habitat present; no further work needed	Not detected

Absent [A] - no habitat present and no further work needed. Habitat Present [HP] - habitat is, or may be present; the species may be present. Present [P] - the species is present. Critical Habitat [CH] - project footprint is located within a designated critical habitat unit, but does not necessarily mean that appropriate habitat is present. Gray highlight – species detected within Western or Central Alternative. Status: Federal Endangered (FE); Federal Threatened (FT); Federal Proposed Endangered or Threatened (FPE, FPT); Federal Candidate (FC), Federal Species of Concern (FSC); State Endangered (SE); State Threatened (ST); Fully Protected (FP); State Rare (SR); State Species of Special Concern (SSC); California Native Plant Society (CNPS)

Discussions of threatened and endangered species are included below, according to their presence within each alternative. Although they were discussed in the Natural Communities and/or Wetlands and Other Waters sections, the sensitive habitats associated with each threatened and endangered species, as well as designated critical habitat units for the Otay tarplant, Quino checkerspot butterfly and coastal California gnatcatcher (see Figure 3.20-1) also are described and discussed below, as appropriate.

Federal Endangered Species Act Consultation Summary

Due to the involvement of a number of federal agencies on this project (including (1) the FHWA through funding and review of the program, (2) the USFWS due to the observation of Otay tarplant, Quino checkerspot butterfly and coastal California gnatcatcher within the program area, and (3) the ACOE due to the occurrence of ACOE jurisdictional wetlands within the program area), the program requires consultation with USFWS pursuant to Section 7 of the FESA (i.e., Section 7 consultation). The Section 7 consultation would be formal because the program area (and program alternatives) contains federally listed species and designated critical habitat units, and effects to any of these would trigger a formal consultation.

Consultation with the USFWS regarding the proposed program started with a request for USFWS's assessment for the potential presence within the program area of federally listed endangered, threatened or proposed species. The request was sent to the USFWS Carlsbad Field Office on September 12, 2006, and the response letter from USFWS was dated October 6, 2006 (refer to Appendix F). In their response letter, the USFWS identified three birds federally listed as threatened or endangered (coastal California gnatcatcher, least Bell's vireo [*Vireo bellii pusillus*] and southwestern willow flycatcher [*Empidonax traillii extimus*]); five plants federally listed as threatened or endangered (San Diego thornmint [*Acanthomintha ilicifolia*], Otay tarplant, San Diego button-celery [*Eryngium aristulatum var. parishii*], willowy monardella [*Monardella viminea*], and Otay mesa mint [*Pogogyne nudiuscula*]); three invertebrates federally listed as endangered (San Diego fairy shrimp, Quino checkerspot butterfly and Riverside fairy shrimp); and one amphibian federally listed as endangered (arroyo toad [*Bufo californicus*]), as potentially occurring in the program area.

Although the least Bell's vireo, southwestern willow flycatcher and arroyo toad were included in the USFWS letter (refer to Appendix F), appropriate habitat for each of these species was not present within the program area and no focused surveys were conducted. Protocol surveys were conducted for the coastal California gnatcatcher in July 2006, and a Coastal California Gnatcatcher Focused Survey Report was submitted to the USFWS on August 31, 2006 (refer to Appendix F). USFWS-protocol wet season fairy shrimp surveys were conducted from March to May of 2006, and a San Diego and Riverside Fairy Shrimp Wet Season Survey Report was submitted to USFWS on August 28, 2006. Dry season fairy shrimp surveys were conducted according to USFWS protocol in July 2006, and a San Diego and Riverside Fairy Shrimp Dry Season Survey Report was submitted to USFWS on December 21, 2006. A Quino checkerspot habitat assessment and USFWS-protocol survey was conducted between April and May 2006, and a survey report was submitted to USFWS on June 19, 2006. These survey reports are all provided as attachments to the SR-11 and POE program's *Biological Resources Existing Conditions Report* (January 2008). General rare plant surveys were conducted in May 2006 and focused Otay tarplant surveys were conducted in June 2006. Additional coordination related to the formal Section 7 consultation would be ongoing as the program moves into Phase II and specific effects on federally listed species are determined.

California Endangered Species Act Consultation Summary

Diegan coastal sage scrub is a target community under the NCCP. Due to potential impacts to this habitat (and to State listed species associated with it), consultation with CDFG is required. Continued coordination with CDFG would occur as the program moves into Phase II.

Western Alternative

As previously noted, the portion of the SR-11 corridor shown on Figure 3.16-2 is assumed to have a fully developed existing condition. The remainder of this discussion therefore focuses on the eastern portions of the Western Alternative that would have the potential for new impacts associated with the proposed program, as delineated in Figures 3.18-1 through 3.18-3 (sensitive plant species) and Figures 3.19-1 through 3.19-3 (sensitive animal species).

Plant Species

Of the seven listed/proposed plant species with the potential to occur in the program area, none were observed within the Western Alternative during the 2006 or previous general surveys or rare plant surveys. As shown in Figure 3.18-3, the Federal and State listed endangered San Diego button-celery, an annual/perennial herb that occurs in sage scrub, valley/foothill grassland and vernal pool habitats, was detected within vernal pool(s) in the program area in 2006 and prior surveys, but has not been observed within either of the alternatives.

Animal Species

One listed animal species occurs within the Western POE Site, as shown in Figure 3.19-3 and listed in Table 3.20-2. Of the nine listed/proposed animal species with potential to occur in the program area, only the Federal listed endangered Quino checkerspot butterfly was observed within the Western Alternative. A description of this species is provided below. Designated critical habitat for this species also occurs over a large portion of the Western Alternative, including the southernmost part of the Western SR-11 Corridor and nearly the entire Western POE Site, as illustrated on Figure 3.20-1. As noted in Table 3.20-2, potential habitat for the Quino includes areas of low-growing and sparse vegetation (typically with open stands of sage scrub and chaparral), adjacent open meadows/grassland and old foot trails and dirt roads, the latter three of which are found in abundance within the Western Alternative. Ideal Quino habitat in San Diego County is open Diegan coastal sage scrub with populations of host plants such as dwarf plaintain and purple owl's clover, and nectaring resources such as common goldfields (*Lasthenia californica*) and cryptantha (*Cryptantah* spp). As this sensitive habitat is found only within the Central Alternative, a description of the sage scrub community as it relates to the Quino habitat is provided in the Central Alternative discussion on the following pages.

The Quino checkerspot butterfly is Federal listed endangered, and approximately 100.4 acres of its critical habitat occur in the Western Alternative (2.8 acres in the Western SR-11 Corridor and 97.6 acres in the Western POE Site; Figure 3.20-1). This species historically occurred through Los Angeles, Riverside, Orange, and San Diego counties, as well as northern Baja California, Mexico, but currently exists in several (probably isolated) colonies in southwestern Riverside and southern San Diego counties, and northern Baja California. San Diego populations are mainly limited to Otay Mountain, Brown Field, portions of Otay Mesa, Jamul, Marron Valley, and Jacumba. The Quino may have been one of the most abundant butterflies in coastal southern California until the 1950s. Habitat degradation and destruction has resulted in a dramatic decline in the species to a point where it currently is in danger of extinction. The animal also is endangered by displacement of the larvae food plants and adult nectar sources by invasive non-native vegetation, non-native invertebrates such as earwigs and sow bugs, over-grazing, fire, extreme adverse weather, over-collection by butterfly collectors, and off-road vehicle activity. Fragmentation of habitat and isolation of populations may be the largest threat to the Quino (Scott 2001).

A habitat assessment was conducted by HELIX in 2006 to identify potential habitat for the Quino and the areas to survey; the USFWS-protocol survey was conducted over five site visits in the spring of 2006. At least one individual of dwarf plantain, one of the Quino's larval host plants, was mapped along the southern edge of the Western Alternative. Most of the previously observed larval host plants (Table 3.20-2) and nectar sources were severely desiccated by the time of the fifth site visit and there appeared to be few resources available to support Quino larvae or adults. The field conditions at that time combined with the lack of recent Quino observations in the Otay Mountain area (as listed on the USFWS web site) suggested the termination of flight season; therefore, no further site visits were made. The Quino was not observed anywhere within the Western Alternative during the 2006 assessment, but three individuals were observed within the Western POE Site during previous surveys. One was located in disturbed habitat in the south-central portion of the POE site; the other two were observed in non-native grassland in the northwest quadrant of the POE site (Figure 3.19-3). No Quino were observed within the Western SR-11 Corridor during the previous surveys. Refer to the *Biological Resources Existing Conditions Report* (January 2008) for the survey report.

Although no Federal listed endangered San Diego fairy shrimp (or vernal pools or basins) were observed with the Western Alternative, final designated critical habitat for this species covers the vast majority of the Western POE site, occurring within 78.0 acres of the POE (Figure 3.20-1).

Central Alternative

Plant Species

One (1) listed plant species occurs within the Central Alternative, as shown in Figure 3.18-2 and listed in Table 3.20-1. Of the seven listed/proposed plant species with a potential to occur in the program area, only the Federal listed threatened and State listed endangered Otay tarplant was observed within this alternative, in the Central SR-11 Corridor. As shown in Figure 3.20-1, designated critical habitat for this species also occurs in the Central Alternative. This species is described below.

Otay tarplant is a Federal listed threatened, State listed endangered and CNPS List 1B.1 species. This species is an annual herb that occurs at elevations of approximately 80 to 980 feet AMSL on clay soils in grassland and sage scrub. It is found in San Diego County and Baja California, Mexico. Its blooming period is from May to June. Approximately 9.0 acres of critical habitat for Otay tarplant occurs in the Central Alternative, within the Central SR-11 Corridor (Figure 3.20-1).

No Otay tarplant were found anywhere within the Central Alternative in 2006. Approximately 97 individuals of Otay tarplant were observed within non-native grassland in the northeastern portion of the Central SR-11 Corridor during 2005 rare plant surveys (Figure 3.18-2); no Otay tarplant were observed in the Central POE Site in previous surveys.

Animal Species

Of the nine listed/proposed animal species with a potential to occur in the program area, two federally listed endangered species were observed within the Central Alternative: the San Diego fairy shrimp and the Riverside fairy shrimp (see Table 3.20-2). Approximately 91.53 acres of final designated critical habitat for the San Diego fairy shrimp occurs within the Central Alternative. As noted in Table 3.20-2, potential habitat for both species of fairy shrimp includes

vernal pools and water-holding basins. While numerous vernal pools and water-holding basins with fairy shrimp were observed within the program area, no vernal pools were observed within either alternative; basins with fairy shrimp were found within the Central Alternative, however, and are described below. In addition, the Federal listed threatened coastal California gnatcatcher was observed adjacent to the Central Alternative, and is also discussed below.

San Diego and Riverside fairy shrimp

The San Diego fairy shrimp is Federal listed endangered. This species is a tiny freshwater crustacean that occurs in seasonal (i.e., vernal) pools within tectonic swales or earth slump basins and other areas of shallow and standing water, often in patches of grassland and agriculture interspersed in coastal sage scrub and chaparral. Urban and water development, flood control and highway and utility projects, as well as conversion of wetlands to agricultural use, have eliminated or degraded 90-97 percent of vernal pools and/or their watersheds in southern California. In the county, over 97 percent of vernal pool habitat has been lost to urbanization and agricultural conversion since 1986. The remaining patches of habitat are mostly isolated, degraded, and/or fragmented. The elimination of vernal pool habitat in southern California has directly contributed to the decline of the San Diego fairy shrimp (USFWS 2000). Of the 91.53 acres of critical habitat for the San Diego fairy shrimp that occurs in the Central Alternative, the vast majority (81.56 acres) is found in the Central POE site, nearly covering the POE; 9.97 acres of this critical habitat are found within the southern interchange area of the Central Corridor. Additional critical habitat for the San Diego fairy shrimp occurs approximately 2,000 feet to the north of the western portion of the SR-11 Corridor (Figure 3.20-1).

San Diego fairy shrimp were found in three basins in the Central Alternative (Figures 3.19-2 and 3.19-3). San Diego fairy shrimp were observed in a basin along a dirt road in the northeastern portion of the Central SR-11 Corridor during the 2006 USFWS protocol surveys; no fairy shrimp were observed in the Central POE Site during the 2006 surveys. This species also was observed in a basin within non-native grassland in the eastern half of the Central POE Site, and in another basin on the northern edge of the Central SR-11 Corridor during previous protocol surveys (URS 2005). Refer to the *Biological Resources Existing Conditions Report* (January 2008) for the wet and dry season fairy shrimp survey reports.

The Riverside fairy shrimp is Federal listed endangered. This species is a small freshwater crustacean historically found in vernal pools, ephemeral wetlands and manmade depressions (e.g., road ruts and ditches) in coastal southern California and south to northwestern Baja California, Mexico. As described above, much of the vernal pool habitat in the county has been lost to urbanization and agricultural conversion. The elimination of vernal pool habitat in southern California has directly contributed to the decline of the Riverside fairy shrimp (USFWS 2000). No critical habitat for the Riverside fairy shrimp occurs in the Central Alternative or in the vicinity of the program area.

Riverside fairy shrimp were found in two basins along dirt roads in the northern portion of the Central SR-11 Corridor during the 2006 USFWS protocol surveys (Figure 3.19-2); none were found in the Central POE Site in 2006. This species also was found in a basin along a dirt road on the northern edge of the Central SR-11 Corridor during previous surveys; no Riverside fairy shrimp were found in the Central POE Site during previous surveys.

Endangered San Diego and Riverside fairy shrimp are found within vernal pools and other basins within the program area. These habitats are described below.

Vernal pools are highly specialized, seasonal communities that support a unique flora, typically occur on mesas and are formed under specific physical conditions, including a subsurface hardpan or claypan that inhibits the downward percolation of water and a topography characterized by a series of low hummocks (mima mounds) and depressions (vernal pools), which prevent surface water runoff. Under these conditions, water collects in the depressions during the rainy season and gradually evaporates over time. In addition to ponding water, a guild of aquatic invertebrates that may include Federal listed fairy shrimp may inhabit vernal pools. Over 97 percent of vernal pool habitat has been lost to urbanization and agricultural conversion since 1986. The remaining patches of habitat are mostly isolated, degraded or fragmented (USFWS 2000).

The vernal pools also support one or more of the plant species identified in the ACOE vernal pool plant indicator species list (ACOE 1997). As a seasonal wetland, vernal pools usually meet all three of the ACOE's wetland parameters. Jurisdiction over vernal pools varies, however, due to idiosyncrasies in the regulations related to landscape position (i.e., connectivity) and the presence of listed species. Vernal pools are typically considered isolated waters and therefore not subject to ACOE jurisdiction; in fact, in 2001, the Supreme Court issued a decision in *Solid Waste Agency of Northern Cook County vs. U.S. Army Corps of Engineers* that essentially eliminated the ACOE's jurisdiction over isolated waters. There have been instances in which vernal pools were considered hydrologically connected to other WUS, however, and the ACOE has exerted jurisdiction over these areas. The ACOE regulates impacts to vernal pools, provided there is a surface connection to WUS. The vernal pools in the program area are isolated according to ACOE regulations and therefore not regulated under Section 404. CDFG only regulates vernal pools if they support listed species, and the regulation is pursuant to the CESA rather than Section 1600 of the California Fish and Game Code. In instances where vernal pools are not regulated by the ACOE or CDFG, the RWQCB will regulate them as Waters of the State under the Porter-Cologne Act. Although nine vernal pools were observed during surveys of the biological study area, in or adjacent to disturbed habitat (primarily within dirt roads) within the vicinity of the Central Alternative, no vernal pools were found within this alternative (Figure 3.18-3). Vernal pools are not further addressed within this PEIR/PEIS because the pools and their associated watersheds were only found outside of the limits of the program alternatives.

Although basins by themselves are not resources of concern, many of the basins within the Central Alternative would be considered valuable habitat, as they support both the Federal listed endangered San Diego and Riverside fairy shrimp. As a result, the basins are mapped as a distinct resource in the Central Alternative. Slightly more than 0.01 acre of basin with fairy shrimp occurs in the Central Alternative; one basin occurs within non-native grassland in the POE Site (observed prior to 2006), and three are found along dirt roads in the northern portion of the Central SR-11 Corridor (Figures 3.19-2 and 3.19-3).

Coastal California gnatcatcher

The coastal California gnatcatcher is Federal listed threatened. This species is a small, non-migratory songbird dependent upon coastal sage scrub. An estimated 94 percent of the existing population resides below 820 ft in elevation (Atwood 1990). Coastal sage scrub habitat was developed rapidly from the 1940s to 1990s for agriculture, grazing or urban areas, and now is considered one of the most endangered habitats in the U.S. Habitat loss is the main threat to this sensitive species (National Audubon Society 2005). Although the Diegan coastal sage scrub within the Central Alternative is part of a large nearby gnatcatcher critical habitat unit, the

boundaries of this final critical habitat unit do not overlap with the Central Alternative and occur entirely outside of either program alternative (Figure 3.20-1).

Three juvenile coastal California gnatcatchers were observed within patches of Diegan coastal sage scrub that also extend into the SR-11 Corridor. During the 2006 USFWS protocol surveys, one juvenile was spotted approximately 150 feet to the northeast of the Central SR-11 Corridor, and a pair of juveniles was spotted approximately 395 feet to the northeast of the Corridor (Figure 3.19-2). No gnatcatchers have been observed within the Central Alternative and surrounding area during the gnatcatcher breeding season (when it is often easier to locate them). It is presumed that gnatcatcher breeding occurs outside the program area in more extensive coastal sage scrub habitat, and that dispersing individual gnatcatchers may wander into the edges of the sage scrub habitat along the northeastern edges of the Central SR-11 Corridor. Additional information regarding Diegan coastal sage scrub habitat is provided below.

Considered sensitive by several resource agencies, including the County (1991) and CDFG (Holland 1986) because it supports a number of State and Federal listed endangered, threatened and rare vascular plants, as well as several bird and reptile species that are Federal listed or are candidate species for Federal listing, coastal sage scrub is one of the two major shrub types that occur in California. This habitat type occupies xeric sites characterized by shallow soils. Sage scrub is dominated by low subshrubs, many of which are drought-deciduous, an adaptation that allows them to withstand prolonged summer and fall drought periods (Holland 1986). Sage scrub species have relatively shallow root systems and open canopies, which allow for a substantial seasonal herbaceous plant component. Loss estimates for sage scrub habitat in California range from 36-85 percent, but since the time these estimates were made in 1979-81, additional losses have accrued (O'Leary 1990). According to Oberbauer (1991), the historical reduction of sage scrub in the County is approximately 72 percent. The primary mechanism for the loss of sage scrub within California has been grazing and, more recently, urbanization.

This native habitat supports the Federal listed endangered Quino checkerspot butterfly and contains plant species such as California sagebrush (*Artemisia californica*), San Diego County viguiera, California buckwheat (*Eriogonum fasciculatum*), and laurel sumac (*Malosma laurina*). As noted above, the Diegan coastal sage scrub in the program area is confined to the Central Alternative and areas north and east of the Central SR-11 Corridor; large stands of this habitat extend beyond the program area to the north and east. All of the Diegan coastal sage scrub (including disturbed) that occurs in the program area (i.e., 11.41 acres on hillsides in the eastern-most portion of the Central SR-11 Corridor and POE Site) is a part of a larger Quino checkerspot butterfly critical habitat unit that occurs on East Otay Mesa.

3.20.3 Impacts

Western Alternative

As noted in the Introduction to Chapter 3, no ground-disturbing activities would occur during Phase I; therefore, no direct or indirect impacts to threatened or endangered plant or animal species would occur in association with the Western Alternative SR-11 Corridor or POE Site and no environmental permits would be required. Although no impacts would occur during Phase I, the identification of a preferred alternative as a result of Phase I would commit the identified SR-11 Corridor and POE Site for future development with these uses.

Additional biological resources studies would be conducted during Phase II, as part of the engineering and environmental evaluation of the design and operational alternatives for SR-11 and the Otay Mesa East POE. Such studies would include an analysis of the potential for the alternatives addressed to result in direct impacts to threatened or endangered plant or animal species within the Western Alternative. For the purpose of comparing the potential future Western and Central alternative impacts, and to provide guidance for future Phase II planning, it is assumed that any of the animal species present within each program alternative could be impacted during Phase II.

Potential Future Direct Impacts

Threatened and Endangered Plant Species. Identification of the Western Alternative for Phase II implementation is not expected to result in direct impacts to threatened or endangered plant species, because none were detected within the Western SR-11 Corridor or POE Site. However, as vegetative cover and individual species occurrence may fluctuate from year to year depending on climatic and hydrologic variations and other environmental factors, direct impacts also could occur to any of the seven threatened or endangered plant species not observed in the Western Alternative, but with the potential to occur in the program area (Table 3.20-1). Any such impacts to listed plant species documented in future surveys for Phase II would be considered adverse.

Threatened and Endangered Animal Species. Identification of the Western Alternative for Phase II implementation could result in direct impacts to the Quino checkerspot butterfly, observed within the Western POE Site during surveys prior to 2006 (refer to Figure 3.19-3 and Table 3.20-2). Impacts would be adverse and substantial because the Quino is Federal listed as endangered. Furthermore, direct impacts would occur to designated critical habitat for the Quino that occurs within the Western SR-11 Corridor and POE Site (Figure 3.20-1). Direct impacts also would occur to designated critical habitat for the San Diego fairy shrimp that occurs within the Western POE site.

Potential future direct impacts to threatened and endangered animal species in the Western Alternative would not be limited to only the Quino, as individual animals move around for hunting, foraging and breeding/nesting purposes, or are inadvertently transported to other locations due to human causes (such as vehicles driving through basins that support fairy shrimp), and would not be expected to always remain in the same fixed location over time. Therefore, direct impacts also could affect those threatened and endangered animal species observed within the area immediately surrounding the Western Alternative, as well as any of the seven other threatened or endangered animal species with the potential to occur in the program area (Table 3.20-2). Any such impacts would be considered adverse and substantial.

Potential Future Indirect Impacts

Threatened and Endangered Plant Species. Potential Phase II indirect impacts or “edge effects” could adversely affect listed plant species found adjacent to the Western SR-11 Corridor and POE Site. Potential causes of indirect impacts include human and pet activity/intrusion in the area (e.g., parking on roadway shoulders and exiting vehicles, as well as littering), increased U.S. Border Patrol activity surrounding the new roadway and POE, landscape irrigation runoff, pesticide and/or fertilizer drift, roadway contaminant runoff, and introduction of non-native species (further addressed in Section 3.23, Invasive Species).

Threatened and Endangered Animal Species. Potential Phase II indirect impacts or "edge effects" could adversely impact listed animal species adjacent to the Western SR-11 Corridor and POE Site. Potential causes of indirect impacts include human and pet activity/intrusion in the area as noted above for plant species. Noise and vibration impacts, including blasting, from the construction and operation of SR-11 and the POE also could adversely impact listed animals. Other indirect impacts to listed animal species could occur as a result of night lighting, habitat degradation and/or fragmentation and introduction of non-native plant or animal species (further addressed in Section 3.23, Invasive Species).

Central Alternative

As described above, no direct or indirect impacts to threatened or endangered plant or animal species within the Central Alternative would occur during Phase I, and no environmental permits would be required. During Phase II, issues that would be addressed by the lead agencies for subsequent environmental documents would include the potential for the alternatives addressed to result in direct impacts to threatened or endangered plant or animal species within the Central Alternative. For the purposes of comparing the potential future Central Alternative impacts, and to provide guidance for future Phase II planning, it is assumed that any of the threatened or endangered plant or animal species present within this program alternative could be impacted during Phase II.

Potential Future Direct Impacts

Threatened and Endangered Plant Species. Identification of the Central Alternative for Phase II implementation could result in direct impacts to the Federal listed threatened and State listed endangered Otay tarplant, which was detected within the Central SR-11 Corridor during surveys prior to 2006 (refer to Figure 3.18-2 and Table 3.20-1). Impacts would be adverse and substantial because the Otay tarplant is a Federal listed species. Furthermore, direct impacts could occur to that portion of designated critical habitat for Otay tarplant that overlaps with the Central SR-11 Corridor (Figure 3.20-1). Direct impacts also could occur to the six other threatened or endangered plant species not observed in the Central Alternative, but with the potential to occur in the program area (Table 3.20-1). Any such impacts to listed plant species documented in future surveys for Phase II would also be considered adverse.

Threatened and Endangered Animal Species. Direct impacts could occur to the Federal listed endangered San Diego and/or Riverside fairy shrimp if the Central Alternative is identified for Phase II implementation, because four basins with fairy shrimp occur within this alternative. Direct impacts to the 91.53 acres of final critical habitat for the San Diego fairy shrimp also would occur with implementation of the Central Alternative. As noted above, it should not be assumed that direct impacts to threatened and endangered animal species during Phase II would be limited to only those species observed within the Central SR-11 Corridor and POE Site, because locations of individual animals may fluctuate over time. Direct impacts also could occur to any of the six other listed/proposed species not detected within the Central Alternative, but with the potential to occur within the program area, including the Quino checkerspot butterfly, which has 143 acres of its designated critical habitat located within the Central Alternative (see Table 3.20-2). The protocol surveys conducted in 2006 would be repeated in conjunction with the Phase II environmental document to determine if additional listed animal species are present at that time. Impacts to any of these species would be considered adverse.

Potential Future Indirect Impacts

Threatened and Endangered Plant Species. The same types of edge effects as described for the Western Alternative could occur for the Central Alternative during Phase II, resulting in indirect impacts to any threatened or endangered plant species found within or adjacent to the Central SR-11 Corridor or POE Site.

Threatened and Endangered Animal Species. Additional edge effects could occur to those listed animal species adjacent to the Central Alternative corridor and POE site during Phase II, resulting in the same types of adverse indirect impacts as those described above for the Western Alternative. Indirect impacts could occur to the coastal California gnatcatcher, individuals of which were observed adjacent to the Central Corridor, and to the final designated gnatcatcher critical habitat unit that nearly abuts the northeastern portion of the Central Corridor.

No Action Alternative

No direct or indirect impacts to sensitive animal species would occur under the No Action Alternative, as no ground-disturbing activities are proposed, no environmental permits would be required, and no SR-11 Corridor/POE Site would be identified for future development.

3.20.4 Avoidance, Minimization and/or Mitigation Measures

Because no impacts were identified for Phase I implementation under any of the described alternatives, no associated avoidance, minimization or mitigation measures are proposed.

As required by NEPA, measures would be identified during Phase II to avoid, minimize or mitigate impacts that may occur related to threatened and endangered plant or animal species.

Avoidance, minimization and mitigation recommendations for implementation of the SR-11 Corridor and/or POE Site under Phase II for both development alternatives would begin with the completion of updated focused sensitive species surveys for the Federal and State listed plant and animal species with potential to occur within or adjacent to the proposed Phase II impact area. A Natural Environment Study would be prepared to update existing conditions information and evaluate in detail the potential impacts of the Phase II alternatives within the identified SR-11 Corridor and POE Site. This study would be completed in conformance with applicable Caltrans requirements, and would include specific measures to avoid, minimize or mitigate development impacts.

If potential adverse direct impacts to listed plants are identified during Phase II, potential measures to avoid or minimize such impacts could include design of Phase II alternatives to avoid impacts to known populations of listed plants species; mitigation of impacts to sensitive plants through habitat restoration, creation and/or preservation; and translocation of plants from the impact area to an existing or planned preserve. Potential measures available to reduce edge effects to listed plant species during Phase II construction of SR-11 and the POE, if necessary, could include use of construction fencing to clearly delineate the edge of allowable clearing and grading, requiring construction personnel to remain in fenced areas, prohibiting pets on construction sites, and construction monitoring to ensure compliance. Over the long-term, if potential indirect impacts to listed plant species are identified from operation of the proposed facilities, measures to address such impacts could include fencing to prevent people from entering habitat areas from the proposed facilities, translocation of listed plants, avoiding

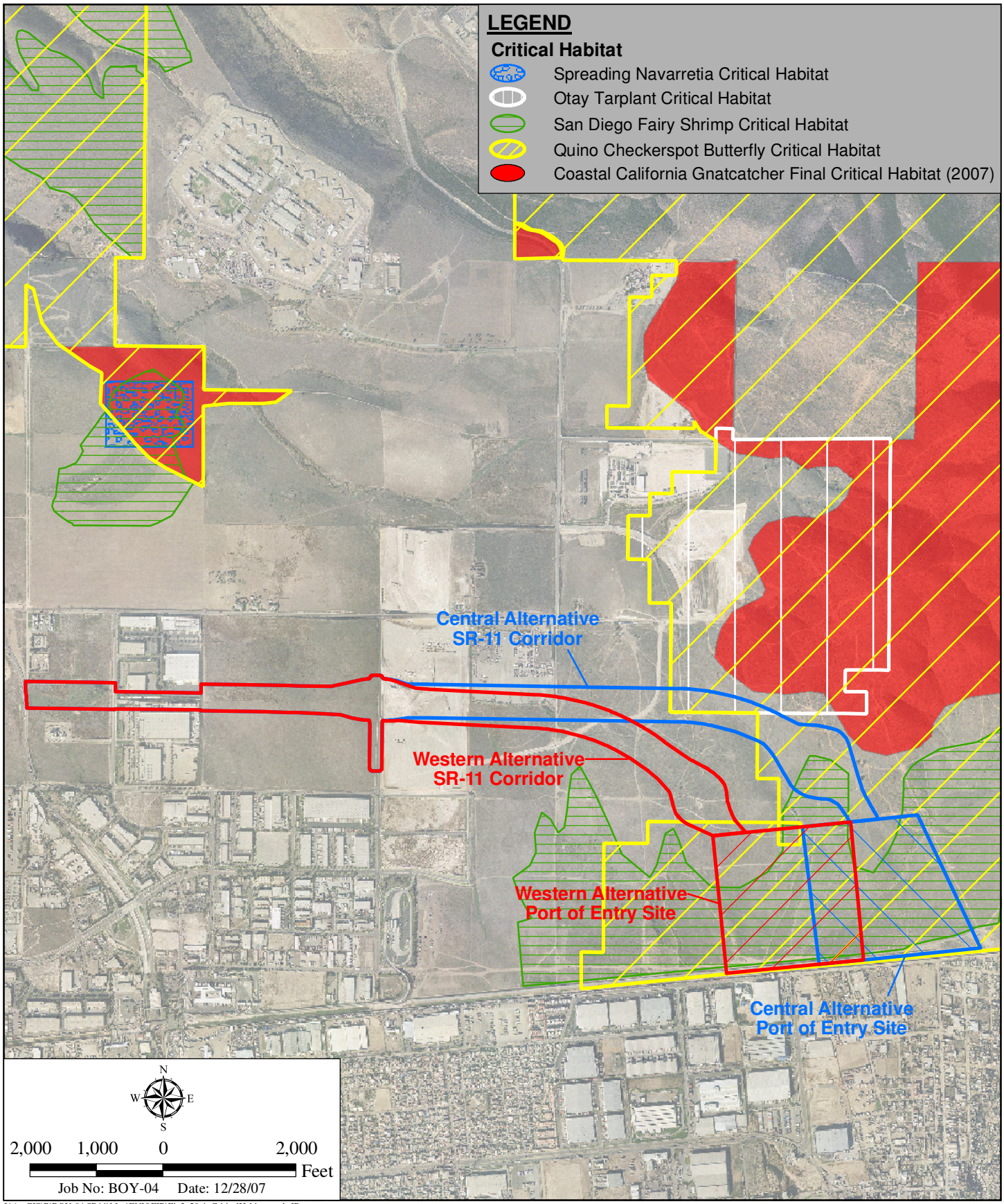
the use of invasive species within landscaped areas (refer to Section 3.21 for additional discussion), and habitat-based mitigation for any impacts considered permanent.

If potential adverse direct impacts to listed animal species are identified during Phase II, potential measures to avoid or minimize such impacts could include design of the proposed facilities to avoid impacts to known populations of listed animals and habitat-based mitigation for substantial impacts to listed species. If potential adverse indirect impacts to listed animals are identified during Phase II, potential measures to address such impacts would include avoidance of construction adjacent to listed, nesting birds during the breeding season or use of noise barriers to avoid substantial impacts to nesting birds; use of construction fencing to clearly delineate the edge of allowable clearing and grading; requiring construction personnel to remain in fenced areas; prohibiting pets on construction sites; directing night lighting away from habitat areas; and construction monitoring to ensure compliance. Over the long-term, if potential indirect impacts to listed animal species are identified from facility lighting, noise and other activities, potential measures to address such impacts would include installation of permanent noise barriers directing permanent lighting onto the proposed facilities and away from adjacent habitat areas; installation of fences to prevent people from entering habitat areas from the proposed facilities; and habitat-based mitigation for any impacts considered permanent.

Specific measures to address impacts to listed plant and animal species would be determined in conjunction with the Phase II environmental document and through consultation with the appropriate permitting and resource agencies.

As described in Section 3.16, the strategy for binational planning of environmental conservation and cross-border mitigation, which is currently being developed and considered for implementation, would need to be considered in development of mitigation measures in Phase II.

Avoidance, minimization or mitigation of the potential impacts to threatened or endangered species under the No Action alternative is not required under CEQA or NEPA.



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Critical Habitat

STATE ROUTE 11 AND OTAY MESA EAST PORT OF ENTRY PEIR/PEIS

Figure 3.20-1

3.21 INVASIVE SPECIES

This section addresses invasive species, which are not considered sensitive by any regulating agency.

3.21.1 Regulatory Setting

On February 3, 1999, President Clinton signed Executive Order 13112 requiring federal agencies to combat the introduction or spread of invasive species in the United States. The order defines invasive species as "any species, including its seeds, eggs, spores, or other biological material capable of propagating that species, that is not native to that ecosystem whose introduction does or is likely to cause economic or environmental harm or harm to human health." FHWA guidance issued August 10, 1999 directs the use of the state's noxious weed list to define the invasive plants that must be considered as part of the NEPA analysis for a proposed project.

3.21.2 Affected Environment

Information presented in this section was derived from the 2006 biological resources surveys described in previous sections, and was supplemented by historic biological data from prior surveys in 2001, 2002 and 2005, all of which are documented in the *Biological Resources Existing Conditions Report* (2008). The relevant portions of that report are summarized below.

Plant Species

The California Invasive Plant Inventory (California Invasive Plant Council [Cal-IPC] 2006, updated 2007) categorizes invasive plant species as high, moderate or limited, reflecting the level of each species' negative ecological impacts in California. Other factors, such as economic impact or difficulty of management, are not included in the assessment.

The most invasive plant species are categorized as "high" and have severe ecological impacts on physical processes, plant and animal communities and vegetation structure. Their reproductive biology and other attributes are conducive to moderate to high rates of dispersal and establishment, and many have a wide ecological distribution.

Species categorized as "moderate" have substantial and apparent, but generally not severe, ecological impacts on physical processes, plant and animal communities and vegetation structure. Their reproductive biology and other attributes are conducive to moderate to high rates of dispersal, although establishment is generally dependent on ecological disturbance. Ecological amplitude and distribution may range from limited to widespread.

Plants categorized as "limited" are invasive, but their ecological impacts are minor on a statewide level or there was not enough information to justify a higher category. Their reproductive biology and other attributes result in low to moderate rates of invasiveness. Ecological amplitude and distribution are generally limited, but these species may be locally persistent and problematic.

Thirty-seven (37) non-native invasive plant species were identified within the program area, as shown below in Table 3.21-1. The habitats in which these species were observed were noted during the general botanical and other biological surveys, but their specific locations within the

program area were not recorded. Therefore, the invasive species listed in Table 3.21-1 are not discussed according to which alternative they were observed in, but rather as general components of vegetation communities occurring within the program area. According to Cal-IPC, the most highly invasive plant species present in the program area are: foxtail chess (*Bromus madritensis* ssp. *rubens*), yellow star-thistle (*Centaurea solstitalis*), fennel (*Foeniculum vulgare*), peppergrass (*Lepidium latifolium*), French tamarisk (*Tamarix ramosissima*), and hottentot-fig (*Carpobrotus edulis*). These species are present in disturbed habitat, disturbed wetland, Diegan coastal sage scrub, non-native grassland, and tamarisk scrub. Typical invasive plant species found in the wetland areas and vernal pools within the program area include grass poly (*Lythrum hyssopifolium*), African brass-buttons (*Cotula coronopifolia*), curly dock (*Rumex crispus*), rabbitsfoot grass (*Polypogon monspeliensis*), and tamarisk (*Tamarix* sp.). Mustard (*Brassica* sp.), yellow star-thistle, tamarisk, fennel, and garland daisy (*Chrysanthemum coronarium*) were noted in the results of the biological surveys completed for the western portion of the program area within the SR-905 alignment, as shown in Figure 3.16-1.

The majority of vegetation communities within the program area are moderately to highly infested with invasive plant species, many of which occur because they colonized following previous site disturbances, such as grazing, farming, fire, and/or off-road activity.

In addition to individual invasive plant species, the program area also supports small stands of tamarisk scrub, a non-native vegetation community dominated by invasive species. Tamarisk scrub is a shrubby vegetation community that often consists of a weedy, virtual monoculture of any of several species of tamarisk, all of which are non-native species that replace native vegetation subsequent to major disturbance. Tamarisk species are opportunistic and can survive in upland areas with little or no surface water contribution. Because of its deep root system and high evapotranspiration rates, tamarisk can lower the water table to below the root zone of native species, thereby competitively excluding them. Additionally, as a prolific seeder, tamarisk is able to rapidly replace native species. As noted in Section 3.16, tamarisk scrub occurs near the center of the Central SR-11 Corridor. Two additional stands of tamarisk scrub occur in the program area outside of either alternative, including a stand to the north of the Central SR-11 Corridor and another small stand midway between the proposed western and central Siempre Viva Interchange areas.

Animal Species

Two potentially invasive animal species were observed within the program area: cabbage white butterfly (*Pieris rapae*) and European starling (*Sturnus vulgaris*). Unlike the California Invasive Plant Inventory, there is no known inventory for categorizing invasive animal species.

The cabbage white butterfly was observed in non-native grassland habitat throughout the program area, as its host and nectar plants include mustard and wild radish (*Raphanus sativus*), both of which are invasive plant species found on site. The location of European starlings within the program area was not recorded, but the species is likely to occur within disturbed habitat and non-native grassland, where it could forage on the ground for insects and seeds.

Table 3.21-1
INVASIVE PLANT SPECIES FOUND WITHIN THE PROGRAM AREA

Common Name	Scientific Name	Habitat(s)†	California Invasive Plant Inventory Negative Ecological Impact Category		
			High	Moderate	Limited
Australian saltbush	*Atriplex semibaccata*	NNG		x	
Slender wild oat	*Avena barbata*	DCSS, DCSS-D, DH, NG, NNG		x	
Wild oat	*Avena fatua*	DCSS-D, DH, NNG		x	
Field mustard	*Brassica rapa*	NNG			x
Ripgut grass	*Bromus diandrus*	DCSS, DCSS-D, NNG, DH		x	
Soft chess	*Bromus hordaceus*	NNG			x
Foxtail chess	*Bromus madritensis* ssp. *rubens*	DCSS, DCSS-D, NNG, DH	x		
Italian thistle	*Carduus pycnocephalus*	NNG		x	
Hottentot fig	*Carpobrotus edulis**	UNK	x		
Star-thistle	*Centaurea melitensis*	DH, NNG		x	
Yellow star-thistle	*Centaurea solstitalis**	UNK	x		
Garland daisy	*Chrysanthemum coronarium**	UNK		x	
African brass-buttons	*Cotula coronopifolia*	FWM, NNG		x	
Cardoon	*Cynara cardunculus*	NNG		x	
Red-stem filaree	*Erodium cicutarium*	DH, NNG			x
Fennel	*Foeniculum vulgare*	DH, DW, NNG	x		
Perennial mustard	*Hirschfeldia incana*	NNG		x	
Mediterranean barley	*Hordeum marinum* ssp. *gussoneanum*	DH, NNG		x	
Smooth cat's ear	*Hypochaeris glabra*	NNG			x
Peppergrass	*Lepidium latifolium*	NNG			
Italian ryegrass	*Lolium multiflorum*	NNG		x	
Grass poly	*Lythrum hyssopifolium*	EW			x
Horehound	*Marrubium vulgare*	NNG			x
Bur-clover	*Medicago polymorpha*	NNG			x
Crystalline iceplant	*Mesembryanthemum crystallinum**	UNK		x	
Tree tobacco	*Nicotiana glauca**	UNK		x	
Bermuda buttercup	*Oxalis pes-caprae*	NNG		x	
Rabbitsfoot grass	*Polypogon monspeliensis*	DW, DH, NNG, FWM			x
Wild radish	*Raphanus sativus*	NNG			x
Curly dock	*Rumex crispus*	DW, TS, FWM			x

Table 3.21-1 (cont.)
INVASIVE PLANT SPECIES FOUND WITHIN THE PROGRAM AREA

Common Name	Scientific Name	Habitat(s)†	California Invasive Plant Inventory Negative Ecological Impact Category		
			High	Moderate	Limited
Russian thistle	*Salsola tragus*	DH, NNG, VP			x
Mediterranean grass	*Schismus barbatus*	DH, NNG			x
Milk thistle	*Silybum marianum*	NNG			x
London rocket	*Sisymbrium irio**	UNK		x	
French tamarisk	*Tamarix ramosissima**	UNK	x		
Tamarisk	*Tamarix* sp.[1]	DW, TS, MFS-D	x	x	
Fescue	*Vulpia myuros*	DCSS, DCSS-D, DH, NNG		x	

*Observed only by URS in 2005 and may have been outside the program area since URS' study area was larger.
[1]Tamarisk within the program area was not identified to species, and may be French tamarisk.
†Habitat acronyms: DCSS=Diegan coastal sage scrub, DCSS-D=Diegan coastal sage scrub-disturbed, DH=disturbed habitat, DW=disturbed wetland, EW=emergent wetland, FWM=freshwater marsh, MFS-D=mule fat scrub-disturbed, NNG=non-native grassland, TS=tamarisk shrub, UNK=unknown, VP=vernal pool.

3.21.3 Impacts

As noted in the Introduction to Chapter 3, no ground-disturbing activities would occur during Phase I; therefore, no direct or indirect impacts from invasive species would occur in association with either the Western Alternative or Central Alternative SR-11 Corridor or POE Site and no environmental permits would be required. Although no impacts would occur during Phase I, the identification of a preferred alternative as a result of Phase I would commit the identified SR-11 Corridor and POE Site for future development with these uses.

Additional biological resources studies would be conducted during Phase II, as part of the engineering and environmental evaluation of the design and operational alternatives for the SR-11 Corridor and POE Site. Such studies would include an analysis of the potential for the alternatives addressed to result in direct or indirect impacts associated with invasive plant or animal species, including the spread of such species within the program area.

Phase II would comply with the requirements of Executive Order 13112, which seeks to prevent the introduction and spread of invasive species. To provide guidance for future Phase II planning, it is assumed that all invasive plant species present within each program alternative would be removed during Phase II, in compliance with Executive Order 13112. None of the species on the California list of noxious weeds is currently used by Caltrans for erosion control or landscaping; the Phase II landscape plan would be required to include only native and non-invasive species.

Although construction of the proposed facilities in Phase II would eliminate invasive species within the project footprint, there is the potential for construction activities associated with Phase II to result in the further spread of invasive plant species within the program area. If program implementation caused invasive plants to colonize previously undisturbed areas of Diegan coastal sage scrub, this could adversely impact the Federal listed endangered Quino

checkerspot butterfly by displacing larval food plants and adult nectar sources, and could also displace listed or sensitive plant species by shading and/or out-competing the native species.

Construction of the project in Phase II could also result in a localized decrease in the cabbage white butterfly population, a species that is considered a pest on crops such as cabbage, broccoli and radishes, and in large numbers may be considered invasive primarily due to its potential for economic harm. However, its presence (or absence) would not have a substantial adverse effect on biological resources in the program area.

Construction of the project in Phase II would not be expected to increase or decrease the population of European starlings, an introduced species that is considered invasive because it competes for nest cavities with native birds such as the acorn woodpecker, northern flicker and purple martin. This competition for nest cavities is thought to be the primary factor in the steep decline of the purple martin as a nesting bird in the West (Unitt 2004). CDFG lists the purple martin as a State species of concern. Phase II could eliminate some foraging habitat for European starlings, resulting in a potential population decrease, but at the same time this species is highly adaptable and can thrive around human settlement, and thus their population may increase. Either result is not expected to adversely affect biological resources, as the purple martin is not expected to occur in or adjacent to the program area.

In summary, Phase II of either program alternative could adversely affect adjacent habitat, if construction resulted in the further spread of invasive plant species into these areas. No adverse impacts would be associated with invasive animal species.

No Action Alternative

No adverse direct or indirect effects associated with invasive species would occur under the No Action Alternative, as no ground-disturbing activities or landscaping are proposed.

3.21.4 Avoidance, Minimization and/or Mitigation Measures

Because no impacts were identified for Phase I implementation under any of the described alternatives, no associated avoidance, minimization or mitigation measures are proposed.

As required by NEPA, measures would be identified during Phase II to avoid, minimize or mitigate impacts that may occur related to invasive species. Avoidance, minimization and mitigation recommendations for implementation of the SR-11 Corridor and/or POE Site under Phase II for either development alternative would begin with the completion of a Natural Environment Study updating existing conditions information and evaluating in detail the potential impacts of the Phase II alternatives within the identified SR-11 and POE alternatives. This study would be completed in conformance with applicable Caltrans requirements, and would include specific measures to avoid, minimize or mitigate development impacts.

Precise measures to address invasive plant impacts in Phase II would be determined during Phase II environmental review, and could include such measures as the following:

- Inspection of construction areas by a biological monitor for invasive species according to a prescribed schedule during construction. A typical schedule would involve weekly inspections after the first rains and throughout the rainy season of the construction period. Outside the rainy season, inspection of invasive species could occur monthly. In areas of particular sensitivity, extra precautions should be taken if invasive species are found in or

adjacent to the construction areas. These would include the inspection and cleaning of construction equipment and eradication strategies to be implemented should an invasion occur. The biological monitor also could recommend a weed eradication effort, if necessary.

- Upon completion of grading, all areas of temporary disturbance would typically be revegetated with native species or ornamental landscaping to limit colonization by invasive species in the future.

- A qualified biologist should review the landscape concept plans for the SR-11 Corridor and POE Site to ensure that no invasive species (as listed in the California Invasive Plant Inventory) are included.

- In compliance with Executive Order 13112, and subsequent guidance from the FHWA (as applicable for the SR-11 project), the landscaping and erosion control included in the project should not use species listed as noxious weeds. In areas of particular sensitivity, extra precautions would be taken if invasive species were found in or adjacent to the construction areas. Such precautions could include the inspection and cleaning of construction equipment and eradication strategies to be implemented should an invasion occur.

Avoidance, minimization or mitigation of the potential impacts related to invasive species under the No Action alternative is not required under CEQA or NEPA.

ADDITIONAL IMPACTS

3.22 RELATIONSHIP BETWEEN LOCAL SHORT-TERM USES OF THE HUMAN ENVIRONMENT AND THE MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY

NEPA requires a discussion of a proposed action's relationship of local short-term impacts and use of resources to the maintenance and enhancement of long-term productivity in 40 CFR Section 1502.16 (Environmental Consequences) of the CEQ Regulations, although CEQA Guidelines Section 15127 (Limitations on Discussion of Environmental Impact) notes that the "statutory requirement for a discussion of the relationship between short-term uses and long-term productivity was repealed by Chapter 1230 of the Statutes of 1994." A discussion in conformance with the guidance in the Caltrans SER is provided below.

3.22.1 Program Alternatives

Proposed actions under Phase I include adoption of a corridor and POE alternative, acquisition of a Presidential Permit and possible land acquisition. Since this phase does not include any ground-disturbing activities and does not address specific design/operational characteristics of the SR-11 Corridor or POE Site, no short-term losses or long-term enhancement of productivity would occur from Phase I. The implementation of Phase I under either alternative would commit the adopted SR-11 Corridor and associated POE Site to future development under Phase II, with anticipated potential short-term losses and long-term productivity enhancement described below.

Phase II program implementation would result in attainment of short-term and long-term transportation and economic objectives at the expense of some long-term social, aesthetic, biological, noise, and other land use impacts. Transportation improvements are based on State/local comprehensive planning, which considers the need for present and future traffic requirements within the context of present and future land use development. The local short-term impacts and use of resources by the proposed program are consistent with the maintenance and enhancement of long-term productivity for the local area and the State as a whole.

Program Alternatives

The program alternatives would have similar impacts, as the Western and the Central alternatives are in close proximity and would involve large-scale construction applying similar techniques, which would affect an approximately 500-foot wide corridor for SR-11 and approximately 100 acres for the POE. Phase I would commit the SR-11 Corridor and POE Site for future construction, but would not result in an immediate use of the land. Under Phase II, the following short-term and long-term losses and benefits are likely to occur:

Short-term losses would include:

- Economic losses experienced by businesses affected by relocation;
- Construction impacts such as noise, motorized and non-motorized traffic delays or detours; and
- Brief interruptions in utility service where relocation or connections would be required.

Short-term benefits would include:

- Increased jobs and revenue generated during construction.

Long-term losses would include:

- Permanent loss of plant and wildlife resources;
- Loss of open space;
- Visual impacts;
- Noise increases; and
- Use of construction materials and energy.

Long-term benefits would include:

- Improvement of the transportation network of the region and the program vicinity;
- Increased access to the border, improving the free movement of people and goods;
- Reduction of congestion on certain local streets and highways, depending on driving patterns that develop in response to provision of an additional high-capacity transportation facility in the study area;
- Reduction in wait times at existing POEs;
- Improvement in security and the ability to conduct primary inspections at all POEs;
- Increased jobs and revenue through creation of a new POE; and
- Support of approved development.

3.22.2 No Action Alternative

The No Action Alternative would offer none of the benefits nor have any of the losses listed above. It would, however, not resolve worsening congestion on local streets and highways and other POEs. It would not support planned development.

3.23 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES THAT WOULD BE INVOLVED IN THE PROPOSED PROGRAM

Program Alternatives

Proposed actions under Phase I include identification of a preferred SR-11 Corridor and POE Site, acquisition of a Presidential Permit and possible land acquisition. Since this phase does not include any ground-disturbing activities and does not address specific design/operational characteristics of the SR-11 Corridor or the POE Site, no irreversible or irretrievable commitments of land or other resources would occur. Once acquired, land designated for the construction of the proposed facility would be considered committed for use as a highway and POE facility. However, if a greater need arose for use of the land prior to construction, the land could be designated for another use. At present, there is no reason to believe such a conversion of intended use would be necessary or desirable.

The specific Phase II impacts of the program would be evaluated during the Phase II environmental process, in conjunction with the analysis of specific design/operational alternatives at that time. In general, implementation of the proposed program in Phase II would involve a commitment of a range of natural, physical, human, and fiscal resources, including the use of fossil fuels, labor, materials, and public funds for construction, operation and maintenance, with the Western Alternative utilizing less of such resources than the Central Alternative, due to the Western Alternative involving a shorter SR-11 roadway. Although such resources are generally not retrievable, their commitment is based on the concept that residents in the immediate area, region and State would benefit from the improved quality of the transportation and POE system. These benefits would consist of improved accessibility and safety, savings in time and fuel and the provision of a dependable transportation system. Environmental studies conducted during Phase II would evaluate whether the program benefits would outweigh the commitment/loss of these resources.

No Action Alternative

The No Action Alternative would not require irreversible and irretrievable commitments of resources.

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the entire coastal plain, when the warm air mass over land is undercut by a shallow layer of cool marine air flowing onshore. During the winter, a nightly shallow inversion layer (at about 800 feet) forms between the cooled air at the ground and the warmer air above, which traps vehicular pollutants. Inversion layers are therefore important elements of local air quality because they inhibit the dispersion of pollutants, thus resulting in a temporary degradation of air quality.

The predominant onshore/offshore wind pattern is sometimes interrupted by so-called Santa Ana conditions, when high pressure over the Nevada-Utah area overcomes the prevailing western winds, sending strong, steady, hot and dry winds from the east over the mountains and out to sea. Strong Santa Ana's tend to blow pollutants out over the ocean, producing very clear days. However, at the onset of these conditions, or if the Santa Ana is weak, prevailing northwesterly winds reassert themselves and send a cloud of contamination from the Los Angeles Basin ashore in the SDAB (SDAPCD 2007).

Existing Air Pollution Sources

Air quality in the SDAB, as measured at the Otay Mesa-Paseo International station in the existing Otay Mesa POE and the Chula Vista station (which is the nearest station that measures $PM_{2.5}$) is currently classified as nonattainment for the 8-hour NAAQS for ozone, and the 24-hour and annual CAAQS for PM_{10}. The area is in attainment of all other criteria pollutant standards. The immediate area surrounding the proposed program is primarily undeveloped, and is planned for primarily industrial development pursuant to the EOMSP. Refer to Section 3.1 for a more detailed description of existing and planned land uses in the area. Existing major transportation facilities in the Otay Mesa area include I-5, I-805, SR-905 and the recently completed SR-125. An extension of SR-905 between I-805 and SR-125 has been approved, but has not yet been constructed. Section 3.6 provides a more detailed description of the existing and planned transportation network within the program area. There are three existing border crossings in the region; San Ysidro, Otay Mesa and Tecate. These border crossings and the current issues regarding long wait times at each crossing are described in Chapter 1. These existing extensive wait times are associated with increased idle times by passenger vehicles and trucks, with increased levels of pollutants being emitted into the air and to the surrounding communities, and have caused a great deal of concern about public health issues. These conditions are projected to worsen due to continued growth in the numbers of passenger vehicles and trucks crossing the border.

3.14.4 Impacts

Regional Air Quality Conformity

This Phase I analysis is exempt from conformity, because it would not involve construction or physical impacts, and there would be no generation of pollutants that would substantially impact air quality. Phase II conformity would be assessed during the Phase II environmental review, based on the Phase II alternative design/operational characteristics.

Western and Central Alternatives

As noted in the Introduction to Chapter 3, no ground-disturbing activities would occur during Phase I; therefore, no air quality impacts would occur in association with either the Western Alternative or Central Alternative.

Chapter 4.0

CUMULATIVE IMPACTS

CHAPTER 4.0 – CUMULATIVE IMPACTS

4.1 INTRODUCTION

4.1.1 Regulatory Setting

Cumulative impacts are those that result from past, present and reasonably foreseeable future actions, combined with the potential impacts of a project. A cumulative effect assessment looks at the collective impacts posed by individual land use plans and projects. Cumulative impacts can result from individually minor, but collectively substantial, impacts taking place over a period of time.

Cumulative impacts to resources in a project area may result from residential, commercial, industrial, and highway development, as well as from agricultural development and the conversion to more intensive types of agricultural cultivation. These land use activities can degrade habitat and species diversity through consequences such as displacement and fragmentation of habitats and populations, alteration of hydrology, contamination, erosion, sedimentation, disruption of migration corridors, changes in water quality, and introduction or promotion of predators. They can also contribute to potential community impacts identified for a project, such as changes in community character, traffic patterns, housing availability, and employment.

CEQA Guidelines, Section 15130, describes when a cumulative impact analysis is warranted and what elements are necessary for an adequate discussion of cumulative impacts. The definition of cumulative impacts under CEQA can be found in Section 15355 of the CEQA Guidelines. A definition of cumulative impacts under NEPA can be found in 40 CFR, Section 1508.7 of the CEQ Regulations.

4.2 CUMULATIVE ANALYSIS

Identification of Resources to Consider in Cumulative Impact Analysis

The first step in performing the cumulative impact analysis for the proposed Phase I program is to identify what resources to consider in the analysis, which are those resources that the program could directly or indirectly impact. If a project would not cause direct or indirect impacts on a resource, the project would not contribute to a cumulative impact on that resource. The cumulative impact analysis should focus only on: 1) resources significantly impacted by the project; and 2) resources currently in poor or declining health or at risk, even if project impacts are relatively small (less than significant).

For Phase I of the SR-11 Corridor and POE Site Program, the environmental analysis in Chapter 3 documents the source and degree of impact for each resource area addressed per NEPA and CEQA guidance in this program-level document. Proposed actions under Phase I include adoption of a corridor and POE alternative, acquisition of a Presidential Permit and possible land acquisition. Phase I would not include any ground-disturbing activities and would not address specific design/operational characteristics of SR-11 or the POE. Therefore, no direct or indirect program-level impacts would occur to resources from Phase I. Consequently, no cumulative impacts to resources would occur from implementation of Phase I. Minor growth inducement impacts have been assessed for Phase I (e.g., identification of a preferred alternative could influence the amount, type, location, or timing of development on Otay Mesa;

refer to Section 3.3). These impacts are not expected to be substantial, nor contribute substantially to cumulative growth inducement on Otay Mesa, and any impacts would be the same regardless of the preferred location for SR-11 and the POE. These preceding conclusions are based on the Phase I analysis presented for each environmental issue in Chapter 3.

For all resources, the implementation of Phase I under either alternative would commit the adopted SR-11 Corridor and the associated POE site to future development under Phase II. Phase II cumulative impacts would depend on the anticipated cumulative development at the time that Phase II is implemented and would be fully addressed in the environmental documents prepared during the Phase II environmental review. Two cumulative impact issues, land use and biological resources, are also addressed in this PEIR/PEIS, however, for the reasons described below.

For most of the environmental issues addressed in Chapter 3, it was determined that the potential future impacts in Phase II would be approximately the same for either the Western or Central Alternative, and would either be dependent on the future design/operational characteristics of the Phase II alternatives (e.g., traffic, noise, and air quality), would not be substantial and/or would be subject to standard regulatory requirements or mitigation measures (e.g., paleontology, geology and water quality). With respect to land use and biological resources, however, it was determined that identification of either the Western or Central Alternative as the preferred alternative in Phase I, would result in different impacts during Phase II, and that an analysis of such impacts is therefore necessary within this PEIR/PEIS. A preliminary analysis, focusing on the anticipated potential Phase II cumulative impacts to land use and biological resources, is therefore also provided within this Chapter 4 of the PEIR/PEIS, to aid decision makers in foreseeing the potential long-term cumulative implications of decisions made in Phase I.

Below is a list of those resource areas for which Phase II program-level impacts are anticipated to be substantially similar under either the Western or Central Alternative, and for which Phase II cumulative impacts would therefore also be expected to be substantially similar; cumulative analysis of these resources in Phase I would not aid in the selection of a corridor/site alternative:

- Growth
- Farmland
- Community Character and Cohesion
- Relocations
- Environmental Justice
- Energy
- Utilities/Emergency Services
- Traffic and Transportation
- Visual/Aesthetics
- Cultural Resources
- Hydrology and Floodplain
- Water Quality and Storm Water Runoff
- Geology/Soils/Seismic/Topography
- Paleontology
- Hazardous Waste/Materials
- Air Quality
- Noise and Vibration
- Relationship between Local Short-term Uses of the Human Environment and the Maintenance and Enhancement of Long-term Productivity
- Irreversible and Irretrievable Commitments of Resources

Anticipated future Phase II cumulative impacts to the above resources are not discussed in this PEIR/PEIS, but would be addressed in the environmental documents prepared during the Phase II environmental review.

In the Chapter 3 program-level impact analysis, two issue areas demonstrate the potential for substantial differences in Phase II impacts between the Western and Central Alternatives; these are land use/plan consistency and biological environment issues (including natural communities, wetlands and other waters, plant species, animal species, threatened and endangered species, and invasive species). These issue areas merit cumulative analysis at this stage to aid decision makers in distinguishing between the potential Phase II cumulative impacts under the different alternatives. The regional study area for cumulative analysis for both land use and biological resources is the EOMSP area.

Current Health and Historical Context of Resources

Resource area health refers broadly to the overall condition, stability or vitality of a resource. Recent trends, such as government and planning decisions, demographic changes and catastrophic natural events, can affect resource area health, which may be classified as improving, stable or in decline. The historical context and current general resource health for land use and biological resources within each RSA are discussed below.

Land Use

Planned land use designations for the EOMSP area have been in effect since 1994. Some amendments have been approved, especially for the western portion of the EOMSP area, but the area where most of the SR-11 Corridor and POE site would occur has not changed substantially. Currently, both the County and the City are undergoing comprehensive updates to their general plans, including the OSP. The majority of the County land in the program area is designated for industrial and technology business uses. Land on both sides of the border in the program area is rapidly urbanizing, and development pressure continues to mount. Thus, the general health of land use in the RSA could be considered to be mixed.

Biological Resources

Steady development in neighboring areas over the past 15+ years, including the Otay Ranch development among others, has converted biological resources and open space into urban areas. Currently, biological resources continue to diminish as urbanization occurs. The EOMSP calls for protection of environmentally sensitive lands, such as steep slopes, vernal pools, coastal sage scrub vegetation, native grasslands, California gnatcatcher habitat, and other sensitive habitats and species. However, the 1993 EIR for the EOMSP noted there is no feasible way to lessen or avoid the significant biological impacts, because some known biologically sensitive areas have been targeted for industrial or commercial uses. Overall, the general health of the biological resources in the RSA could be considered to be declining.

Identification of Impacts of the Proposed Program that Might Contribute to a Cumulative Impact

No impacts would occur to any resource from implementation of Phase I. Table S-1 of this PEIR/PEIS summarizes the impacts that could occur from implementation of Phase II, including impacts to the land use and biological resources issue areas addressed in this cumulative analysis. For other issue areas, impacts would be similar for the Western Alternative or the

Central Alternative, and are best addressed in the Phase II environmental document when specific design/operational alternatives and the anticipated timing of implementation are known. The following analysis therefore focuses on the potential future land use and biological resources impacts due to implementation of Phase II of the proposed program.

Land Use

Impacts to Existing Land Uses – Action Alternatives

The Western Alternative would traverse primarily undeveloped land, with a few exceptions. The parcel at the southwest corner of Otay Mesa Road and Alta Road is currently used as a vehicle auction yard; the Western SR-11 Corridor would traverse approximately the southern quarter of this parcel. The Central Alternative would traverse primarily undeveloped land, with the exception of the southern quarter of the vehicle auction yard at the southwest corner of Otay Mesa Road and Alta Road, a graded parcel immediately west of the vehicle auction yard, and the four smaller industrial parcels just east of Sanyo Avenue that support three existing industrial buildings adjacent to the SR-11 Corridor.

The Central Alternative would also traverse primarily undeveloped land, but would impact a larger portion (approximately the southern one-quarter) of the vehicle auction yard at the southwest corner of Otay Mesa Road and Alta Road, as well as a similar portion of the graded parcel immediately west of the vehicle auction yard, and the four smaller industrial parcels just east of Sanyo Avenue that support three existing industrial buildings adjacent to the SR-11 Corridor.

Although Phase I would not include any ground-disturbing activities, it would commit both the developed and undeveloped parcels in the path of either the Western or Central Alternative for future development as SR-11 and the new POE, and preclude other uses. For the Western SR-11 Corridor, this land use impact would involve the conversion to transportation-related uses of 94.2 acres of undeveloped land, 16.4 acres of graded land, 5.3 acres of industrial land, and 5.2 acres of land currently used as a vehicle auction yard under a temporary major use permit. The Western SR-11 Corridor would traverse an additional 2.7 acres of existing roads (Enrico Fermi Drive and Sanyo Avenue), but this area would not constitute a change of land use. For the Western POE Site, the land use impact would involve the conversion to transportation-related uses of 99.5 acres of undeveloped land. This land use conversion would not represent an adverse impact, because implementation of SR-11 and the Otay Mesa East POE would be consistent with the Circulation Elements of the County General Plan, EOMSP, the City General Plan, and the OMCP, as explained in Section 3.2, *Consistency with Federal, State, Regional, and Local Plans and Programs*.

For the Central SR-11 Corridor, this land use impact would involve the conversion to transportation-related uses of 119 acres of undeveloped land, 16.3 acres of graded land, 5.3 acres of industrial land, and 8.7 acres of land currently used as a vehicle auction yard under a temporary major use permit. The Central SR-11 Corridor would traverse an additional 2.7 acres of already existing roads, but this area would not constitute a change of land use. For the Central POE Site, this land use impact would involve the conversion to transportation-related uses of 100 acres of undeveloped land. These land use conversions would not be substantial, because they are consistent with the conceptual representation of the SR-11 Corridor and POE Site in the Circulation Elements of the County General Plan, EOMSP, the City General Plan, and the OMCP. Although the location of the Central Alternative does not coincide exactly with

these plans, the EOMSP contains a provision that the proposed corridor alignment for SR 11 is subject to change upon the completion of Caltrans environmental studies.

Impacts to Proposed Land Uses – Action Alternatives

The Western Alternative SR-11 Corridor and POE Site would traverse the following currently proposed private developments: Saeed TM/Airway Business Center, Dillard and Judd Roll County LLC/Enrico Fermi Industrial Park, Otay Mesa Travel Plaza, Bradley/Robertson Copart Salvage Auto Auctions, Otay Crossings Commerce Park, and Otay Business Park (Paragon). The commitment of portions of these proposed developments for SR-11 R/W and the POE Site would not be considered a substantial impact, since the SR-11 Corridor and POE would be consistent with the County General Plan, EOMSP, the City General Plan, and the OMCP.

The Central Alternative Corridor and POE Site would traverse the following currently proposed private developments: Saeed TM/Airway Business Center, Dillard and Judd Roll County LLC/Enrico Fermi Industrial Park, Otay Mesa Travel Plaza, Bradley/Robertson Copart Salvage Auto Auctions, and Otay Crossings Commerce Park. Because the EOMSP (as amended) includes an approximation of the Western Alternative SR-11 Corridor and POE Site, identification of the Central Alternative as the preferred corridor could require modification of the site plans for the Otay Mesa Travel Plaza, Bradley/Robertson Copart Salvage Auto Auctions, and Otay Crossings Commerce Park projects. The commitment of land within these proposed developments for future implementation of SR-11 and the Otay Mesa East POE would not be considered a substantial impact, since SR-11 and the POE would be consistent with the County General Plan, EOMSP, the City General Plan, and the OMCP.

No Action Alternative

As noted in Section 3.1, under the No Action Alternative, there would be no immediate impact to land use in the area under Phase I. An SR-11 Corridor would likely still be shown conceptually on the circulation elements of the EOMSP and County General Plan, and the Otay Mesa East POE would likely continue to be indicated conceptually on the land use plan of the EOMSP. The areas currently shown for these facilities on the adopted EOMSP correspond approximately to the Western Alternatives addressed in this PEIR/PEIS.

It is expected that development would proceed in this area, with or without the selection of preferred locations for SR-11 and the Otay Mesa East POE.

Biological Resources

Under the Western Alternative, potential impacts due to direct disturbance could occur in Phase II to the following estimated resources:

- native and non-native grassland;
- disturbed mule fat scrub and non-wetland WUS/streambed;
- small-flowered morning glory and the San Diego marsh-elder;
- red-diamond rattlesnake, two-striped garter snake, coastal western whiptail, grasshopper sparrow, white-tailed kite, California horned lark, San Diego black-tailed jackrabbit, burrowing owl, northern harrier, and loggerhead shrike; and
- the Quino checkerspot butterfly.

Under the Central Alternative, potential impacts due to direct disturbance could occur in Phase II to:

- Diegan coastal sage scrub and non-native grassland;
- disturbed mule fat scrub, freshwater marsh, emergent wetland, disturbed wetland, and non-wetland WUS/streambed;
- small-flowered morning glory, San Diego marsh-elder, California adolphia, variegated dudleya, San Diego barrel cactus, and San Diego County viguiera;
- western spadefoot toad, red-diamond rattlesnake, coastal western whiptail, grasshopper sparrow, northern harrier, California horned lark, San Diego black-tailed jackrabbit, burrowing owl, white-tailed kite, and loggerhead shrike; and
- Otay tarplant, and San Diego and/or Riverside fairy shrimp.

There is also the potential for indirect impacts to biological resources under both alternatives. Potential impacts could also occur to adjacent habitat if construction resulted in the further spread of invasive plant species into these areas under both alternatives. No adverse impacts due to invasive animal species would be expected.

Under the No Action Alternative, no program-related impacts to biological resources would occur, with the program therefore not contributing to cumulative impacts to biological resources within the region.

Identification of Other Reasonably Foreseeable Actions that Affect Each Resource

Current and reasonably foreseeable projects in the general area encompassed by the program area are identified and described on Figure 3.1-9 and Table 3.1-1 in Section 3.1, and are listed in Table 4-1 below, along with the anticipated environmental impacts from these projects, as best can be determined based on available information.

Cumulative Impact Assessment and Potential Avoidance, Minimization and/or Mitigation Measures

The assessment of cumulative impacts should determine for each resource whether there is currently a cumulative impact on the resource in the RSA, and whether the impacts from the proposed project would contribute to that impact, and if so, at what level. As noted above, Phase I itself is not expected to result in program-level or cumulative impacts. Phase II cumulative impacts would depend on the anticipated cumulative development at the time that Phase II is implemented, and would be addressed in the environmental documents prepared during the Phase II environmental review. The program-level, preliminary cumulative analysis presented below focuses on the only two areas that could have a different level of Phase II cumulative impacts between the Western and Central Alternatives. These potential impact differences are therefore presented in Phase I to aid decision makers in identifying a preferred Phase I alternative.

Table 4-1
OTHER FUTURE ACTIONS AND IMPACTS

Map #	Project	Status	Impact Summary
		Public Works Projects	
Caltrans Capital Improvement Projects			
NA	SR-905	Project consists of construction of a six-lane freeway from I-805 to the existing Otay Mesa POE at the U.S.-Mexico Border, including grade-separated local access interchanges, and a freeway-to-freeway interchange with future SR-125. Final Environmental Impact Statement/Report dated July 2004. Construction of the six-lane facility between Caliente Boulevard and Siempre Viva Road scheduled to begin early in 2008 and be completed by summer of 2010.	Substantial impacts and mitigation identified for water quality, cultural resources, hazardous materials, hydrology/drainiage, floodplain, noise, socioeconomics, paleontological resources, and biological environment issues (natural communities, wetlands, WUS, sensitive plants, sensitive animals, wildlife movement corridors, invasive species, and edge effects). These issues mitigated to be less than substantial. Direct and cumulative unmitigable impacts to vernal pools.
NA	SR-125	Project consists of construction of about 12.5 miles of new highway alignment from SR-905 near the International Border to SR-54 near the Sweetwater Reservoir. Initially, the north end of the route to open as a six-lane highway tying into the existing SR-125. To the south, 9.3 miles of SR-125 to open as a four-lane highway and will be operated as a toll road (South Bay Expressway). Ultimate construction to be a six to eight-lane highway plus possible future carpool lanes and/or transit facilities in the median. EIS Record of Decision 2000; groundbreaking 2003; project completed and route opened in late 2007.	Impacts identified for cultural resources, farmland, parks, sensitive species, wetlands, and community. Extensive mitigation program.
GSA/CBP Capital Improvement Projects			
NA	U.S. Cargo Import Facility	Project consists of adding lanes to a connector roadway, modifying approaches and fences for booths and other infrastructure improvements to enhance goods movement at the U.S. Cargo Import Facility, just east of the existing Otay Mesa POE at the U.S.-Mexico Border. First phase of project completed; final phase is pending.	Site and surroundings are largely developed. Known biological constraints to expansion/redevelopment of the site are limited to the drainage/wetlands area between the international border and the commercial truck inspection inbound queuing road.
NA	Reconfiguration and Expansion of the Existing San Ysidro POE	Three-phase project includes demolition and new construction of most of the POE. New facility will consist of 225,000 square feet of building space, primary and secondary inspection areas, 29 inbound vehicle lanes, two bus lanes, six outbound vehicle lanes, and a new southbound roadway to connect with Mexico's El Chaparral facility. Schedule includes master planning and EIR/EIS preparation by fall 2008; Phase I construction initiation in summer 2009; completion of final phase construction by Fall 2014.	Site and surroundings are largely developed. Potential environmental issues include, but are not limited to, traffic, noise, air quality, visual and community impacts.
		Land Development Projects	
1	Otay Crossings Commerce Park	February 9, 2006 County scoping letter required preparation of a supplemental EIR due to changes since the EOMSP EIR (July 27, 1994). Screencheck document under review.	Significant and unmitigable cumulative impacts identified for traffic and air quality. Significant and mitigable direct impacts identified for biological resources, cultural resources, traffic, and noise.
2	Sunroad Centrum Tech Center	December 15, 2000 Final Supplemental EIR to the EOMSP Final EIR, for 96-lot project. EIR addendum dated March 4, 2003 for 56-lot project included changes to road improvements and grading. TM 5139 since expired; TM 5538 currently proposed on same site (plus triangular area just west of original site, adjacent to SR-125). No further information available as of December 10, 2007.	Supplemental EIR for TM 5139 identified significant unmitigable impacts for air quality and transportation; significant and mitigable impacts identified for biological and cultural resources. Mitigation required open space to protect vernal pools, NNG and sensitive species, cultural and bio monitors, off-site purchase of 0.4 acre of southern willow scrub wetland, 5.4 acres native grassland, 48.6 acres of NNG, avoidance of raptor nesting, and obtaining a QCB take permit. Other requirements include traffic improvements and construction conditions to prevent air quality impacts. However, cumulative air quality impacts and short-term construction traffic impacts would remain unmitigable. Impact analysis for TM 5538 not yet available,
3	Saeed TM/Airway Business Center	Tentative Map approved on May 1, 2006. Upon completion of an addendum to the EOMSP EIR project may proceed.	Scoping letter dated April 8, 2003 indicated potentially significant impacts to biology, paleontology, archaeology, geology, traffic, and drainage issues. April 2, 2004 biological survey identified impacts to 38.52 acres of NNG, to be mitigated by purchase of 19.26 acres of mitigation bank habitat. Only sensitive species are foraging raptors.
4	Dillard and Judd Roll County LLC/Enrico Fermi Industrial Park	FEIR dated January 2006, certified March 2006. Minor Amendment to the MSCP, consistent with BMO, within the boundary of the adopted HCP.	Impacts concluded as less than significant.
5	Otay Hills Construction Aggregate Extraction Operation	NOP dated May 26, 2005 included Initial Study	Potentially significant impacts to land use, geology, hydrology/water quality, biological and cultural resources, traffic, noise, air quality, public services/utilities, hazardous materials and aesthetics.

Table 4-1 (cont.)
OTHER FUTURE ACTIONS AND IMPACTS

Map #	Project	Status	Impact Summary
		Land Development Projects (cont.)	
6	Otay Mesa Travel Plaza	MND for TPM 20414 and approval of MUP 98-024 relying on EOMSP Final EIR without modification, both dated June 9, 2000. MND dated June 13, 2001 extended Interim Ordinance 9226 while EOMSP was being updated, to allow temporary use TPM 20414. Project change of ownership April 22, 2004. TPM 20414RPL2 required SWMP – approved February 2, 2004. Minor amendment of MSCP Subregion for 39.5 acres credit of Tier 3 required in March, 12, 2004 status letter. Grading Plan 14632: NOD dated April 21, 2006. Approval of project relying on EOMSP EIR.	Environmental review update checklist form for projects with previously approved environmental documents dated April 21, 2006 stating project would impact 73.5 acres of NNG. The impacts to NNG will be mitigated at a ratio of 1:1 by contributing $10,000 per acre of mitigation responsibility to the San Diego Foundation to be used for management of NNG preserve areas on Otay Mesa.
7	Burke Minor Subdivison/Otay Logistics Center	MND for Burke Minor Subdivision dated October 2, 2003 (otherwise relies on EOMSP EIR).	Significant and mitigable impacts identified for biological resources. Mitigation consists of offsite purchase of 20 acres of NNG to mitigate for 40 acres (entire site) of disturbed grassland at 0.5:1 ratio. Otay Logistics Center: ND dated August 2006 required fair share traffic contributions to mitigate traffic impacts for 635 (Phase I) and 715 (Phase II) ADT.
8	East Otay Mesa Auto Storage/ Aaron Construction Auto Auction Park	MND dated July 9, 2003.	Significant and mitigable impacts identified for traffic. Mitigation required fair share traffic contributions to mitigate traffic impacts from addition of 354 ADT.
9	RTX Truck Park	Supplemental EIR requiring technical studies requested by County April 5, 2007. As of September 7, 2007, comments on technical studies were being processed	NA
10	Otay Mesa Auto Transfer/Rowland	MND dated June 24, 2005 relying on EOMSP with modifications.	Significant and mitigable impacts identified for biological and cultural resources, paleontology, traffic, and geology. Mitigation measures included 4 acres of NNG credits, biological monitoring for burrowing owls and raptor breeding, cultural and paleontological monitoring, control of construction emissions and fugitive dust, geological requirements, landscape requirements, traffic improvements, and a fair share contribution for SR-905/Old Otay Mesa Road realignment.
11	Bradley/Robertson Copart Salvage Auto Auctions	First ND dated Feb. 22, 1994. Second ND dated Nov. 2, 2001 to increase the number of employees from 10 to 40, add 900 ft. of additional leach line, and extend the expiration date of the interim permit from Nov. 2000 to Nov. 2005. No further information available.	January 3, 2007 County letter requested supplemental technical information regarding hydrology, storm water management, traffic, visual, route locations, and the preliminary grading plan.
12	Otay Business Park (Paragon)	Scoping letter dated July 27, 2006.	Supplemental EIR was requested May 30, 2007 for biology regarding preservation of vernal pools, storm water management and easements.
13	Border Patrol Site Grading Plan (East Otay Mesa Parcel B Grading Plan)	NOD dated April 21, 2006. Approval of project relying on EOMSP EIR. Environmental review update checklist form for projects with previously approved environmental documents dated April 21, 2006.	Project would impact 17.72 acres of NNG and 0.70 acres of CSS.
14	Vulcan Otay Mesa Plant	NOD for grading of pad dated September 15, 2006. Approval of project relying on EOMSP EIR. Environmental review update checklist form for projects with previously approved environmental documents dated June 30, 2006. County scoping letter for proposed asphalt and concrete plants dated October 29, 2007.	Grading project would impact 73.5 acres of NNG. The impacts to NNG will be mitigated at a 1:1 ratio by contributing $10,000 per acre of mitigation responsibility to the San Diego Foundation to be used for management of NNG preserve areas on Otay Mesa. Impacts of asphalt and concrete plant project to be determined.

CIP = Capital Improvement Plan; NOP = Notice of Preparation; EIR = Environmental Impact Report; FEIR = Final Environmental Impact Report; ND = Negative Declaration; MND = Mitigated Negative Declaration; IS = Initial Study; NOD = Notice of Decision; EOMSP = East Otay Mesa Specific Plan; SWMP = Storm Water Management Plan; NA = Not Available; WUS = Waters of the U.S.; NNG = Non-Native Grassland; DCSS = Diegan Coastal Sage Scrub; QCB = Quino Checkerspot Butterfly; BMO = Biological Mitigation Ordinance; HCP = Habitat Conservation Plan; ADT = Average Daily Traffic.

Land Use

Although there is significant development pressure in the program area, the cumulative projects listed in Table 4-1 all appear to be consistent with approved land use planning documents and in particular with the EOMSP. Design and operational features of SR-11 and the POE are not known at this time, but it is anticipated that the program components also would be designed to be consistent with applicable policies, so unmitigable project-level land use impacts would not occur.

As noted above, currently, the EOMSP includes a conceptual SR-11 alignment and POE Site that correspond approximately to the Western Alternative proposed in this PEIR/PEIS, although the POE Site is substantially smaller (approximately 22 acres) than that proposed here (100 acres). Regardless of the SR-11/POE Alternative selected, buildout of the program area is expected to occur according to the EOMSP, and would include primarily industrial and commercial uses. The precise pattern of development would vary, however, depending on the alternative selected.

The selection of a program alternative would commit slightly different amounts of land to change from their existing uses to transportation-related uses. In comparison with the Western SR-11 Corridor, selection of the Central SR-11 Corridor would commit an additional 24.8 acres of currently undeveloped land and an additional 3.5 acres of the current vehicle auction yard at the corner of Otay Mesa Road and Alta Road to transportation-related uses. Conversion of other uses would be approximately identical under the two alternatives, as would conversion of land uses within the POE sites.

The same currently proposed private developments would be impacted, with the exception of the Otay Business Park/Paragon project, which would be affected under the Western Alternative, but not under the Central Alternative. Because the EOMSP (as amended) includes approximately the Western Alternative SR-11 Corridor and POE Site, selection of the Central Alternative instead could require modification of the site plans for the Otay Mesa Travel Plaza, Bradley/Robertson Copart Salvage Auto Auctions and Otay Crossings Commerce Park projects. This would not be necessary for the Western Alternative, because these developments have generally reflected the Western Alternative within their development plans.

Under the No Action Alternative, land use and circulation planning and development in the EOMSP area could proceed without the benefit of a preferred location for the SR-11 Corridor and POE Site. The facilities might be retained in the EOMSP, but if the EOMSP is amended to remove the conceptual SR-11 Alignment and POE Site, development patterns could be modified to include a different arrangement of circulation element roads, and other land uses in the areas currently reserved for development of SR-11 and the POE.

It is possible that the No Action Alternative would only delay implementation of the Otay Mesa East POE. If development proceeds on the U.S. and/or Mexico sides of the border in the East Otay Mesa area, a situation could develop wherein acquisition of developed property would be necessary to implement SR-11 and the Otay Mesa East POE in the future. If development leaves only the most environmentally constrained land available for these facilities and the facilities must be constructed in close proximity to existing development, land use impacts and associated visual and noise impacts may eventually be greater than they would be under the currently proposed Western or Central Alternatives. It is the responsibility of the local land use planning jurisdiction (e.g., City or County of San Diego) to ensure that freeway-adjacent development is compatible, and to require developers to provide appropriate abatement and/or

mitigation for sensitive receptors that may be located in the vicinity of the future SR-11 Corridor and POE Site.

Overall, the proposed program is not anticipated to cause substantial cumulative land use impacts, and no avoidance, minimization and/or mitigation measures would be required. Cumulative land use impacts would be evaluated in greater detail during the Phase II environmental review process.

Biological Resources

The project EIRs for the developments listed in Table 4-1 have identified significant and generally mitigable impacts to biological resources. The EOMSP Final EIR (1993) noted that cumulative biological resources impacts were determined to be significant in a regional context, "especially given the number of other proposed and/or approved projects in the area and the sensitivity of the habitats in the SPA." Specific plants and animals identified in the EOMSP EIR discussion as cumulatively impacted include San Diego barrel cactus, San Diego County viguiera, coastal sage scrub, grassland, disturbed wetland, jurisdictional habitat, Otay tarplant, and burrowing owl. The SR-905 EIS/EIR (2004) noted that the cumulative biological resources impacts that have already occurred on Otay Mesa are substantial. Thus, a cumulative biological resources impact is present in the RSA.

For the proposed program, as noted above, natural communities and individual plant and animal species, some threatened or endangered, would be substantially and adversely impacted by Phase II implementation. Avoidance, minimization or mitigation measures that could be applied to reduce impacts include revegetation, creation and/or preservation of habitats; translocation of individual plant species; pre-construction surveys to verify the presence or absence of nesting birds; avoiding grading and vegetation clearing during the bird breeding season; use of noise control measures to reduce grading/construction noise impacts upon breeding birds; passive or active relocation of owls; use of BMPs to avoid degradation of downstream water quality; using construction fencing to clearly delineate the edge of allowable clearing and grading; requiring construction personnel to remain in fenced areas; prohibiting pets on construction sites; and construction monitoring to ensure compliance. The effectiveness of these measures is unknown at this program-level of development. Therefore, the proposed program may cause cumulative biological resources impacts. The cumulative land development projects listed in Table 4-1 would be subject to the requirements of the MSCP, local biological protection and resource protection ordinances, FESA, CESA, CWA and Porter-Cologne Act, with similar mitigation requirements to those listed above as potentially applicable to the proposed program.

As shown in Table 4-2, the contribution to cumulative impacts would be greater for the Central Alternative than for the Western Alternative, due to the greater presence of sensitive resources within and adjacent to this alternative. Cumulative impacts to biological resources on Otay Mesa would be expected to remain substantial and adverse following mitigation; however, cumulative biological resources impacts would be evaluated in greater detail during the Phase II environmental review process.

Table 4-2
POTENTIAL PROGRAM CONTRIBUTION TO CUMULATIVE BIOLOGY IMPACTS - COMPARISON OF WESTERN AND CENTRAL ALTERNATIVES

	Western Corridor/POE	Central Corridor/POE
Natural Communities		
Basin with Fairy Shrimp*	0	0.01 acre
Mule Fat Scrub-Disturbed	0.25 acre	0.25 acre
Emergent Wetland	0	0.25 acre
Freshwater Marsh	0	0.03
Disturbed Wetland	0	0.05 acre
Diegan Coastal Sage Scrub	0	5.85 acre
Diegan Coastal Sage Scrub-Disturbed	0	5.56 acre
Native Grassland	<0.01 acre	0
Non-Native Grassland	159.01 acre	175.32 acre
Eucalyptus Woodland	0	0.04 acre
Wetlands and Other Waters		
ACOE Jurisdictional Wetlands		
Freshwater Marsh	0	0.03 acre (135 linear ft)
Emergent Wetland	0	<0.01 acre (40 linear ft)
Disturbed Wetland	0	0.05 acre (175 linear ft)
ACOE Non-Wetland WUS		
Ephemeral and Intermittent Drainage	0.21 acre (3,828 linear ft)	0.14 acre (3,370 linear ft)
CDFG Jurisdictional Areas		
Mule fat scrub-disturbed	0.25 acre	0.25 acre
Freshwater Marsh	0	0.03 acre
Emergent Wetland	0	<0.01 acre
Disturbed Wetland	0	0.05 acre
Streambed	0.28 acre	0.18 acre
Sensitive Plant Species	Small-flowered morning glory, San Diego marsh-elder and other species not observed but with potential to occur.	California adolphia, variegated dudleya, San Diego barrel cactus, San Diego County viguiera, small-flowered morning glory, San Diego marsh-elder, Otay tarplant, and other species not observed but with potential to occur,

Table 4-2 (cont.)
POTENTIAL PROGRAM CONTRIBUTION TO CUMULATIVE BIOLOGY IMPACTS - COMPARISON OF WESTERN AND CENTRAL ALTERNATIVES

	Western Corridor/POE	Central Corridor/POE
Sensitive Animal Species	Burrowing owl, loggerhead shrike, red-diamond rattlesnake, California horned lark, grasshopper sparrow, northern harrier, San Diego black-tailed jackrabbit, white-tailed kite, two-striped garter snake, coastal western whiptail, and other species not observed but with potential to occur.	Burrowing owl, loggerhead shrike, red-diamond rattlesnake, white-tailed kite, California horned lark, northern harrier, San Diego black-tailed jackrabbit, coastal western whiptail, grasshopper sparrow, western spadefoot toad, and other species not observed but with potential to occur.
Federally Listed Threatened and Endangered Species	Quino checkerspot butterfly and other species not observed but with potential to occur. Critical habitat for Quino present within alternative.	Otay tarplant, San Diego fairy shrimp, Riverside fairy shrimp and other species not observed but with potential to occur. Critical habitat for Quino and Otay tarplant present within alternative. Critical habitat for coastal California gnatcatcher adjacent.
Invasive Species	Numerous invasive plant species, as well as cabbage white butterfly and European starling	Numerous invasive plant species, as well as cabbage white butterfly and European starling

CHAPTER 5.0

CEQA EVALUATION

CHAPTER 5.0 – CEQA EVALUATION

5.1 DETERMINING SIGNIFICANCE UNDER CEQA

The proposed project is a joint project by Caltrans and FHWA and is subject to State and Federal environmental review requirements. Project documentation, therefore, has been prepared in compliance with both CEQA and NEPA. Caltrans is the lead agency under CEQA and the FHWA is lead agency under NEPA.

One of the primary differences between NEPA and CEQA is the way significance is determined. Under NEPA, significance is used to determine whether an EIS, or some lower level of documentation, will be required. NEPA requires that an EIS be prepared when the proposed federal action (project) *as a* whole has the potential to "significantly affect the quality of the human environment." The NEPA determination of significance is based on context and intensity; CEQA is based on a similar concept—the environmental setting. Some impacts determined to be significant under CEQA may not be of sufficient magnitude to be determined significant under NEPA. Under NEPA, once a decision is made regarding the need for an EIS, it is the magnitude of the impact that is evaluated and no judgment of its individual significance is deemed important for the text. NEPA does not require that a determination of significant impacts be stated in the environmental documents.

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

The purpose of this document is to provide decision-makers and the public sufficient information to identify a corridor for future SR-11 and the future Otay Mesa East POE. It is important to note, that no ground disturbing activities would result from the action of identifying the future project.

Due to the undeveloped nature of East Otay Mesa, there are few impacts anticipated. However, critical laws and regulations exist which may compel identifying an alternative that avoids or minimizes harm to protected resources, such as threatened or endangered species and wetlands. The identification of the corridor and POE may impact previously approved and planned land uses on East Otay Mesa. Regardless of the corridor identified, it is anticipated there would be no discernible differences in traffic volumes, or in impacts to air quality, water quality, aesthetics, community character and cohesion, hazardous waste, palentological and cultural resources, or noise levels.

There are no significant impacts anticipated from identifying a preferred corridor and POE location. This document does identify possible future impacts of the implementation of Phase II. At a future date, a project level EIR/EIS will be prepared which will address project specific impacts and will propose specific avoidance, minimization and/or compensation measures.

5.2 LESS THAN SIGNIFICANT EFFECTS OF THE PROPOSED PROGRAM

Chapters 1, *Purpose and Need for the Program*, and 2, *Program Alternatives*, provide a description of the proposed project and the preliminary alignments for each corridor being studied. The proposed Program is to identify the preferred facility locations that would allow for route adoption, approval of the Presidential Permit for the POE by the U.S. Department of State (DOS) and the designation and acquisition of R/W. Specific design, construction and operational characteristics would be addressed in the project-level Phase II document. Because there are no ground-disturbing activities for this phase of the project, no significant impacts would occur as a result of Phase I implementation. A detailed analysis of impacts and mitigation would be discussed in the future project-level Phase II environmental document; however, the potential future Phase II impacts are discussed below.

5.2.1 Land Use

The proposed SR-11 Corridor and POE Site are included conceptually in the adopted SANDAG RCP, RTP and RTIP, and therefore consistent with these regional plans. The facilities are also contemplated in the County General Plan, OSP and EOMSP, and included in the current City OMCP and General Plan. Although Phase I would not include any ground disturbing activities, it would involve land conversion and commitment of the Western and/or Central Corridor alignments for SR-11 and the associated POE Sites for future transportation-related development. If any of the proposed private development projects were to be constructed before implementation of the Phase II project, occupants of those developments could experience temporary construction related impacts including noise, visual and dust effects.

5.2.2 Farmland

As discussed in Section 3.3, the western portions of the alternative SR-11 Corridors (approximately between Harvest Road and Enrico Fermi Drive) are identical. An off-ramp from the SR-905/SR-125 interchange was previously evaluated in this location within the SR-905 EIS/EIR, which identified development impacts and minimization requirements. Because these requirements have been previously evaluated and approved, the off-ramp in this location is assumed as existing in the following analysis, although it has not been implemented as of this writing.

Phase II activities for the Western Alternative could potentially convert 9 acres of Prime and Unique Farmland and 210 acres of Statewide and Local Important Farmland to non-agricultural uses. Activities for the Central Alternative could potentially convert 9 acres of Prime and Unique Farmland and 179 acres of Statewide and Local Important Farmland to non-agricultural uses. According to the FPPA guidelines and the results of the NRCS Farmland Conversion Impact Rating Form 106, project impacts to farmland in the study area are considered minor.

5.2.3 Cultural Resources

As discussed in Section 3.8, impacts would not occur to known cultural resources within the APE for either alternative because the known sites that could be affected are not subject to further analysis beyond their recordation. No further survey work would be necessary. During Phase II CEQA review, the potential for impacts to as yet unidentified cultural resources beneath the ground surface would be determined and avoidance, minimization or mitigation measures would be identified, if necessary.

5.2.4 Noise

There are no sensitive receptors within or adjacent to the Western or Central Alternatives. The nearest sensitive receptors are residences located approximately 1,000 feet away. The Phase II project would address the implementation of various design, construction and operational characteristics that have not yet been identified. The future project-level phase would include an in depth analysis of regulation requirements for potential noise impacts from the proposed project, and whether potential abatement measures would need to be considered; however, noise impacts are not anticipated to be significant.

5.2.5 Relationship between Local Short-term Uses of the Human Environment and the Maintenance and Enhancement of Long-Term Productivity

No short-term uses would occur at the program level.

5.3 SIGNIFICANT ENVIRONMENTAL EFFECTS OF THE PROPOSED PROGRAM

There are no significant impacts anticipated from the program-level project (Phase I).

A detailed analysis of impacts and mitigation for Phase II would be discussed in the future project-level Phase II environmental document; however, the potential future Phase II impacts that were considered to be potentially significant under CEQA, based on available data and anticipated design concepts, are discussed below.

5.3.1 Paleontological Resources

Implementation of Phase II would have the potential to affect previously undisturbed areas of the high sensitivity Otay Formation, and previously undisturbed volcaniclastic units of the Santiago Peak Volcanics exhibiting moderate resource sensitivity. Impacts to such formations would be considered significant under CEQA. A detailed paleontological resources technical report would be prepared, which would include evaluation of any new potential impacts to paleontological resources within the footprint of the off-ramp to Enrico Fermi Drive that was previously approved as part of the SR-905 project.

5.3.2 Hazardous Waste

Implementation of Phase II would have the potential to cause impacts due to contamination from sources, including previous agricultural operations, automobile salvage/storage, trash and debris deposits, sites listed on regulatory databases, and currently unknown sites**.** Such impacts would be considered significant under CEQA. A Preliminary Site Investigation (PSI) would be conducted to further characterize the presence or absence of suspected hazardous waste issues/materials (petroleum hydrocarbons, pesticides and herbicides) referenced in the ISA (auto salvage yard, agricultural staging area and previous agricultural use of the entire study area), prior to construction. Other measures that would be conducted during Phase II include: 1) preparation of a Hazardous Waste Management Plan that describes the handling and disposal of hazardous waste materials; 2) preparation of a site-specific Health and Safety Plan that includes measures to limit exposure of affected soil and/or groundwater to persons working onsite and discusses use of proper Personal Protective Equipment and environmental monitoring (including air monitoring), as appropriate; and 3) the requirement for persons working with hazardous waste materials to have training in accordance with Title 8 of the California Code of Regulations.

5.3.3 Natural Communities

As discussed in Section 3.18, the Western and Central Alternatives for Phase II implementation could result in direct impacts to any of the sensitive natural communities, including vegetation, animal and wetland communities. Direct impacts could occur to Diegan coastal sage scrub within the Central SR-11 Corridor and POE Site if that alternative were chosen for implementation. Any impacts to this sensitive habitat would be significant because it has experienced historical reductions in geographic extent and because it supports the federally threatened coastal California gnatcatcher. Impacts could occur to native grassland and non-native grassland, both within the SR-11 Corridor and POE Sites, and would likely be significant because grasslands offer foraging habitat for sensitive birds of prey such as the burrowing owl, northern harrier and white-tailed kite. Potential impacts to disturbed habitat and developed areas within both the Western SR-11 Corridor and POE Site could occur, but these impacts would not likely be significant because these are not considered sensitive vegetation communities.

Potential indirect impacts or "edge effects" could significantly impact sensitive vegetation communities adjacent to the SR-11 Corridor and POE Sites, including additional Diegan coastal sage scrub. Potential causes of indirect impacts include human and pet activity/intrusion in the area (e.g., parking on roadway shoulders and exiting vehicles, as well as littering), increased U.S. Border Patrol activity surrounding the new roadway and POE, landscape irrigation runoff, pesticide and/or fertilizer drift, roadway constituent runoff, and introduction of non-native species (addressed in Section 3.23, *Invasive Species*).

Impacts to native grasslands from implementation of the proposed highway facility could result in habitat fragmentation and isolation, causing the quality of the habitat to diminish and the prevention of wildlife movement between the fragmented/isolated areas.

5.3.4 Wetlands and Other Waters

Identification of the Western or Central Alternative for Phase II implementation could result in direct impacts to any of the jurisdictional wetland communities described in the Affected Environment discussion in Section 3.19, including the jurisdictional habitats identified on Figures 3.19-1 and 3.19-2 and in Tables 3.19-1 and 3.19-2. Thus, impacts could occur to disturbed mule fat scrub in the Western SR-11 Corridor and to non-wetland waters of the U.S. and State in both the Western SR-11 Corridor and POE Site.

The disturbed mule fat scrub located in the Western SR-11 Corridor is an isolated wetland habitat supporting a high percentage of non-native species and is of relatively low quality. Due to its small size and distance from other wetland/riparian habitats, it would not be expected to support any listed or sensitive wetland/riparian-dependent animal species. The primary functions of this habitat include potential nesting habitat for commonly occurring birds and cover for small mammals. Despite its low quality and isolation from other wetland habitats, any impacts to the disturbed mule fat scrub would likely be significant, as wetland habitat is considered sensitive and declining by the resource agencies.

Direct impacts to any of the ACOE and CDFG jurisdictional drainages located in the Western SR-11 Corridor and POE Site could result from implementation of the Western Alternative. Such impacts would likely be significant, as waters of the U.S. and State are considered sensitive by the resource agencies. The drainages occurring within the Western Alternative are

narrow, primarily ephemeral features that convey flows only following a rain event, and do not support hydrophytic vegetation, except in one area upstream of the Western POE Site (Drainage D). The drainages are of average quality and would not be expected to contribute substantially to life cycle functions of aquatic invertebrates or other water-dependent species.

Limited amounts of freshwater marsh, emergent wetland and disturbed wetland are located along the upper reaches of Drainage D within the Central Alternative POE Site. The freshwater marsh and emergent wetland are of moderate quality, while the disturbed wetland is of low quality. All three of these habitat types, taken together, comprise only 0.09 acre. Being of such small size, the functions provided by these wetlands are minimal.

While both alternatives support disturbed mule fat scrub and unvegetated streambed, the Central Alternative includes 0.09 acre more of vegetated wetland habitat (freshwater marsh, emergent wetland and disturbed wetland) than the Western Alternative, but 0.17 acre less of unvegetated streambed. Since impacts could occur to jurisdictional habitats within either alternative, it would be expected that the Western Alternative would result in minimally greater direct impacts to acreage of jurisdictional habitat (0.01 acre more of impact) than the Central Alternative, but lesser overall impacts to vegetated wetlands, which are of higher sensitivity than unvegetated streambeds. Indirect impacts for either alternative would be the same. In summary, both alternatives would likely result in significant impacts to jurisdictional habitat, but such effects would be marginally greater for the Central Alternative, and substantially similar overall.

Potential indirect impacts or “edge effects” could significantly impact jurisdictional habitats adjacent to the Central SR-11 Corridor and POE Site. Potential causes of indirect impacts include human and pet activity/intrusion in the area (e.g., parking on roadway shoulders and exiting vehicles, as well as littering), increased U.S. Border Patrol activity surrounding the new roadway and POE, landscape irrigation runoff, pesticide and/or fertilizer drift, roadway constituent runoff, increased sediment loads, and introduction of non-native species (further addressed in Section 3.23, *Invasive Species*).

5.3.5 Plant Species

Identification of the Western Alternative for Phase II implementation could result in direct impacts to the two special-status plant species identified on Figure 3.20-1 and in Table 3.20-2. Any impacts to this species would be considered significant. Direct impacts also could occur to the 14 other special-status plant species not observed in the Western Alternative, but with the potential to occur in the program area (Table 3.20-1). Any such impacts to additional sensitive plant species documented in future surveys for Phase II would also be considered signficant.

Identification of the Central Alternative for Phase II implementation could result in direct impacts to any of the six plant species identified in Table 3.20-3 and on Figures 3.20-1, 3.20-2 and 3.20-4.

Such impacts would be considered significant, as these are all special-status plants recognized as sensitive by the CNPS. Due to climatic and hydrologic shifts that could lead to annual variations in vegetative cover and species presence, it is possible that direct impacts could also occur to the ten species not observed in the Central Alternative, but with the potential to occur within the program area (Table 3.20-1). Any such impacts to additional sensitive plant species documented in future surveys for Phase II would also be considered significant.

Although impacts could occur to sensitive plant species within either alternative, it is expected that the Central Alternative would result in greater direct and indirect impacts to sensitive plant species than the Western Alternative. While both alternatives are dominated by non-native grassland, the Central Alternative includes more areas occupied by sensitive wetland communities than the Western Alternative, as well as areas occupied by Diegan coastal sage scrub. This diversity of habitat types in the Central Alternative supports a greater number and variety of sensitive species, as indicated on the sensitive plant species maps. In addition, the Central Alternative would have the potential for edge effects upon a greater range of species because it could affect species occurring in both non-native grassland and Diegan coastal sage scrub, while the indirect impacts of the Western Alternative would primarily affect species occurring in non-native grassland. In summary, both alternatives would result in significant impacts to sensitive plant species; however, such effects would be greater for the Central Alternative.

5.3.6 Animal Species

Identification of the Western Alternative for Phase II implementation could result in significant direct impacts to any of the ten sensitive animal species described in Chapter 3.21, including those identified on Figures 3.21-1 through 3.21-4 and in Table 3.21-2.

Thus, significant impacts could occur to the red-diamond rattlesnake and two-striped garter snake within the Western SR-11 Corridor; to the coastal western whiptail, grasshopper sparrow, white-tailed kite, California horned lark, and San Diego black-tailed jackrabbit within the Western POE Site; and to the burrowing owl, northern harrier and loggerhead shrike, both within the Western Corridor and POE Site. Such impacts would be considered significant because each species is considered sensitive by the resource agencies. Furthermore, burrowing owl impacts within the Western Alternative would be considered significant because the program area is one of the only remaining parts of the County where a breeding burrowing owl population occurs.

Identification of the Central Alternative for Phase II implementation could result in significant direct impacts to any of the ten animal species described in Chapter 3.21, and identified in Table 3.21-3 and on Figures 3.21-1 through 3.21-4. These species generally are the same as those found within the Western Alternative, except that the two-striped garter snake was only found within the Western Alternative and the western spadefoot toad was only found within the Central Alternative. Thus, identification of the Central Alternative for Phase II implementation could significantly impact the western spadefoot toad, red-diamond rattlesnake and grasshopper sparrow within the Central SR-11 Corridor; the coastal western whiptail, northern harrier, California horned lark, and San Diego black-tailed jackrabbit within the Central POE Site; and the burrowing owl, white-tailed kite and loggerhead shrike, both within the Central SR-11 Corridor and POE Site. As noted for the Western Alternative, animal species impacts for this alternative would likely be significant, because each species is considered sensitive by the resource agencies.

Potential indirect impacts or “edge effects” could significantly impact sensitive animal species adjacent to the Western or Central SR-11 Corridor and POE Site. Potential causes of indirect impacts include human and pet activity/intrusion in the area (e.g., parking on roadway shoulders and exiting vehicles; traffic incidents resulting in road kill incidents), and increased U.S. Border Patrol activity surrounding the new roadway and POE. Temporary noise and vibration impacts during construction of Phase II could significantly impact sensitive animals, including nesting raptors and other bird species. Other indirect impacts to sensitive animal species could occur as a result of night lighting, habitat degradation and/or fragmentation.

5.3.7 Threatened and Endangered Species

Identification and implementation of the Western Alternative for Phase II is not expected to result in direct impacts to threatened or endangered plant species, because none were detected within the SR-11 corridor and POE site. A direct impact to the Quino checkerspot butterfly would be possible since the species was observed within the POE site location in surveys prior to 2006. Impacts would be considered significant because the Quino is federally listed endangered. Direct impacts could also occur to designated critical habitat for the Quino, which occurs within the SR-11 corridor and POE.

Potential future direct impacts to threatened and endangered species would not be limited to the Quino, as individual animals move throughout the area to hunt, forage, breed and nest, or are inadvertently transported to other locations due to human causes. For these reasons, it is possible that direct impacts could also occur to any of the seven other threatened or endangered species occurring in the program area of the Western Alternative (Table 3.22-1).

Identification and implementation of the Central Alternative for Phase II could result in direct impacts to the federally listed as threatened, state listed as endangered Otay tarplant, which was detected within the SR-11 Corridor during surveys prior to 2006. Direct impacts to six other threatened or endangered plant species (Table 3.22-1) is also possible. Although these species were not observed during surveys, the potential for them to occur within the program area is possible.

Direct impacts could occur to the federally listed endangered San Diego and/or Riverside fairy shrimp, because four basins with fairy shrimp occur within the Central Alternative. Six other listed/proposed species not detected within the Central Alternative but with the potential to occur within the program area could also be impacted (Table 3.22-2).

Potential indirect impacts or “edge effects” could significantly affect plant and animal species found adjacent to the Western and Central Corridors and POE sites. Potential causes include human and pet activity/intrusion in the area, increased U.S. Border Patrol activity surrounding the new road and POE, landscape irrigation runoff, pesticide and/or fertilizer drift, roadway contaminant runoff, and introduction of non-native species.

5.3.8 Invasive Species

Phase II would comply with the requirements of Executive Order 13112, which seeks to prevent the introduction and spread of invasive species. It is assumed that for the future Phase II project that all invasive plant species would be removed in compliance with the above Executive Order. The Phase II landscape plan would be required to include only native and non-invasive species. Although construction of the project would eliminate invasive species within the project footprint, there is the potential for construction activities to further disperse invasive species within the program area. If the project caused invasive plant species to colonize in previously undisturbed areas of Diegan Coastal sage scrub, this could significantly impact the federally listed Quino checkerspot butterfly by displacing larval food plants and adult nectar sources, and could displace the listed or sensitive plant species by shading and/or out-competing the native species.

Avoidance, minimization and mitigation recommendations for implementation of the SR-11 Corridor and/or POE Site under Phase II for both development alternatives would begin with detailed project level studies including updating existing conditions information and evaluating in

detail the potential impacts of the Phase II alternatives within the identified SR-11 and POE alternatives. Studies would be completed in conformance with applicable Caltrans requirements, and would include specific measures to avoid, minimize or mitigate impacts.

5.3.9 Growth

Construction of a new highway is one of the project types that has the most potential for growth implications. Similarly, the implementation of a new POE facility has the potential to attract trade, industrial and business activity to the east Otay Mesa area. The Otay Mesa area contains large tracts of undeveloped, relatively inexpensive industrial land, and benefits from its proximity to the U.S./Mexico border with its associated trade and twin-plant industrial opportunities. The project type, project location, accessibility, and growth pressure all indicate the potential for changes in growth patterns in the area, and related indirect, growth-induced impacts to the environmental resources of concern. Although the growth would be expected to conform to the existing local and regional plans, it could affect the human environment, the physical environment and resources in the biological environment. There are currently no development proposals contingent on the development of SR-11 or the POE. The potential growth effects will be evaluated during the Phase II environmental process.

5.3.10 Unavoidable Significant Environmental Effects

No unavoidable significant environmental effects would be expected at the Program level.

The specific Phase II impacts of the program would be evaluated during the Phase II environmental process, in conjunction with the analysis of specific design/operational alternatives. Any unavoidable significant environmental effects would be identified and analyzed at that time.

5.3.11 Significant Irreversible Environmental Changes

No significant irreversible environmental changes would be expected at the Program level. Any decision in land use would not be considered irreversible.

The specific Phase II impacts of the program would be evaluated during the Phase II environmental process, in conjunction with the analysis of specific design/operational alternatives at that time. In general, implementation of the proposed program in Phase II would involve a commitment of a range of natural, physical, human, and fiscal resources.

5.4 CLIMATE CHANGE

While climate change has been a concern since at least 1988, as evidenced by the establishment of the United Nations and World Meteorological Organization's Intergovernmental Panel on Climate Change (IPCC), the efforts devoted to greenhouse gas[1] (GHG) emissions reduction and climate change research and policy have increased dramatically in recent years. In 2002, with the passage of Assembly Bill (AB) 1493 California launched an innovative and pro-active approach to dealing with GHG emissions and climate change at the state level. AB 1493 requires the CARB to develop and implement regulations to reduce automobile and light truck

[1] Greenhouse gases related to human activity include: carbon dioxide, methane, nitrous oxide, tetrafluoromethane, hexafluoroethane, sulfur hexafluoride, and hydroflurocarbons HFC-23, HFC-134a, and HFC-152a.

GHG emissions; these regulations will apply to automobiles and light trucks beginning with the 2009 model year.

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

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

Caltrans and its parent agency, the Business, Transportation and Housing Agency, have taken an active role in addressing GHG emission reduction and climate change. Recognizing that 98 percent of California's GHG emissions are from the burning of fossil fuels and 40 percent of all human made GHG emissions are from transportation, Caltrans has created and is implementing the *Climate Action Program at Caltrans* (Caltrans 2006e).

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

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

Caltrans continues to be actively involved on the Governor's Climate Action Team as the CARB works to implement AB 1493 and AB 32. As part of the *Climate Action Program at Caltrans* (Caltrans 2006e), Caltrans is supporting efforts to reduce vehicle miles traveled by planning and implementing smart land use strategies, including job/housing proximity, developing transit-oriented communities and high-density housing along transit corridors. Caltrans is working closely with local jurisdictions on planning activities; however, Caltrans does not have local land use planning authority. Caltrans is also supporting efforts to improve the energy efficiency of the transportation sector by increasing vehicle fuel economy in new cars, and in light and heavy-duty trucks. It is important to note that the control of the fuel economy standards is held by the U.S. EPA and the CARB. The use of alternative fuels is also being considered; Caltrans is participating in funding for alternative fuel research at the University of California Davis.

Phase II of the proposed program would implement strategies to reduce GHGs as developed by the Caltrans Climate Action Team and presented in the *Climate Action Program at Caltrans*.

Strategies that could potentially be considered during Phase II of the proposed SR-11 program include facilities design to reduce vehicle miles traveled, truck idling and the associated fuel consumption and GHG emissions; accommodation of existing and potential future pedestrian, bicycle and mass transit facilities; operational design and information technology systems to alleviate congestion and the associated fuel consumption; use of low emission or alternative fuel vehicles for construction and POE operation purposes; non-vehicular conservation measures related to lighting, heating, ventilation, air conditioning, and other office equipment (POE, toll facilities, etc., if applicable); and use of longer lasting concrete.

Chapter 6.0

COMMENTS AND COORDINATION

CHAPTER 6.0 – COMMENTS AND COORDINATION

6.1 INTRODUCTION

Early and continuing coordination with the appropriate public agencies and the general public is an essential part of the environmental process to determine the scope of environmental documentation, the level of analysis, potential impacts and mitigation measures and related environmental requirements. Agency consultation and public participation for this program have been accomplished through a variety of formal and informal methods, including Project Development Team (PDT) meetings; interagency coordination meetings; Native American coordination; community group, planning group and sponsor group presentations; and the public scoping meeting. This chapter summarizes the results of Caltrans' efforts to fully identify, address and resolve program-related issues through early and continuing coordination. Evidence of coordination and public involvement can be seen in the figures at the end of the chapter.

6.2 PUBLIC SCOPING PROCESS

Notice of Intent/Notice of Preparation

Pursuant to NEPA and CEQA, a Notice of Intent (NOI) and Notice of Preparation (NOP) were prepared for the program. The NOI was published in the Federal Register on May 2, 2007. The NOP was issued by the State Clearinghouse on May 11, 2007, and the review was completed on June 11, 2007 (Figure 6.2-1 and Figure 6.2-2).

The USFWS was the only agency to submit comments on the NOI, and those comments are as follows:

- Provide a description of the environment in the vicinity of the program from a local/regional perspective, and include a vegetation/habitat map of the program area.
- Provide a complete discussion of the purpose and need and alternatives, to include program area limits, and a discussion of the how the program would be coordinated with County of San Diego East Otay Mesa Specific Plan update, and the amendment to the Multiple Species Conservation Program. The description should include all alternatives considered to avoid, minimize and mitigate impacts to sensitive habitat and species.
- Provide a quantitative and qualitative assessment of the biological resources and habitat types to be impacted, and an assessment of direct, indirect and cumulative impacts to fish and wildlife and the associated habitats. Address proposed measures to avoid, minimize and mitigate significant impacts to biological resources.
- Include a detail discussion of the species (Federal candidate, proposed and/or listed, State listed and locally sensitive), their status and distribution that exist on or near the program site.
- Address program related impacts to Federal listed Mexican species.

- Discuss program related impacts that may occur outside of the area directly affected by the proposed program, including a cumulative impacts analysis broad enough to include the effects of future State, tribal, local or private actions that are reasonably certain to occur.

- Provide a detailed analysis of impacts from the proposed program on the movement of wildlife.

- Assess the potential impacts to wetlands and jurisdictional waters of the U.S., and discuss measures to avoid, minimize and mitigate unavoidable impacts.

- Identify the methods to be used to prevent discharge and disposal of toxic and/or caustic substances, including oil and gasoline, on the program site during and after construction; specifically effects to water quality run-off.

  Response: Chapters 1(Purpose and Need for the Program) and 2 (Program Alternatives) provide a clear description of the proposed program and the preliminary alignments for each Corridor and POE Site being studied. Chapter 3, Sections 3.16 through 3.21 address the Biological Environment (existing conditions) and the potential future impacts and mitigation for the project-level project. Section 3.16 discusses the strategy for binational planning of environmental conservation and cross-border mitigation for the Otay Mesa-Mesa de Otay binational corridor being developed by SANDAG and IMPlan, in collaboration with the State of Baja California's Secretariat of Infrastructure and Urban Development and Caltrans District 11, which would affect mitigation planning in Phase II. The proposed Program is to identify the preferred facility locations that would allow for route adoption, approval of the Presidential Permit for the POE by the DOS and the designation and acquisition of R/W. Specific design, construction and operational characteristics would be addressed in the Phase II document. Because there would be no ground-disturbing activities for Phase I of the program, a detailed analysis of impacts would be discussed in the project-level Phase II NEPA/CEQA document. A program-level analysis of Water Quality and Storm Water Run-off is addressed in Chapter 3, Section 3.10.

The following agencies submitted comments on the NOP:

- The Native American Heritage Commission – Comments were with regard to "project-related" impacts to cultural resources within the Area of Potential Effects (APE); specifically Native American cultural resources. The Commission asked that a sacred lands search be conducted, that a mitigation plan be prepared for the accidental discovery of cultural resources, and that avoidance be considered if significant cultural resources are discovered during project activities.

  Response: Chapter 3, Section 3.8, Cultural Resources, discusses the preparation of the various reports and includes coordination with local Native American tribes. Cultural surveys conducted within the APE for both alternatives have determined that existing cultural resources would not be subject to further analysis beyond their recordation, and that no further survey work would be necessary.

- IBWC – Comments addressed the Phase II impacts and were with regard to how the future SR-11 Corridor and POE Site would affect the permanence of existing boundary monuments and access for maintenance; the placement of future facilities in relation to the

Mexico border; providing copies of final engineering drawings to their agency for review; and concern about changes to historic surface runoff characteristics at the border.

Response: A program-level discussion about water quality and any future potential impacts can be found in Chapter 3, Section 3.10, Water Quality and Storm Water Runoff. Design details would be available in the Phase II document. Plans would be coordinated with the IBWC.

- CHP – Comment was with regard to ADT generated on the SR-905, SR-125 and proposed SR-11. What does this mean?

  Response: Chapter 3, Section 3.6, Traffic and Transportation/Pedestrian and Bicycle Facilities, provides a definition of traffic terms and program-level analysis of the proposed future impacts that would occur for the No Action condition. Coordination would continue with the CHP during Phase II project development, and analysis of traffic impacts would be provided in future environmental documents and technical studies.

- The Otay Crossings Commerce Park. – The comment letter addressed the need for access to the East Otay Mesa area, and requested that the program incorporate a direct connector for northbound SR-125 from westbound SR-11, and from southbound SR-125 to eastbound SR-11. The letter also suggested that the environmental document examine the consistency of the proposed locations with the EOMSP, paying close attention to the Otay Crossings project. Impacts to burrowing owls should also be addressed.

  Response: The Phase II document would address implementation of various design, construction and operational characteristics to include direct connector ramps for the future freeway. Chapter 3, Section 3.1, discusses land use; Section 3.2, Consistency with Plans and Programs, discusses the EOMSP, among other documents; Section 3.6, Traffic and Transportation/Pedestrian and Bicycle Facilities, provides an analysis of the circulation aspects of the study area; and Section 3.19, Animal Species, discusses the biological environment for animal species.

- The County Department of Planning and Land Use (DPLU) submitted comments for the following topics: Biological Resources, Cultural Resources, Transportation and Traffic, the Otay Mesa East POE, the Commercial Vehicle Enforcement Facility (CVEF) and Cumulative Analysis. The comments are cited below.

Biological Resources

- The PEIR/PEIS should address impacts to burrowing owls and raptors that use the non-native grasslands at the program site as habitat. Include a proposal for mitigating impacts and coordinate the location of grassland mitigation with other grassland acquisitions in the area to promote a functional grassland preserve design.

- The PEIR should address impacts to vernal pools and vernal pool species and include a proposal for avoiding or mitigating impacts to this habitat type.

- The PEIR should address impacts to the Quino checkerspot butterfly and include a proposal for avoiding or mitigating impacts to this species.

Cultural Resources

- DPLU recommended that the cultural resource review begin with a review of the County Specific Plan Amendment supplement report.

Transportation and Traffic

- Continued agency coordination and the sharing of data are encouraged for the development of traffic analysis for this program.

- The PEIR/PEIS should include a traffic impact analysis that identifies ultimate corridor width required to accommodate the projected number of travelway lanes needed for the future SR-11 freeway.

- The PEIR/PEIS should provide a detailed project description that clearly identifies all of the proposed design/operation features for each project alternative.

- The PEIR/PEIS should provide map figures that show the proposed SR-11 Alignments for each of the preliminary program alternatives. In addition to the freeway alignment information, the PEIR/PEIS should show the footprint for each alternative for the areas that would be needed for the ultimate R/W and grading.

- The PEIR/PEIS should analyze existing conditions, Opening Day for the proposed program, and Year 2035, with and without the program. The Phase II (project-level) analysis should consider buildout/full development (post-2035) forecast projections in developing the ultimate design of the freeway.

- The PEIR/PEIS should provide a general discussion of the program's impacts to the following interchange locations: 1) SR-11/Enrico Fermi Drive and 2) SR-11/Loop Road.

- The PEIR should identify the access assumptions to/from SR-905 to SR-11. It is recommended that the document include access alternatives that consider an off-ramp that splits off from the northbound to eastbound SR-905/SR-11 connector and then drops down to connect with the southern terminus of Harvest Road. SR-905 northbound access to Otay Mesa Road should also be considered due to the potential beneficial effects to the SR-11/SR-905 connection and access to the East Otay Mesa area.

- The PEIR/PEIS should discuss if the proposed SR-11 program may require improvements to connecting County roads and/or reconfiguration of County roads. The extent of improvements that may be required to connect and/or parallel County roads should also be discussed.

- The PEIR/PEIS should verify that the proposed SR-11 program would not preclude the construction of any planned County Circulation Element and Specific Plan roads. The SR-11 design should accommodate all planned County Circulation Element and Specific Plan roads that are proposed to directly connect and/or traverse SR-11.

- The County "Guidelines for the Determination of Significance for Transportation and Traffic," dated September 26, 2006, should be used as a guide in the preparation of the traffic analysis.

- Encroachment and construction permits would be required for any work performed within the county's R/W.

Otay Mesa East POE

- The PEIR/PEIS should identify the properties that may be potentially directly impacted by the 100-acre project site.

- The PEIR/PEIS should outline the potential process that may be used to acquire the needed 100 acres.

- The PEIR/PEIS should provide a detailed project description that clearly identifies all of the proposed POE operational alternatives, such as various passenger and commercial/cargo options, plus the POE functioning as a toll facility.

- The document should explain how the proposed operations at the new POE would relate to operations at the existing Otay Mesa and San Ysidro POEs.

Commercial Vehicle Enforcement Facility (CVEF)

- The PEIR/PEIS should provide map figures that show proposed routes from the new POE to the CVEF, and onto SR-11 or other public roads.

- The document should identify/assess if truck traffic would need to use any County roads to travel from the POE to the CVEF, and onto SR-11.

Cumulative Analysis

- To facilitate the cumulative analysis, the County has made available data that identifies the location and status of proposed discretionary projects being processed by the County.

- The County is currently processing proposed discretionary projects in the East Otay Mesa area that would be affected by the location of the SR-11/POE project. Three projects potentially affected are: 1) Otay Crossings Commerce Park, 2) Otay Business Park and 3) RTX Truck Park and Storage.

  <u>Response</u>: As stated in Chapter 1, the proposed program is to identify the preferred corridor alignment locations that would allow for route adoption, approval of the Presidential Permit for the POE by the DOS, and the designation and acquisition of R/W. Specific design, construction and operational characteristics would be addressed in the Phase II document. Chapter 2 provides a description of the proposed program and the preliminary corridor alignments for each corridor being studied, as well as the POE. Chapter 3, Sections 3.16 through 3.21, address the Biological Environment (existing conditions), and the potential future impacts and mitigation for the program. Chapter 3, Section 3.8, addresses the Cultural Resources existing conditions, the potential for cultural resources impacts and the coordination efforts that have occurred. A program-level analysis of traffic and transportation is summarized in Chapter 3, Section 3.6, Traffic, Transportation/Pedestrian and Bicycle Facilities. The CVEF is not included in the program-level document and would be addressed in a future NEPA/CEQA document.

Public Scoping Meeting

A Public Scoping Meeting was held on Wednesday, June 6, 2007 from 5:00 p.m. to 7:30 p.m. at the Ocean View Hills Elementary School in Otay Mesa to give the community an opportunity to review and comment on the proposed SR-11/ POE program. The meeting was conducted in an "Open House" format, with representatives of Caltrans, the FHWA and SANDAG in attendance to answer questions regarding program activities, studies and the schedule. Notices were mailed to the cooperating/participating agencies, State, Federal and local agencies, Mexican agencies with an interest in the program, elected officials and members of the public. The Notice of Public Meeting was published in the San Diego Union Tribune in English and the Hispaños Unidos newspaper in Spanish. A Spanish interpreter was available to translate for Spanish-speaking attendees. The Public Scoping Meeting was attended by sixteen people. Comments were encouraged at the meeting, and comment sheets were made available; however, no comments were received. Caltrans also accepted comments via mail through July 13, 2007 after the meeting, and comments were received from the East Otay Mesa Property Owners Association (EOMPOA) and the EPA. Their comments are listed below.

East Otay Mesa Property Owners Association

- The program should evaluate the adequacy and timely completion of the SR-125/SR-905 freeway connections, specifically the SR-905/SR-125 north to east connection and the extension of the SR-905 to Enrico Fermi Road. A direct connector is needed for northbound SR-905 to eastbound SR-11. A northbound direct connection from SR-905 to Otay Mesa Road should also be considered. The Larkspur Power Plant has proposed an extension that could preclude this off-ramp. Coordination is required between Caltrans and Larkspur with regard to this issue.

- The PEIR/PEIS needs to examine the various proposed locations for the SR-11 Corridor against the EOMSP, and evaluate any detrimental impacts to the EOMSP.

- The PEIR/PEIS should discuss the potential impacts on burrowing owls.

  Response: The Phase II document would address implementation of various design, construction and operational characteristics to include direct connector ramps for the future freeway. Chapter 3, Section 3.1, discusses land use; Section 3.6, Traffic and Transportation/Pedestrian and Bicycle Facilities, provides an analysis of the circulation aspects of the study area; and Section 3.19, Animal Species, discusses the biological environment for animal species.

Environmental Protection Agency

Scope of Analysis

- There is a lack of consistency in the proposed scope of analysis and evaluation of various resource areas.

- The PEIR/PEIS should include a program-level discussion of anticipated impacts to resources and the process and/or strategies to inform avoidance, minimization and mitigation decision-making, and to ensure that the least environmentally damaging practicable alternative is not prematurely eliminated.

Transboundary Impacts

- The PEIR/PEIS should clearly identify how FHWA, Caltrans and GSA would address impacts and potential mitigation for transboundary effects (air quality, land use, community cohesion and character, and changes to truck traffic).

Aquatic Resources

- To the extent possible, pursue alternatives and corridors that avoid direct and indirect impacts to vernal pools and depressional wetlands.

- Identify opportunities available for each corridor alternative to explore in the project-level document efforts to further avoid or minimize impacts to streams and wetlands (shifting alignments, relocating interchanges, spanned crossings, or other less damaging designs).

- Include a program level discussion of water quality impacts and increases in stormwater runoff to appropriately compare alternatives. For each corridor alternative, compare opportunities to minimize surface water contamination from increased runoff from additional impervious surfaces associated with proposed roads, parking lots and facilities. Incorporate innovative solutions to address stormwater and other impacts roads have on the natural environment.

Air Quality

- Consider/include truck stop electrification for the facility footprint, as an alternative to reduce truck idling.

- Consider other infrastructural and efficiency-based improvements to reduce idling and improve throughput at the POE. (e.g., automated system to streamline truck processing, incentives to stagger cross-border traffic, remove barriers to utilizing the FAST program, and increase the number of lanes).

Mobile Source Air Toxins

- Identify homes and sensitive receptors on both sides of the border located at least 300 meters (984 feet) from possible alternatives where there would be increases in truck traffic/idling.

- Identify available options for each alternative to further minimize MSAT impacts

- Identify a methodology in the PEIR/PEIS to further assess these impacts in the project-level document.

Indirect Growth Impacts

- Identify if the proposed roadway would include intersections to existing or other proposed roads.

- Conduct a thorough cumulative impact assessment with a list of reasonably foreseeable actions, including non-transportation projects.

- Include the associated POE facility proposed for the Mexican side of the border in the assessment.

Purpose and Need

- Describe how the recent Tecate POE expansion, the proposed improvements to the SR-94 and the possible new Jacumba POE affect the purpose and need for this program. Include a discussion of the status of these projects and how their implementation may affect the need for this project.

- Include analysis of possible TSM-TDM-only alternatives, so that alternatives can be appropriately compared at the program level, so that the least environmentally damaging alternative is not prematurely eliminated from consideration.

Green Building

- When considering design alternatives for the POE, consider the U.S. Green Building Council's Leadership in Energy and Environmental Design. Develop a green showcase project that complies with the Federal Leadership in High Performance and Sustainable Buildings MOU.

- Encourage partnership between the U.S. and Mexican construction teams and the U.S. and Mexican Green Building Councils to make new stations on both sides of the border healthier and to take advantage of economies of scale.

- Encourage the facilities to provide environmental education on features associated with the green POE projects.

Energy Use and Utilities

- Include a discussion on how water, sewer and power would service the new POE. If new infrastructure would be required, then impacts of these project elements should be analyzed/disclosed in the PEIS to inform the future alignment of utility corridors.

Tribal Resources

- Include a section on any affected tribal resources and disclose tribal consultation efforts.

Consistent Analysis for Proposed Facilities

- Ensure analysis and discussion of the roadway and POE are either appropriately addressed collectively, or equally and separately, throughout the PEIS. Sections of the outline appear to focus primarily on the roadway impacts.

  <u>Response</u>: As stated in Chapter 1, the proposed program is to identify the preferred SR-11 Corridor and POE locations that would allow for route adoption, approval of the Presidential Permit for the POE by the DOS and the designation and acquisition of R/W. Specific design, construction and operational characteristics would be addressed in the Phase II document. Chapter 2 provides a clear description of the proposed program and the preliminary locations for each SR-11 Corridor/POE Site being studied, as well as those that have been considered and eliminated, which include an Eastern Corridor Alternative, a

Local Road Alternative and a TSM/TMD Alternative. Chapter 1 also discusses the existing POE facilities, their potential improvements, and other restrictions and limitations that would demonstrate the need for the reservation of the POE site being proposed as part of this program. Chapter 3, Sections 3.16- 3.21, address the biological environment (existing conditions), which include a discussion of aquatic resources and the potential future impacts and mitigation for the project-level phase. Chapter 3, Section 3.14, provides a program-level analysis of air quality. Air quality would be discussed in greater detail at the project-level phase. Section 3.3 examines growth and the likelihood of any future potential growth-related impacts. It also discusses accessibility and circulation within the study area, and how the program relates to the existing City and County Community Plans. Section 3.5, Utilities/Emergency Services, discusses existing services, as well as the providers for the area. Section 3.8 addresses the cultural resources existing conditions and the coordination efforts that have occurred. Design alternatives for the POE would be addressed in a future Phase II NEPA/CEQA document, and would be pursued separately by the GSA.

Additional Program Outreach

- The Otay Mesa East Interagency Workgroup Meetings are ongoing, and have occurred approximately on a monthly basis since December 2005. Meetings are attended by FHWA, SANDAG, EPA, DOS, GSA, and the CBP. Information for the PEIR/PEIS was solicited at these meetings.

- The SR-11/Otay Mesa East POE Caltrans Project Management team provided a presentation and overview of the proposed program to the Otay Mesa Chamber of Commerce Directors and its members on September 12, 2007. Members include Otay Mesa property owners, representatives of manufacturing and assembly plants, and business owners/operators.

- A Border Liaison Mechanism meeting occurred on October 9, 2007 and was attended by members from Mexico and the U.S. The following agencies were represented: SANDAG; the City and County of San Diego; the City of Chula Vista; the City of Tijuana; Secretariat of Transportation of Mexico (Mexico's Federal agency for transportation and POE infrastructure); FHWA; USGSA; USCBP; State of Baja, California, Mexico; the Mexican Consulate in San Diego; USFWS; USEPA; IBWC; and Caltrans.

- On October 9, 2007, Pedro Orso-Delgado, Director for Caltrans District 11, presented a program update at the County. In attendance were members/employees of the County, the City, SANDAG, the Otay Mesa Chamber of Commerce, the EOMPOA, and other property owners from the Otay Mesa area.

6.3 SAFETEA-LU 6002 Coordination Plan

On August 10, 2005, President Bush signed into law the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). SAFETEA-LU promotes more efficient and effective Federal surface transportation programs by focusing on transportation issues of national significance, while giving State and local transportation decision makers more flexibility for solving transportation problems in their communities. Section 6002 of SAFETEA-LU established a new environmental review process that included a Coordination Plan, which requires Caltrans to enhance opportunities for coordination with Federal, State, Tribal, and local government agencies, as well as the public, during the environmental review process for the

program. As part of the Coordination Plan, Caltrans was tasked with managing the 6002 process, preparing the EIS, and providing opportunities for public and Participating and Cooperating Agency involvement. Compliance with the latter was accomplished in various ways, which are discussed below.

Initiation of Agency Participation

Pursuant to 23 USC 139 Section 6002 of SAFETEA-LU, letters inviting Federal, State, Tribal and local government agencies that may have an interest in program development as a Coordinating or Participating Agency were mailed on July 9, 2007 by FHWA and June 27, 2007 by Caltrans. Letters were sent to the following Federal, State, Tribal and local agencies:

- Cooperating Agencies: GSA, DOS, ACOE, USFWS, DHS, CBP, CEQ, EPA, CDFG, CHP, and RWQCB.

- Participating Agencies: USFWS; CBP; EPA; DHS; CHP; CDFG; RWQCB; SDAPCD; SANDAG; County of San Diego; City of San Diego; Otay Water District; International Boundary and Water Commission; Native American Heritage Commission; U.S. Department of Agriculture, Animal and Plant Health Inspection Services; U.S. Food and Drug Administration (FDA); California Governor's D.C. Office, Port Security Unit; Sycuan Band of the Kumeyaay Nation; Kumeyaay Cultural Heritage Preservation; Jamul Indian Village; Kumeyaay Cultural Repatriation Committee; Diegueno/Kumeyaay Representative; San Pasqual Band of Mission Indians; Ewiiaapaayp Tribal Office; Santa Ysabel Band of Diegueno Indians; Mesa Grande Band of Mission Indians; Manzanita Band of the Kumeyaay Nation; Viejas Band of Mission Indians; Kwaaymii Laguna Band of Mission Indians; Inaja Band of Mission Indians; and Santa Ysabel Band of Diegueno Indians.

In response to the request letters, GSA, DOS, USFWS, EPA, and CBP agreed to be both Cooperating and Participating Agencies. The SDAPCD, City of San Diego, SANDAG, IBWC and Otay Water District agreed to be Participating Agencies.

Opportunities for Involvement

Purpose and Need

Letters and electronic mail were sent to Participating agencies for review and comments on the program Purpose and Need Statement in July/August 2007. Comments were received from the following Participating Agencies: DHS, EPA, IBWC, USFWS, and SANDAG. FHWA also submitted comments. The public was provided the opportunity for input into the question of purpose and need for the proposed program via the NOI/NOP, the Public Scoping Meeting, the mass-mailed scoping meeting information flyer, the newspaper advertisements, and the additional outreach meetings described above in Section 6.2, *Public Scoping Process*.

Range of Alternatives

Participating agencies and the public were provided the opportunity for input into the identification of the range of alternatives and level of detail required in alternatives analysis via the NOI/NOP, the Public Scoping Meeting exhibits and fact sheet, the mass-mailed scoping meeting information flyer, and the newspaper advertisements that included a map and a description of the program's proposed alternatives. In addition, Participating Agencies had the

opportunity for input on this issue in the PDT meetings, as well as the Interagency Workgroup Meetings. Letters and electronic mail were sent to Participating Agencies for review and comments on the program alternatives in July/August 2007. Comments were received from the following Participating Agencies: DHS, EPA, IBWC, USFWS, and SANDAG. The FHWA also submitted comments. The EOMPOA was the only member of the public to comment on this issue; their comment is discussed above in Section 6.2, *Public Scoping Process*.

6.4 PROJECT DEVELOPMENT TEAM MEETINGS

The SR-11/Otay Mesa East POE PDT was assembled by Caltrans in 2006 to serve as the technical advisory committee and internal decision-making body for the program. The PDT consists of Caltrans' staff representatives from Program Management and the various technical divisions, including Environmental, Design, Maintenance, Hydraulics, and other divisions. The meetings are also attended by FHWA, SANDAG, GSA, DHS and the City and County of San Diego. The PDT generally meets monthly during the course of program development, as issues arise requiring technical direction or resolution.

Figure 6.2-1 Notice of Intent

[4910-22]

DEPARTMENT OF TRANSPORTATION

Federal Highway Administration

ENVIRONMENTAL IMPACT STATEMENT: SAN DIEGO, CALIFORNIA

AGENCY: Federal Highway Administration (FHWA), DOT

ACTION: Notice of Intent

SUMMARY: The FHWA is issuing this notice to advise the public that an environmental impact statement will be prepared to identify a corridor for a future proposed highway and port of entry in San Diego County, California.

FOR FURTHER INFORMATION CONTACT: Steve Healow, Project Development Engineer, Federal Highway Administration, 650 Capitol Mall, Suite 4-100, Sacramento, California 95814. Telephone: (916) 498-5849 or Susanne Glasgow, Deputy District Director, Environmental Division, California Department of Transportation, District 11, 4050 Taylor Street, MS-242, San Diego, CA 92110. Telephone: (619) 688-0100

SUPPLEMENTARY INFORMATION: The FHWA, in cooperation with the California Department of Transportation (Caltrans) and the General Services Administration (GSA), will prepare a phased environmental impact statement (PEIS) on a proposal to identify and preserve a corridor for future State Route (SR) 11, identify an area for the future Otay Mesa East Port of Entry (POE), and study the functionality of the existing Commercial Vehicle Enforcement Facility (CVEF) on eastern Otay Mesa in San Diego County. Identification and preservation of the highway corridor and port of entry will facilitate the application process for presidential permit for the POE, land use planning by local jurisdictions, and right-of-way acquisition for the future projects.

Figure 6.2-1 Notice of Intent (Pg. 2)

Future SR11 would begin at approximately the SR905/SR125 interchange and proceed easterly approximately 2.7 miles to a new POE. The completed PEIS will facilitate Caltrans, FHWA, and GSA proceeding independently with right-of-way acquisition, designation, and project level environmental processing of their respective projects. Within the limits of and adjacent to the study area, there are biological resources, cultural resources, agricultural lands, cross-border concerns, and potential growth issues.

In addition to the no action alternative, there are alternatives for two proposed corridors to two POE locations under consideration.

Letters describing the proposed action and soliciting comments will be sent to appropriate federal, state, and local agencies, and to private organizations and citizens who have previously expressed or are known to have interest in this proposal. A public scoping meeting will be held at an appropriate location in or near Otay Mesa in June 2007. In addition, a public hearing will be held. Public notice will be given of the time and place of the meeting and hearing. The draft PEIS will be available for public and agency review prior to the public hearing.

To ensure that the full range of issues related to this proposed action are addressed and all significant issues identified, comments and suggestions are invited from all interested parties. Comments or questions concerning this proposed action and the PEIS should be directed to FHWA and/or Caltrans at the addresses provided above. The views of the agencies having knowledge about the historic resources potentially affected by the proposal or interested in the effects of the project on historic properties are solicited.

(Catalog of Federal Domestic Assistance Program Number 20.205, Highway Planning and Construction. The regulations implementing Executive Order 12372 regarding intergovernmental consultation of federal programs and activities apply to this program.)

2

Figure 6.2-1 Notice of Intent (Pg. 3)

Issued on: April 23, 2007

Steve Healow
Federal Highway Administration
Sacramento, California

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Figure 6.2-2 (Pg. 1) NOI published in Federal Register

24352 **Federal Register** / Vol. 72, No. 84 / Wednesday, May 2, 2007 / Notices

Electronic Comments

- Use the Commission's Internet comment form (*http://www.sec.gov/rules/sro.shtml*); or
- Send an e-mail to *rule-comments@sec.gov*. Please include File Number SR–NYSE–2007–41 on the subject line.

Paper Comments

- Send paper comments in triplicate to Nancy M. Morris, Secretary, Securities and Exchange Commission, Station Place, 100 F Street, NE., Washington, DC 20549–1090.

All submissions should refer to File Number SR–NYSE–2007–41. This file number should be included on the subject line if e-mail is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's Internet Web site (*http://www.sec.gov/rules/sro.shtml*). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for inspection and copying in the Commission's Public Reference Room. Copies of such filing also will be available for inspection and copying at the principal office of the NYSE. All comments received will be posted without change; the Commission does not edit personal identifying information from submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number SR–NYSE–2007–41 and should be submitted on or before May 23, 2007.

For the Commission, by the Division of Market Regulation, pursuant to delegated authority.[13]

Florence E. Harmon,
Deputy Secretary.

[FR Doc. E7–8311 Filed 5–1–07; 8:45 am]

BILLING CODE 8010–01–P

[13] 17 CFR 200.30–3(a)(12).

SMALL BUSINESS ADMINISTRATION

Disaster Declaration #10852 and #10853; New York Disaster #NY–00045

AGENCY: U.S. Small Business Administration.

ACTION: Notice.

SUMMARY: This is a Notice of the Presidential declaration of a major disaster for the State of New York (FEMA–1692–DR), dated 04/24/2007.

Incident: Severe Storms and Inland and Coastal Flooding.

Incident Period: 04/14/2007 through 04/18/2007.

Effective Date: 04/24/2007.

Physical Loan Application Deadline Date: 06/25/2007.

Economic Injury (EIDL) Loan Application Deadline Date: 01/24/2008.

ADDRESSES: Submit completed loan applications to: U.S. Small Business Administration, Processing and Disbursement Center, 14925 Kingsport Road, Fort Worth, TX 76155.

FOR FURTHER INFORMATION CONTACT: A. Escobar, Office of Disaster Assistance, U.S. Small Business Administration, 409 3rd Street, SW., Suite 6050, Washington, DC 20416.

SUPPLEMENTARY INFORMATION: Notice is hereby given that as a result of the President's major disaster declaration on 04/24/2007, applications for disaster loans may be filed at the address listed above or other locally announced locations.

The following areas have been determined to be adversely affected by the disaster:

Primary Counties (Physical Damage and Economic Injury Loans):
Orange, Rockland, Westchester.

Contiguous Counties (Economic Injury Loans Only):
New York: Bronx, Dutchess, Putnam, Sullivan, Ulster.
Connecticut: Fairfield.
New Jersey: Bergen, Passaic, Sussex.
Pennsylvania: Pike.

The Interest Rates are:

	Percent
For Physical Damage:	
Homeowners with Credit Available Elsewhere:	5.750
Homeowners without Credit Available Elsewhere:	2.875
Businesses with Credit Available Elsewhere:	8.000
Other (Including Non-Profit Organizations) with Credit Available Elsewhere:	5.250
Businesses and Non-Profit Organizations without Credit Available Elsewhere:	4.000
For Economic Injury:	
Businesses & Small Agricultural Cooperatives without Credit Available Elsewhere:	4.000

The number assigned to this disaster for physical damage is 108526 and for economic injury is 108530.

Federal Domestic Assistance Numbers 59002 and 59008)

Jane M. Pease,
Acting Associate Administrator for Disaster Assistance.

[FR Doc. E7–8348 Filed 5–1–07; 8:45 am]

BILLING CODE 8025–01–P

DEPARTMENT OF TRANSPORTATION

Federal Highway Administration

Environmental Impact Statement: San Diego, CA

AGENCY: Federal Highway Administration (FHWA), DOT.

ACTION: Notice of intent.

SUMMARY: The FHWA is issuing this notice to advise the public that an environmental impact statement will be prepared to identify a corridor for a future proposed highway and port of entry in San Diego County, California.

FOR FURTHER INFORMATION CONTACT: Steve Healow, Project Development Engineer, Federal Highway Administration, 650 Capitol Mall, Suite 4–100, Sacramento, California 95814. Telephone: (916) 498–5849 or Susanne Glasgow, Deputy District Director, Environmental Division, California Department of Transportation, District 11, 4050 Taylor Street, MS–242, San Diego, CA 92110. Telephone: (619) 688–0100.

SUPPLEMENTARY INFORMATION: The FHWA, in cooperation with the California Department of Transportation (Caltrans) and the General Services Administration (GSA), will prepare a phased environmental impact statement (PEIS) on a proposal to identify and preserve a corridor for future State Route (SR) 11, identify an area for the future Otay Mesa East Port of Entry (POE), and study the functionality of the existing Commercial Vehicle Enforcement Facility (CVEF) on eastern Otay Mesa in San Diego County. Identification and preservation of the highway corridor and port of entry will facilitate the application process for presidential permit for the POE, land use planning by local jurisdictions, and right-of-way acquisition for the future projects.

Future SR11 would begin at approximately the SR905/SR125 interchange and proceed easterly approximately 2.7 miles to a new POE. The completed PEIS will facilitate Caltrans, FHWA, and GSA proceeding independently with right-of-way acquisition, designation, and project level environmental processing of their

Figure 6.2.2 NOI published in Federal Register (Pg. 2)

Federal Register / Vol. 72, No. 84 / Wednesday, May 2, 2007 / Notices 24353

respective projects. Within the limits of and adjacent to the study area, there are biological resources, cultural resources, agricultural lands, cross-border concerns, and potential growth issues.

In addition to the no action alternative, there are alternatives for two proposed corridors to two POE locations under consideration.

Letters describing the proposed action and soliciting comments will be sent to appropriate federal, state, and local agencies, and to private organizations and citizens who have previously expressed or are known to have interest in this proposal. A public scoping meeting will be held at an appropriate location in or near Otay Mesa in June 2007. In addition, a public hearing will be held. Public notice will be given of the time and place of the meeting and hearing. The draft PEIS will be available for public and agency review prior to the public hearing.

To ensure that the full range of issues related to this proposed action are addressed and all significant issues identified, comments and suggestions are invited from all interested parties. Comments or questions concerning this proposed action and the PEIS should be directed to FHWA and/or Caltrans at the addresses provided above. The views of the agencies having knowledge about the historic resources potentially affected by the proposal or interested in the effects of the project on historic properties are solicited.

(Catalog of Federal Domestic Assistance Program Number 20.205, Highway Planning and Construction. The regulations implementing Executive Order 12372 regarding intergovernmental consultation of federal programs and activities apply to this program.)

Issued on: April 23, 2007.

Steve Healow,

Project Development Engineer, Federal Highway Administration, Sacramento, California.

[FR Doc. E7–8444 Filed 5–1–07; 8:45 am]

BILLING CODE 4910–22–P

DEPARTMENT OF TRANSPORTATION

Federal Motor Carrier Safety Administration

Sunshine Act Meetings; Unified Carrier Registration Plan Board of Directors

AGENCY: Federal Motor Carrier Safety Administration (FMCSA), DOT.

TIME AND DATE: May 21, 2007, 11 a.m. to 2 p.m., Eastern Daylight Time.

PLACE: This meeting will take place telephonically. Any interested person may call Mr. Avelino Gutierrez at (505) 827–4565 to receive the toll free number and pass code needed to participate in this meeting by telephone.

STATUS: Open to the public.

MATTERS TO BE CONSIDERED: The Unified Carrier Registration Plan Board of Directors (the Board) will continue its work in developing and implementing the Unified Carrier Registration Plan and Agreement and to that end, may consider matters properly before the Board.

FOR FURTHER INFORMATION CONTACT: Mr. Avelino Gutierrez, Chair, Unified Carrier Registration Board of Directors at (505) 827–4565.

Dated: April 25, 2007.

William A. Quade,

Acting Associate Administrator for Enforcement and Program Delivery.

[FR Doc. 07–2181 Filed 4–30–07; 12:49 pm]

BILLING CODE 4910–EX–P

DEPARTMENT OF TRANSPORTATION

Federal Transit Administration

Notice of Limitation on Claims Against Proposed Public Transportation Projects

AGENCY: Federal Transit Administration (FTA), DOT.

ACTION: Notice of Limitation on Claims.

SUMMARY: This notice announces final environmental actions taken by the Federal Transit Administration (FTA) for public transportation projects in the following metropolitan areas: Eugene, Oregon; Fort Myers, Florida; Houston, Texas; and New York, New York. The purpose of this notice is to announce publicly the environmental decisions by FTA on the subject projects and to activate the limitation on any claims that may challenge these final environmental actions.

DATES: By this notice, FTA is advising the public of final agency actions subject to Title 23, United States Code (U.S.C.), section 139(l). A claim seeking judicial review of the FTA actions announced herein for the listed public transportation projects will be barred unless the claim is filed on or before October 29, 2007.

FOR FURTHER INFORMATION CONTACT: Joseph Ossi, Environmental Protection Specialist, Office of Planning and Environment, 202–366–1613, or Christopher Van Wyk, Office of Chief Counsel, 202–366–1733. FTA is located at 1200 New Jersey Avenue, SE., Washington, DC 20590. Office hours are from 9 a.m. to 5:30 p.m., e.t., Monday through Friday, except Federal holidays.

SUPPLEMENTARY INFORMATION: Notice is hereby given that FTA has taken final agency actions by issuing certain approvals for the public transportation projects listed below. The actions on these projects, as well as the laws under which such actions were taken, are described in the documentation issued in connection with the project to comply with the National Environmental Policy Act (NEPA), and in other documents in the FTA administrative record for the project. The final agency environmental decision documents—Records of Decision (ROD) or Findings of No Significant Impact (FONSI)—for the listed projects are available online at *http://www.fta.dot.gov/planning/environment/planning_environment_documents.html* or may be obtained by contacting the FTA Regional Office for the metropolitan area where the project is located. Contact information for the FTA Regional Offices may be found at *http://www.fta.dot.gov.*

This notice applies to all FTA decisions on the listed projects as of the issuance date of this notice and all laws under which such actions were taken, including, but not limited to, the National Environmental Policy Act (NEPA) [42 U.S.C. 4321–4375], Section 4(f) of the Department of Transportation Act of 1966 [49 U.S.C. 303], Section 106 of the National Historic Preservation Act [16 U.S.C. 470f], and the Clean Air Act [42 U.S.C. 7401–7671q].

The projects and actions that are the subject of this notice are:

1. *Project name and location:* Bus Rapid Transit System Improvements for the Pioneer Parkway Corridor; Eugene, Oregon. *Project sponsor:* Lane Transit District (LTD). *Project description:* The Pioneer Parkway bus rapid transit (BRT) project consists of construction of 5.2 miles of exclusive transit lanes and 14 transit stations. The southern part of the project alignment would follow Pioneer Parkway, utilizing portions of an abandoned railroad right-of-way. The existing pedestrian and bicycle path in this corridor will be maintained. Along the northern loop, a single lane will be located in the median of Martin Luther King Jr. Parkway. On RiverBend Drive and International Way, the BRT buses will operate in the median. On Gateway Street and Harlow Road, the BRT buses will operate in mixed traffic. *Final agency actions:* FONSI issued on December 22, 2006; Section 106 Finding of No Adverse Effect; project-level Air Quality Conformity determination. *Supporting documentation:* Environmental Assessment: Bus Rapid Transit System Improvements for the

Figure 6.2-3 NOP Recorded by the County Recorder

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY ARNOLD SCHWARZENEGGER, Governor

DEPARTMENT OF TRANSPORTATION
DISTRICT 11
4050 TAYLOR STREET, MS-242
SAN DIEGO, CA 92110
PHONE (619) 688-0100
FAX (619) 688-4277
TTY (619) 688-3214

FILED
Gregory J. Smith, Recorder/County Clerk
MAY 11 2007
BY A. Consul DEPUTY

Flex your power! Be energy efficient!

11-SD-11
P.M. 0.0-2.7
056300
SCH#_____

NOTICE OF PREPARATION

FILED IN THE OFFICE OF THE COUNTY CLERK
San Diego County on MAY 11 2007
Posted MAY 11 2007 Removed _____
Returned to Agency on _____
Deputy A. Consul

To: All
Federal, State, and Local
Responsible and Cooperating Agencies

Subject: Notice of Preparation of a Draft Program Environmental Impact Report (PEIR)
[References: Division 13, Public Resources Code, Section 21080.4 (State); 40 C.F.R. 1501.7 and 1508.22 (Federal)]

This is to inform you that the California Department of Transportation (the Department) in cooperation with the Federal Highway Administration (FHWA) will be the lead agency and will prepare a PEIR for the project described below. Your participation as a responsible/cooperating agency is requested in the preparation and review of this document. We will need the name of a contact person in your agency.

We need to know the applicable permit and environmental review requirements of your agency and the scope and content of the environmental information which is germane to your agency's statutory responsibilities in connection with the proposed project. Your agency will need to use the PEIR prepared by our agency when considering your permit or other approval for the project.

The project proposes to identify a corridor for future State Route 11 (SR), identify an area for the future Otay Mesa East Port of Entry (POE), and study the functionality of the existing Commercial Vehicle Enforcement Facility (CVEF) on Otay Mesa. Identification and preservation of the highway corridor and port of entry will contribute towards the process of acquiring the presidential permit for the POE, land use planning by local jurisdictions, and right of way acquisition for the future projects.

Future SR11 would begin at approximately the SR905/SR125 interchange and proceed easterly approximately 2.7 miles to a new POE. The ultimate approval of the PEIR would allow the Department, FHWA, and the General Services Administration (GSA) to proceed independently with right-of-way acquisition, designation, and project level environmental processing of their respective projects, with mutual knowledge that the overall program is approved. Within the limits of and adjacent to the study area, there are biological resources, cultural resources, agricultural lands, cross-border concerns, and potential growth issues.

There are two corridor and port of entry locations and the no action alternative under consideration.

"Caltrans improves mobility across California"

Figure 6.2-3 NOP Recorded by the County Recorder (Pg.2)

A public scoping meeting will be held on Wednesday, June 6, 2007 at the Ocean View Hills Elementary School located at 4915 Del Sol Boulevard, San Diego, CA 92154. The meeting will be held from 5:00pm to 7:30pm. There will also be a formal public hearing at the conclusion of environmental studies.

To encourage an exchange of information and ideas the meeting format will be an informal open forum. Interested persons will be able to drop in at any time during the meeting hours to ask questions, make suggestions, or express views for determining the range of alternatives and the scope of the issues to be addressed and analyzed in depth in the PEIR.

Subsequent to this initial scoping meeting, individual scoping meetings will be arranged with responsible/cooperating agencies and with special interest groups upon request.

Due to the time limits mandated by State law, your response must be sent at the earliest possible date but not later than 45 days after receipt of this notice.

Please send your response and direct any comments or questions regarding this project to Susanne Glasgow, Deputy District Director, Environmental Division, Department of Transportation, District 11, 4050 Taylor Street, MS-242, San Diego, CA 92110.

9 May 2007
Date

Susanne Glasgow
Susanne Glasgow
Deputy District Director,
Environmental Division

"Caltrans improves mobility across California"

Figure 6.2-4 Notice of Preparation

11-SD-11
P.M. 0.0-2.7
056300
SCH#_____

NOTICE OF PREPARATION

To: All
Federal, State, and Local
Responsible and Cooperating Agencies

From: California Department of
Transportation, District 11
4050 Taylor Street, MS-242
San Diego, CA 92110

Subject: Notice of Preparation of a Draft Program Environmental Impact Report (PEIR) [References: Division 13, Public Resources Code, Section 21080.4 (State); 40 C.F.R. 1501.7 and 1508.22 (Federal)]

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Figure 6.2-4 Notice of Preparation (Pg. 2)

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9 May 2007
Date

Susanne Glasgow
Susanne Glasgow
Deputy District Director,
Environmental Division

Chapter 7.0

LIST OF PREPARERS

CHAPTER 7.0 – LIST OF PREPARERS

This PEIR/PEIS was prepared by HELIX Environmental Planning, Inc. under the direction of Tamara Ching, for the California DOT and the FHWA. Caltrans oversight was also provided for NEPA compliance. The following persons participated in preparation of the PEIR/PEIS and its associated technical studies:

Caltrans District 11

Kelly Finn, Senior Environmental Planner, M.S. Natural Resources Conservation, B.A. Biology and Environmental Studies – full review of the entire PEIR/PEIS and Technical Reports.

Sandra Lavender, Associate Environmental Planner, B.A. Urban Studies and Planning – prepared Noise and Vibration, Air Quality, Comments and Coordination, CEQA sections, full review of entire PEIR/PEIS and Technical Reports.

Jayne Dowda, Senior Transportation Engineer, Branch Chief, Environmental Engineering, B.S. Civil Engineering, Registered Civil Engineer – reviewed Air Quality section.

Martin Rosen, Senior Environmental Planner, Cultural Resources Studies Oversight, M.A. Anthropology, RPA certified – assisted in preparing the Cultural Resources section and *First Addendum Archaeological Survey Report* for State Route 11 and East Otay Mesa Port of Entry.

Bruce April, Senior Environmental Planner, Environmental Stewardship Branch Chief, B.S. Biology – reviewed Biology sections.

HELIX Environmental Planning, Inc.

Karen Brandt, Senior Project Manager, B.A. Geography - prepared Cultural Resources section of PEIR/PEIS; conducted land use fieldwork.

Sean Cardenas, Senior Project Manager, A.B.D. Anthropology, M.A. Anthropology, B.A. Anthropology – full review of the entire PEIR/PEIS.

Tamara S. Ching, Planning Division Manager/Senior Project Manager, M.S. Administration; B.A. Social Ecology - Project Manager for PEIR/PEIS; full review and edit of entire PEIR/PEIS and Community Assessment Existing Conditions Report.

Lara Costantino, Environmental Planner III, B.A. Geography - prepared Natural Communities, Wetlands and Other Waters, Plant Species, Animal Species, and Threatened and Endangered Species sections, and contributed to Executive Summary of PEIR/PEIS.

Stacy Hall de Gomez, Environmental Planner III, M.M.A. Fisheries Economics and Marine Policy, B.Sc. Biology - prepared Purpose and Need, Program Alternatives, Land Use, Plan Consistency, Growth, Community Character and Cohesion, Relocations, and Environmental Justice sections, and contributed to Executive Summary of PEIR/PEIS; primary author of Community Assessment Existing Conditions Report.

Kristel Haesler, Environmental Planner II, J.D. Law, B.A. Environmental Studies - prepared Farmland, List of Preparers, Distribution List, References, List of Technical Studies, and Abbreviations and Acronyms sections of PEIR/PEIS.

Amy Hoffman, ASLA, Project Landscape Architect, M. Landscape Architecture, B.A. Landscape and Architecture - prepared Visual/Aesthetics section of PEIR/PEIS.

Deborah Leonard, Senior Scientist, B.A. Natural Resources/Environmental Geography - primary author of Biological Resources Existing Conditions Report.

Dennis Marcin, Senior Environmental Specialist, B.S. Geology - prepared Hydrology and Floodplain, Water Quality and Storm Water Runoff, Geology/Soils/Seismic/Topography, Paleontology, and Hazardous Waste/Materials sections of PEIR/PEIS, and NRCS-CPA-106 Form (see Appendix B of the PEIR/PEIS). Contributed to farmland analysis.

Stacy Nigro, Biologist, B.S. Forest Resources and Conservation – assisted in preparation of *Biological Resources Existing Conditions Report*, prepared Jurisdictional Delineation, and assisted in preparing Biological Environment sections of PEIS/PEIR.

Justin Palmer, GIS Group Manager, B.A. Geography, Natural Resource and Environmental Conservation – lead GIS specialist for project; prepared figures and data for PEIR/PEIS, Community Assessment Existing Conditions Report and Biological Resources Existing Conditions Report.

Melissa Whittemore, Project Manager, B.S. Biology - prepared Invasive Species, and contributed to Additional Impacts sections of PEIR/PEIS.

Boyle Engineering

Kirk Bradbury, Principal Engineer, B.S. Civil Engineering - Contract Manager, Consultant Project Engineer, serving in a review capacity.

Gerard Dalziel, Principal Engineer, M.B.A., B.S. Civil Engineering - primary author of *Preliminary Existing Conditions Hydrology Report*.

Hon Consulting, Inc.

Katherine Hon, President, M.E. Civil Engineering, B.S. Environmental Health - prepared Utilities/Emergency Services, Traffic and Transportation/Pedestrian and Bicycle Facilities, Cumulative Impacts, Short-Term Uses/Long-Term Productivity, and Irreversible And Irretrievable Commitments sections, and contributed to Executive Summary of PEIR/PEIS.

Ninyo & Moore

Jonathan Goodmacher, M.S. Geological Sciences, B.A. Geology, Principal Geologist – primary author of *Draft Preliminary Geotechnical Study*.

Beth S. Abramson-Beck, Principal Geologist, M.S. Geology, B.A. Geology - primary author of *Draft Hazardous Materials and Hazardous Waste Initial Site Assessment Caltrans/SR-11*.

Shannon L. Smith, Project Environmental Scientist, B.A. Environmental Studies and Economics – contributed to *Draft Hazardous Materials and Hazardous Waste Initial Site Assessment Caltrans/SR-11*.

Kyle Consulting

Carolyn E. Kyle, Principal Investigator, M.A. Anthropology, B.A. Anthropology - primary author of *First Addendum Archaeological Survey Report for State Route 11 and East Otay Mesa Port of Entry*.

James and Briggs Archeological Services

Steven Briggs, Project Archeologist - contributed to *First Addendum Archaeological Survey Report for State Route 11 and East Otay Mesa Port of Entry.*

Delman James, Project Archeologist, B.A. Anthropology - contributed to First Addendum Archaeological Survey Report for State Route 11 and East Otay Mesa Port of Entry.

VRPA Technologies

Erik Ruehr, Director of Traffic Engineering, M.S. Civil Engineering, B.S. Civil Engineering – primary author of *State Route 11 Phase I Traffic Technical Report*.

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Chapter 8.0

DISTRIBUTION LIST

CHAPTER 8.0 – DISTRIBUTION LIST

FEDERAL GOVERNMENT:

Natural Resources Conservation Service
Area II
318 Cayuga Street, Suite 206
Salinas, CA 93901

Centers for Disease Control
Environmental Health and Injury Control
Special Programs Group, Mail Stop F-29
1600 Clifton Road
Atlanta, GA 30333

Department of the Interior
Office of Env. Policy and Compliance
Main Interior Bldg., MS 2342
1849 C Street, NW
Washington, DC 20240

U.S. Fish and Wildlife Service
6010 Hidden Valley Road
Carlsbad, CA 92011
Attn: Susan Wynn

Chief Attn: CESPL-CO-R
US Army Corps of Engineers
915 Wilshire Boulevard, Suite 980
Los Angeles, CA 90053-2325
Attn: Mark Cohen

International Boundary and Water Commission
2225 Dairy Mart Road
San Ysidro, CA 92173-2840
Attn: Dion McMicheaux

Federal Emergency Management Agency
1111 Broadway, Suite 1200
Oakland, CA 94607-4052
Attn: Nancy Ward

U.S. General Services Administration
880 Front Street
San Diego, CA 92101-8843
Attn: Ramon Riesgo

Director, Office of Env. Compliance
U.S. Dept. of Energy
1000 Independence Ave., SW
Rm. 4G-064
Washington, DC 20585

U.S. Department of State
2201 C Street NW
Attn: WHA/MEX 4258 HST
Washington, DC 20520

U.S. General Services Administration
880 Front Street
San Diego, CA 92101-8843
Attn: Greg Smith

U.S. General Services Administration
Region 9
450 Golden Gate Avenue
San Francisco, CA 94102
Attn: Jonathan Ballard

U.S. Public Health Service, Region 9
Regional Health Administrator
50 United Nations Plaza, Room 327
San Francisco, CA 94102

U.S. Food and Drug Administration
5600 Fishers Lane
Rockville, Maryland 20857
Attn: Amy Iselin

U.S. Customs and Border Protection
San Diego Field Operations Office
610 W. Ash Street, Suite 1200
San Diego, CA 92101
Attn: Andy Brinton

U.S. Customs and Border Protection
San Diego Field Operations Office
610 W. Ash Street, Suite 1200
San Diego, CA 92101
Attn: Anthony Kleppe

U.S. Dept. of Agriculture
Escondido Service Center
332 S. Juniper Street, Suite 110
Escondido, CA 92025-4225

U.S. Dept. of Agriculture, Animal and Plant Health Inspection Services
MRP-BS/ASD Contracting Team
Butler Square, 5th Floor
100 N. Sixth Street
Minneapolis, MN 55403

FEDERAL GOVERNMENT: (CONT.)

United States Border Patrol
311 Athey Ave.
San Ysidro, CA 92173
Attn: Joe Perez

Environmental Protection Agency
San Diego Border Liaison Office
610 West Ash Street, Suite 905
San Diego, Ca 92101
Attn: Dave Fege

General Counsel
Council on Environmental Quality
722 Jackson Place, N.W.
Washington, DC 20503-0002
Attn: Dinah Bear

Environmental Program Manager
DHS Customs & Border Protection
1300 Pennsylvania Avenue NW
Suite 314D
Washington, DC 20229
Attn:Russell D'Hondt

U.S. Border Patrol
P.O. Box 210035
Chula Vista, CA 91921
Attn: David Badger, Supervisor

Federal Aviation Administration
San Diego Flight Standards Dist. Office
8525 Gibbs Drive, Suite 120
San Diego, CA 92123-4340

US Dept. of Agriculture
APHIS
1400 Independence Ave. SW
Room 1147 South Building
Washington, DC 20250

Office of the Secretary
U.S. Department of Transportation
Office of International Transportation and Trade (X-20)
400 7th Street, SW, Room 10300
Washington, DC 20590

Office of Law Enforcement
U.S. Fish and Wildlife Service
4501 N. Fairfax Drive
Arlington, VA 22203
Attn: Greg Jackson

Port Security Deputy Director
California Governor's D.C. Office
134 Hall of the States
444 North Capital Street, NW
Washington, DC 20001
Attn: David Pagan

U.S. Environmental Protection Agency
Region IX
75 Hawthorne Street
San Francisco, CA 94105-3901
Attn: Susan Sturges

Department of Homeland Security
7684 Pogo Row
San Diego, CA 92154
Attn: Mr. Carl Anderson

U.S. General Services Administration
1800 F Street, N.W.
Washington, D.C. 20405
Attn: Lee Salviski

International Boundary and Water Commission
4171 N. Mesa Street, Ste C-100
El Paso, TX 79902
Attn: Steve Smullen

Administrator for International Issues, Unit 20
U.S. Department of Agriculture, Animal and Plant Health Inspection Service
4700 River Road, Ste 6D02
Riverdale, MD 20737
Attn: Frank C. Vollmerhausen, Assistant Deputy

STATE GOVERNMENT:

Regional Water Quality Control Board
9174 Sky Park Court, Suite 100
San Diego, CA 92123
Attn: John Robertus

Executive Office
State Air Resources Board
1001 "I" Street
P.O. Box 2815
Sacramento, CA 95812

San Diego Air Pollution Control District
10124 Old Grove Road
San Diego, CA 92131
Attn: Rob Reider

Chair, California Air Resources Board
1001 "I" Street
P.O. Box 2815
Sacramento, CA 95812

Director
California Dept. of Conservation
801 K Street, MS 24-01
Sacramento, CA 95814

California Department of Fish & Game – Region 5
4949 Viewridge Avenue
San Diego, CA 92123
Attn: David Mayer

Director
California Department of Fish & Game
1416 9th Street
Sacramento, CA 95814

Director
Dept. of Health and Human Services
P.O. Box 997413
Sacramento, CA 95899-7413

California Highway Patrol
Otay Mesa Inspection Facility
2335 Enrico Fermi Drive
San Diego, CA 92173
Attn: Lt. Hector Paredes

California Highway Patrol
4902 Pacific Highway
San Diego, CA 92110-4097

State Clearing House Office of Planning and Research
1400 Tenth Street
Sacramento, CA 95814

California Highway Patrol
Otay Mesa Inspection Facility
2335 Enrico Fermi Drive
San Diego, CA 92173
Attn: Sgt. Rick Marshall

LOCAL GOVERNMENT CITY/COUNTY/DISTRICT:

City of San Diego Planning Dept.
202 C Street, MS 5A
San Diego, CA 92101
Attn: Gail Goldberg

Kerry Santoro
City of San Diego
Engineering & Development Department
1010 2nd Avenue, MS 612
San Diego, CA 92101

Director, City of San Diego
Development & Environmental Planning Division
1222 First Avenue, MS 501
San Diego, CA 92101
Attn: Marcella Escobar

City of San Diego Planning Dept.
202 C Street, MS 5A
San Diego, CA 92101
Attn: Linda Marabian

City of San Diego Engineering Dept.
Traffic Division
1010 2nd Avenue, 8th Floor
San Diego, CA 92101
Attn: Patti Boekamp

Brown Field Airport
1424 Continental Street, MS #14
San Diego, CA 92154

County Dept. of Planning & Land Use
5201 Ruffin Road, Suite B
San Diego, CA 92123
Attn: Eric Gibson

County of San Diego Dept. of Public Works Transportation Planning
5555 Overland Avenue, MS 0336
San Diego, CA 92123
Attn: Bob Goralka

County of San Diego
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CHAPTER 9.0

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Appendix A

SOCIOECONOMIC BASELINE DATA

APPENDIX A: SOCEOECONOMIC BASELINE DATA

This appendix discusses socioeconomic issues in the program area that includes the corridor/POE alternatives. It is based on the *Community Assessment Existing Conditions Report* prepared for the proposed program in October 2007, which, in turn, relies substantially on statistics provided by SANDAG, the regional growth management agency for the San Diego area, which is responsible for preparing demographic and economic statistics and regional growth forecasts.

The socioeconomic study area used is Census Tract 100.15, a large statistical unit that includes the entire southern portion of Otay Mesa (refer to Figure A-1), and which lies partially in the City of San Diego, and partially in the County. Its boundaries extend from just east of I-805, north to Otay Mesa Road, east to the Otay Mountain Truck Trail ridgeline and south to the border with Mexico; Census Tract 100.15 covers approximately 9,900 acres. This census tract includes the areas adjacent to the existing San Ysidro and Otay Mesa POEs. Any future analysis of community or socioeconomic impacts of the proposed program would likely also require data for a smaller area more specific to the immediate program vicinity.

Within the socioeconomic study area, a smaller program area, defined in Section 3.1 of this PEIR/PEIS and presented in Figure 3.1-1, is the study area used for analysis of certain local community impacts.

Regional Context

The San Diego region today includes about 3.0 million residents and 1.8 million jobs (HR & A 2006). Its Gross Regional Product (GRP) estimated in 2006 was $149.9 billion and is forecast to increase 2.4 percent in 2007 to $153.5 (San Diego Workforce Partnership 2007). Its current GRP ranks the San Diego region among the 50 largest economies in the world. San Diego's regional economic significance is even greater when the economy in neighboring northern Baja California, Mexico is taken into consideration (HR & A 2006).

The region suffered a serious recession between 1990 and 1994 that stemmed from national defense restructuring that devastated the economy's defense-related sectors. Since that time, the San Diego region has maintained a steady economic recovery aside from the two brief slowdowns due to the "dot.com" bust in 2000 and the consequences of the September 11, 2001 terrorist attacks (HR & A 2006).

The median household income in the San Diego region in 2004 was $47,268, comparable to the California median of $47,493 and about $5,000 higher than the United States median income of $41,994. The median household income for the region in 2006 was estimated at $50,710, representing a 6.8% increase over the two-year period (SANDAG 2006a).

The region's economic recovery has been guided by diversification into high technology industries, foreign trade, and tourism and entertainment sectors. The region has sustained significant economic benefits in the foreign sector following the enactment of the North American Free Trade Agreement (NAFTA), as well as from the stability in the Mexican economy in the past decade. The high technology sector in the region is predominantly supported by the presence of large institutions such as universities and research institutes which have resulted in a strong, concentrated cluster of new firms that specialize in advanced development and testing (HR & A 2006).

San Diego's economy is anticipated to perform below the nation's average during 2007, which is mainly due to a slowdown in job growth. Job growth during the current year is expected to be considerably below that of 2006, with a rise of only 15,000 industry jobs, 5,000 less than were added during 2006. The number of jobs created will be adequate to hold the local unemployment rate below the state and national rates, however, it will cause the local rate to rise slightly from 3.9 percent recorded in 2006 to 4.0 – 4.2 percent in 2007 (Cox 2007). The total employment in the region increased from 1,384,676 in 2000 to 1,449,349 in 2004 and is forecast to increase to 1,573,742 in 2010 (SANDAG 2006c).

The most pressing economic challenge for the San Diego region is that the region's standard of living has not kept pace with the national average. The imbalance has been created by two trends: first, more jobs have been added at the low end of the pay scale than jobs at the high end of the pay scale. Second, a widening gap exists between wages received at the high and low ends of the pay scale (REPS 2007).

The average annual population growth in the San Diego region, between 2000 and 2005, was 1.6 percent. This reflects the same rate of growth seen during the 1990's and about half as much as seen during the 1970's and 1980's. Looking specifically at the population trends since 2000, it is evident that the growth rate in the region has slowed each year since 2002. For instance, the region's average annual growth rate decreased from two percent in 2002 to 1.3 percent in 2005. Since 2000, the San Diego region has grown by a total of 8.4 percent, slightly less than the statewide growth rate of 8.7 percent over the same time period (SANDAG 2006a).

The overall regional economic status for San Diego is generally positive, marked by continuing but slower growth and reflected by an increase in the GRP (Cox 2007).

Unlike much of the San Diego region, residential development in the Otay Mesa area (as represented by Census Tract 100.15) is predominantly rural. This existing rural residential condition on Otay Mesa is in contrast with the more dense residential development west of I-805 and south of the international border. The undeveloped San Ysidro Mountains form the eastern boundary of this census tract. Based on current approved and proposed development applications (refer to Figure 3.1-3 and Table 3.1-1 in Section 3.1 of this PEIR/PEIS), the mesa is in the process of transforming into a more urbanized area, complete with large-scale industrial development, supporting commercial use, and master-planned residential developments.

Demographics

Existing demographic data were derived primarily from the 2000 U.S. Census and available 2007 SANDAG data (SANDAG 2007). SANDAG monitors population growth through annual population and housing estimates that are developed in cooperation with local agencies and the California State Department of Finance.

The Otay Mesa area differs markedly from the San Diego region as a whole from a social and demographic perspective. Table A-1 shows a 2000 demographic profile of the area, including recent and forecasted population growth through the year 2030, based on the most recent available data for Census Tract 100.15. Also presented is demographic information for the entire region, for comparative purposes.

TABLE A-1 SELECTED DEMOGRAPHIC CHARACTERISTICS						
Category	**Census Tract 100.15**			**San Diego Region**		
Year	**2000**	**2004 Estimated**	**2030 Projected**	**2000**	**2004 Estimated**	**2030 Projected**
Population Characteristics						
Total Population	1,062	2,434	21,691	2,813,833	3,098,269	3,984,753
Persons in Households	1,062	2,434	21,691	2,716,820	2,998,024	3,819,175
Group Quarters Population	0	0	0	97,013	100,245	165,578
Household Population Characteristics						
Persons per Household	4.52	4.49	4.31	2.73	2.77	2.87
Median Age	26.1	27.0	43.2	33.2	35.0	39.0
Percent 65+ Years of Age	8.4%	12.2%	21.4%	11.2%	11.8%	18.6%
Percent of Persons Age 5 and older with a Handicap or Disability	15.0%	N/A*	N/A	18.0%	Unavailable	Unavailable
Housing Characteristics						
Total Housing Units	248	596	5,189	1,040,149	1,131,749	1,383,803
Percent: Owner-Occupied	36.2%	Unavailable	Unavailable	55.4%	Unavailable	Unavailable
Renter-Occupied	63.8%	Unavailable	Unavailable	44.6%	Unavailable	Unavailable
Median Value, Owner-Occupied Housing	$182,871	Unavailable	Unavailable	$227,200	Unavailable	Unavailable
Median Contract Rent	$620	Unavailable	Unavailable	$711	Unavailable	Unavailable
Residential Density (Housing Units per Acre)	0.026	0.054	0.544	0.381	0.410	0.507

Sources: SANDAG, constructed from U.S. Census Bureau's 2000 Census Summary Files 1 and 3, July 2004.
SANDAG, Data Warehouse, accessed December 12, 2007: http://datawarehouse.sandag.org

Table A-1 shows that currently, the Otay Mesa area is relatively sparsely populated, although rapid and extensive growth is projected by the end of the decade and beyond. Since 2000, population has grown much more rapidly in this area than in the San Diego region as a whole. This situation is expected to continue through the year 2030, with the population in the census area projected to grow by 1,942 percent, from 1,062 in 2000 to 21,691 in 2030, while the San Diego regional population is expected to increase by approximately 42 percent during the same period. Residential housing density is similarly expected to increase rapidly, from the sparse 2000 level of 0.026 dwelling units (DU) per acre (or one DU per 22.2 acres, which represents 6.8 percent of the regional average) to 0.544 DU/acre in 2030 (which slightly exceeds the projected regional average and represents a 20-fold increase over 2000 figures).

It is expected, however, that much of this population growth will be focused in the western part of the area, with the immediate vicinity of the proposed program continuing to be devoted to industrial uses and open space. Only 753.4 acres of the 2,359.6 acres of land in the entire County EOMSP area is designated for residential development, with a density of one DU per 20 acres. As a result, only a maximum of 37 DU could be built in the entire EOMSP area under current land use designations. Clearly, given this land use situation, the spectacular population growth predicted by SANDAG for Census Tract 100.15 is not expected to take place within the EOMSP area, but rather primarily within the City of San Diego portions of the census tract to the west. The City's current Otay Mesa Community Plan, approved in 1981, restricts residential development to the area west of Brown Field, in the vicinity of the I-805 freeway, approximately 5 to 7 miles west of the proposed SR-11 corridors/POE sites. The Otay Mesa Community Plan is currently undergoing an update, which may eventually result in zoning changes within the plan area, however, most allowable residential development and associated population increases are likely to remain at a distance of several miles from the proposed SR-11 corridors/POE sites.

Residents of Census Tract 100.15 showed a larger number of persons per household (4.5 versus 2.8 for the region) and study area residents were notably younger on average compared to regional residents, with a median estimated 2004 age of 27.0 years, versus 35.0 for all residents of the San Diego region. The Otay Mesa area's proportion of elderly residents (65+ years) was less than the regional average (8.4 percent compared to 11.8 percent, respectively). The proportion of working age (16 to 64 years) residents with a mobility limitation or work disability was slightly less than the regional average (15.0 percent versus 18.0 percent, respectively, in 2000).

Housing in the study area consisted of 248 total units in 2000 (596 estimated in 2004), which were predominantly renter-occupied (63.8 percent). In contrast, housing in the San Diego region in 2000 (the most recent year for which this data was available) was predominantly owner-occupied (55.4 percent). The median value of owner-occupied housing in the Otay Mesa area was $182,871 in 2000, almost 20 percent lower than the median in the region as a whole ($227,200). The median contract rent was also lower for the Study Area ($620) than for the region as a whole ($711).

Employment and Income

Southern San Diego County, including Otay Mesa, has most of the developable (and relatively affordable) residential and industrial land remaining in the San Diego region. As new industrial, commercial and office space continue to be built in the Otay Mesa area, employment is projected to rise dramatically. Table A-2 illustrates recent and projected employment trends in

the vicinity of the proposed corridors/POE sites. The number of jobs in the study area, as represented by Census Tract 100.15, is projected to nearly triple to 28,109 by 2030.

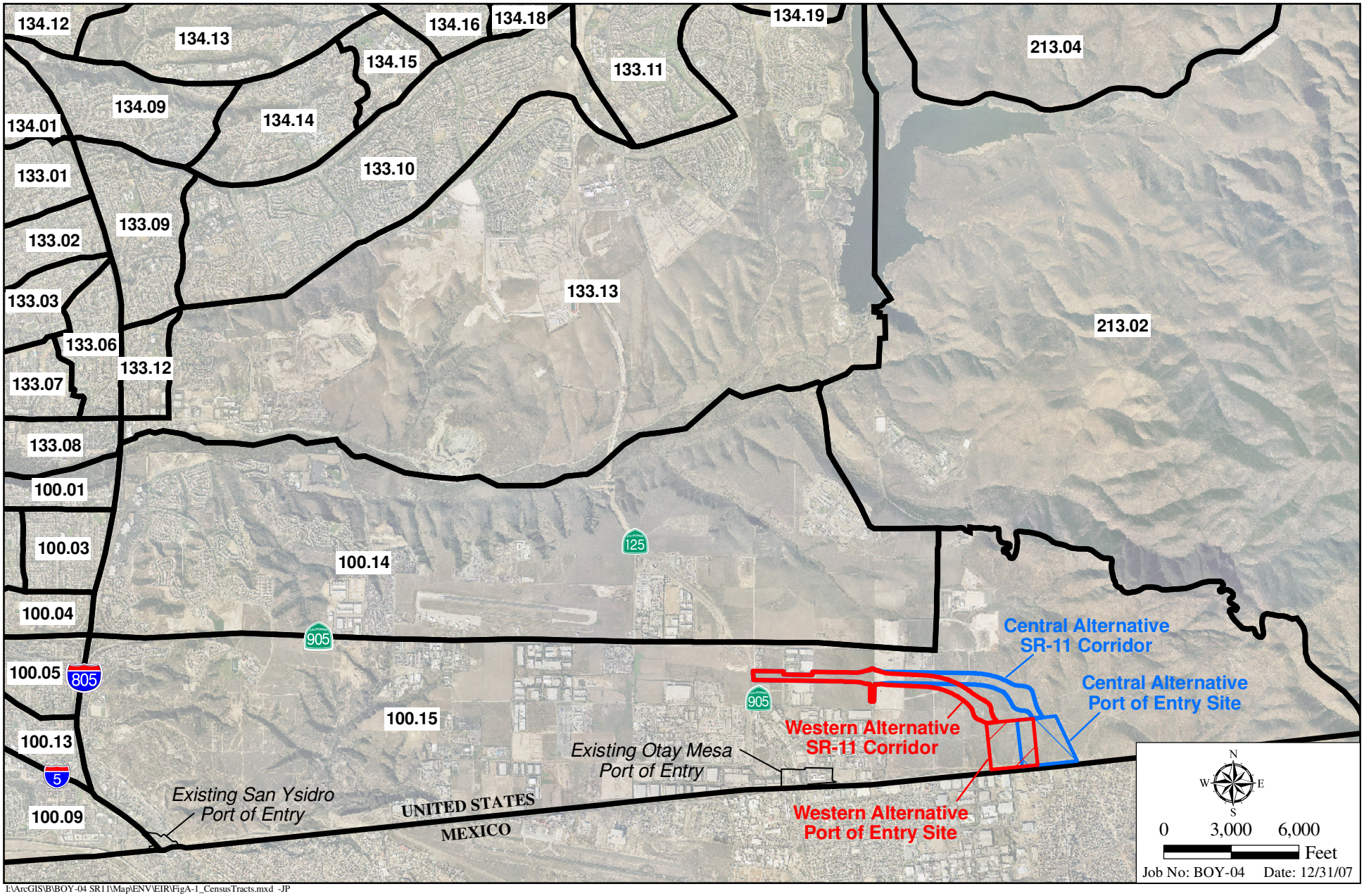
Currently, industrial and business activity in Census Tract 100.15 employs at least five times as many people as reside in this census tract. Residential growth is expected to nearly catch up to employment by 2030.

As shown in Table A-2, compared with San Diego regional averages, Census Tract 100.15 had a significantly lower median income and higher percentage of households under the average Federal poverty threshold. Low income is defined based on the Department of Health and Human Services poverty guidelines. For 2007, this was $20,650 for a family of four. The estimated median household income for the census tract in 2004 ($28,676) was well below the San Diego regional average ($52,192). In 2000, the most recent year for which data were available, the percentage of households below the poverty line was 29.0 percent, compared to the San Diego regional average of 12.4 percent. These figures indicate that the area surrounding the program area has a relatively low-income population. Unemployment in the Otay Mesa area in 2000 (the most recent year for which data were available) was comparable to regional levels. Approximately 55 percent of Census Tract 100.15 residents were employed in production, transportation, and material moving activities and the service sector, whereas only 26 percent of residents in the overall San Diego region were employed in these sectors in 2000.

TABLE A-2
SELECTED EMPLOYMENT AND INCOME CHARACTERISTICS

Category	Census Tract 100.15			San Diego Region		
Year	**2000**	**2004 Estimated**	**2030 Projected**	**2000**	**2004 Estimated**	**2030 Projected**
Total Employment	10,914	13,210	28,109	1,384,676	1,449,349	1,913,682
Percent of Civilian Labor Force Unemployed	3.9%	N/A	N/A	3.6%	N/A	N/A
Occupation (Percent)						
Management, professional, and related	12.0%	N/A	N/A	37.7%	N/A	N/A
Sales and office occupations	28.0%	N/A	N/A	27.2%	N/A	N/A
Production, transportation, and material moving	35.0%	N/A	N/A	9.9%	N/A	N/A
Construction, extraction, and maintenance occupations	5.0%	N/A	N/A	8.7%	N/A	N/A
Services	20.0%	N/A	N/A	16.1%	N/A	N/A
Farming, Forestry and Fishing	0%	N/A	N/A	0.5%	N/A	N/A
Median Household Income, Adjusted for inflation (1999 $)	$29,723	$28,676	$52,321	$47,268	$52,192	$62,598
Percent of Persons below Poverty Level	29.0%	N/A	N/A	12.4%	10.7%	7.9%

Sources: SANDAG, constructed from U.S. Census Bureau's 2000 Census Summary Files 1 and 3, July 2004.
SANDAG, Data Warehouse, accessed December 12, 2007: http://datawarehouse.sandag.org



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Otay Mesa Census Tract 100.15

STATE ROUTE 11 AND OTAY MESA EAST PORT OF ENTRY PEIR/PEIS

Figure A-1

Appendix B

FARMLAND CONVERSION IMPACT RATING FORM

U.S. DEPARTMENT OF AGRICULTURE
Natural Resources Conservation Service

NRCS-CPA-106
(Rev. 1-91)

FARMLAND CONVERSION IMPACT RATING FOR CORRIDOR TYPE PROJECTS

PART I *(To be completed by Federal Agency)*	3. Date of Land Evaluation Request 9/10/07	4. Sheet 1 of 1
1. Name of Project **SR 11/Otay Mesa East Port of Entry (POE)**	5. Federal Agency Involved **Federal Highway Administration**	
2. Type of Project **Highway Improvements Project**	6. County and State **San Diego, CA**	

PART II *(To be completed by NRCS)*	1. Date Request Received by NRCS 9/10/07	2. Person Completing Form C. Calvert Butler
3. Does the corridor contain prime, unique statewide or local important farmland? (If no, the FPPA does not apply - Do not complete additional parts of this form). YES ☑ NO ☐		4. Acres Irrigated 69,537 / Average Farm Size 80
5. Major Crop(s) Nursery, Flower, Fruit/Nut	6. Farmable Land in Government Jurisdiction Acres: 112,974 % 4	7. Amount of Farmland As Defined in FPPA Acres: 91,812 % 4
8. Name Of Land Evaluation System Used CA - Storie System	9. Name of Local Site Assessment System None	10. Date Land Evaluation Returned by NRCS 9/27/07

PART III *(To be completed by Federal Agency)*	Alternative Corridor For Segment			
	Corridor A	Corridor B	Corridor C	Corridor D
A. Total Acres To Be Converted Directly	223	252		
B. Total Acres To Be Converted Indirectly, Or To Receive Services	0	0		
C. Total Acres In Corridor	223	252	0	0
PART IV *(To be completed by NRCS) Land Evaluation Information*				
A. Total Acres Prime And Unique Farmland	9	9		
B. Total Acres Statewide And Local Important Farmland	210	179		
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted	0	0		
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value	Data Not Available			
PART V *(To be completed by NRCS) Land Evaluation Information Criterion Relative value of Farmland to Be Serviced or Converted (Scale of 0 - 100 Points)*	40.73	40.86		
PART VI *(To be completed by Federal Agency) Corridor Assessment Criteria (These criteria are explained in 7 CFR 658.5(c))* — Maximum Points				
1. Area in Nonurban Use — 15	7	7		
2. Perimeter in Nonurban Use — 10	10	10		
3. Percent Of Corridor Being Farmed — 20	0	0		
4. Protection Provided By State And Local Government — 20	0	0		
5. Size of Present Farm Unit Compared To Average — 10	0	0		
6. Creation Of Nonfarmable Farmland — 25	0	0		
7. Availablility Of Farm Support Services — 5	5	5		
8. On-Farm Investments — 20	0	0		
9. Effects Of Conversion On Farm Support Services — 25	0	0		
10. Compatibility With Existing Agricultural Use — 10	5	5		
TOTAL CORRIDOR ASSESSMENT POINTS — 160	27	27		
PART VII *(To be completed by Federal Agency)*				
Relative Value Of Farmland (From Part V) — 100	40.73	40.86		
Total Corridor Assessment (From Part VI above or a local site assessment) — 160	27	27		
TOTAL POINTS *(Total of above 2 lines)* — 260	67.73	67.86		

1. Corridor Selected:	2. Total Acres of Farmlands to be Converted by Project:	3. Date Of Selection:	4. Was A Local Site Assessment Used? YES ☐ NO ☑

5. Reason For Selection:

Signature of Person Completing this Part: [signature] DATE 10/3/07

NOTE: Complete a form for each segment with more than one Alternate Corridor

CORRIDOR - TYPE SITE ASSESSMENT CRITERIA

The following criteria are to be used for projects that have a linear or corridor - type site configuration connecting two distant points, and crossing several different tracts of land. These include utility lines, highways, railroads, stream improvements, and flood control systems. Federal agencies are to assess the suitability of each corridor - type site or design alternative for protection as farmland along with the land evaluation information.

(1) How much land is in nonurban use within a radius of 1.0 mile from where the project is intended?
More than 90 percent - 15 points
90 to 20 percent - 14 to 1 point(s)
Less than 20 percent - 0 points

(2) How much of the perimeter of the site borders on land in nonurban use?
More than 90 percent - 10 points
90 to 20 percent - 9 to 1 point(s)
Less than 20 percent - 0 points

(3) How much of the site has been farmed (managed for a scheduled harvest or timber activity) more than five of the last 10 years?
More than 90 percent - 20 points
90 to 20 percent - 19 to 1 point(s)
Less than 20 percent - 0 points

(4) Is the site subject to state or unit of local government policies or programs to protect farmland or covered by private programs to protect farmland?
Site is protected - 20 points
Site is not protected - 0 points

(5) Is the farm unit(s) containing the site (before the project) as large as the average - size farming unit in the County ?
(Average farm sizes in each county are available from the NRCS field offices in each state. Data are from the latest available Census of Agriculture, Acreage or Farm Units in Operation with $1,000 or more in sales.)
As large or larger - 10 points
Below average - deduct 1 point for each 5 percent below the average, down to 0 points if 50 percent or more below average - 9 to 0 points

(6) If the site is chosen for the project, how much of the remaining land on the farm will become non-farmable because of interference with land patterns?
Acreage equal to more than 25 percent of acres directly converted by the project - 25 points
Acreage equal to between 25 and 5 percent of the acres directly converted by the project - 1 to 24 point(s)
Acreage equal to less than 5 percent of the acres directly converted by the project - 0 points

(7) Does the site have available adequate supply of farm support services and markets, i.e., farm suppliers, equipment dealers, processing and storage facilities and farmer's markets?
All required services are available - 5 points
Some required services are available - 4 to 1 point(s)
No required services are available - 0 points

(8) Does the site have substantial and well-maintained on-farm investments such as barns, other storage building, fruit trees and vines, field terraces, drainage, irrigation, waterways, or other soil and water conservation measures?
High amount of on-farm investment - 20 points
Moderate amount of on-farm investment - 19 to 1 point(s)
No on-farm investment - 0 points

(9) Would the project at this site, by converting farmland to nonagricultural use, reduce the demand for farm support services so as to jeopardize the continued existence of these support services and thus, the viability of the farms remaining in the area?
Substantial reduction in demand for support services if the site is converted - 25 points
Some reduction in demand for support services if the site is converted - 1 to 24 point(s)
No significant reduction in demand for support services if the site is converted - 0 points

(10) Is the kind and intensity of the proposed use of the site sufficiently incompatible with agriculture that it is likely to contribute to the eventual conversion of surrounding farmland to nonagricultural use?
Proposed project is incompatible to existing agricultural use of surrounding farmland - 10 points
Proposed project is tolerable to existing agricultural use of surrounding farmland - 9 to 1 point(s)
Proposed project is fully compatible with existing agricultural use of surrounding farmland - 0 points

U.S. DEPARTMENT OF AGRICULTURE
Natural Resources Conservation Service

NRCS-CPA-106
(Rev. 1-91)

FARMLAND CONVERSION IMPACT RATING FOR CORRIDOR TYPE PROJECTS

PART I *(To be completed by Federal Agency)*	3. Date of Land Evaluation Request 9/10/07	4. Sheet 1 of 1
1. Name of Project SR 11/Otay Mesa East Port of Entry (POE)	5. Federal Agency Involved Federal Highway Administration	
2. Type of Project Highway Improvements Project	6. County and State San Diego, CA	
PART II *(To be completed by NRCS)*	1. Date Request Received by NRCS 9/10/07	2. Person Completing Form C. Calvert Butler
3. Does the corridor contain prime, unique statewide or local important farmland? (If no, the FPPA does not apply - Do not complete additional parts of this form). YES ☑ NO ☐		4. Acres Irrigated 69,537 / Average Farm Size 80
5. Major Crop(s) Nursery, Flower, Fruit/Nut	6. Farmable Land in Government Jurisdiction Acres: 112,974 % 4	7. Amount of Farmland As Defined in FPPA Acres: 91,812 % 4
8. Name Of Land Evaluation System Used CA - Storie System	9. Name of Local Site Assessment System None	10. Date Land Evaluation Returned by NRCS 9/27/07

PART III *(To be completed by Federal Agency)*	Alternative Corridor For Segment			
	Corridor A	Corridor B	Corridor C	Corridor D
A. Total Acres To Be Converted Directly	223	252		
B. Total Acres To Be Converted Indirectly, Or To Receive Services	0	0		
C. Total Acres In Corridor	223	252	0	0
PART IV *(To be completed by NRCS) Land Evaluation Information*				
A. Total Acres Prime And Unique Farmland	9	9		
B. Total Acres Statewide And Local Important Farmland	210	179		
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted	0	0		
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value	Data Not Available			
PART V *(To be completed by NRCS) Land Evaluation Information Criterion Relative value of Farmland to Be Serviced or Converted (Scale of 0 - 100 Points)*	40.73	40.86		
PART VI *(To be completed by Federal Agency) Corridor Assessment Criteria (These criteria are explained in 7 CFR 658.5(c))* — Maximum Points				
1. Area in Nonurban Use — 15				
2. Perimeter in Nonurban Use — 10				
3. Percent Of Corridor Being Farmed — 20				
4. Protection Provided By State And Local Government — 20				
5. Size of Present Farm Unit Compared To Average — 10				
6. Creation Of Nonfarmable Farmland — 25				
7. Availability Of Farm Support Services — 5				
8. On-Farm Investments — 20				
9. Effects Of Conversion On Farm Support Services — 25				
10. Compatibility With Existing Agricultural Use — 10				
TOTAL CORRIDOR ASSESSMENT POINTS — 160	0	0	0	0
PART VII *(To be completed by Federal Agency)*				
Relative Value Of Farmland (From Part V) — 100				
Total Corridor Assessment (From Part VI above or a local site assessment) — 160	0	0	0	0
TOTAL POINTS *(Total of above 2 lines)* — 260	0	0	0	0

1. Corridor Selected:	2. Total Acres of Farmlands to be Converted by Project:	3. Date Of Selection:	4. Was A Local Site Assessment Used? YES ☐ NO ☑

5. Reason For Selection:

Signature of Person Completing this Part: | DATE

NOTE: Complete a form for each segment with more than one Alternate Corridor

CORRIDOR - TYPE SITE ASSESSMENT CRITERIA

The following criteria are to be used for projects that have a linear or corridor - type site configuration connecting two distant points, and crossing several different tracts of land. These include utility lines, highways, railroads, stream improvements, and flood control systems. Federal agencies are to assess the suitability of each corridor - type site or design alternative for protection as farmland along with the land evaluation information.

(1) How much land is in nonurban use within a radius of 1.0 mile from where the project is intended?
More than 90 percent - 15 points
90 to 20 percent - 14 to 1 point(s)
Less than 20 percent - 0 points

(2) How much of the perimeter of the site borders on land in nonurban use?
More than 90 percent - 10 points
90 to 20 percent - 9 to 1 point(s)
Less than 20 percent - 0 points

(3) How much of the site has been farmed (managed for a scheduled harvest or timber activity) more than five of the last 10 years?
More than 90 percent - 20 points
90 to 20 percent - 19 to 1 point(s)
Less than 20 percent - 0 points

(4) Is the site subject to state or unit of local government policies or programs to protect farmland or covered by private programs to protect farmland?
Site is protected - 20 points
Site is not protected - 0 points

(5) Is the farm unit(s) containing the site (before the project) as large as the average - size farming unit in the County ? (Average farm sizes in each county are available from the NRCS field offices in each state. Data are from the latest available Census of Agriculture, Acreage or Farm Units in Operation with $1,000 or more in sales.)
As large or larger - 10 points
Below average - deduct 1 point for each 5 percent below the average, down to 0 points if 50 percent or more below average - 9 to 0 points

(6) If the site is chosen for the project, how much of the remaining land on the farm will become non-farmable because of interference with land patterns?
Acreage equal to more than 25 percent of acres directly converted by the project - 25 points
Acreage equal to between 25 and 5 percent of the acres directly converted by the project - 1 to 24 point(s)
Acreage equal to less than 5 percent of the acres directly converted by the project - 0 points

(7) Does the site have available adequate supply of farm support services and markets, i.e., farm suppliers, equipment dealers, processing and storage facilities and farmer's markets?
All required services are available - 5 points
Some required services are available - 4 to 1 point(s)
No required services are available - 0 points

(8) Does the site have substantial and well-maintained on-farm investments such as barns, other storage building, fruit trees and vines, field terraces, drainage, irrigation, waterways, or other soil and water conservation measures?
High amount of on-farm investment - 20 points
Moderate amount of on-farm investment - 19 to 1 point(s)
No on-farm investment - 0 points

(9) Would the project at this site, by converting farmland to nonagricultural use, reduce the demand for farm support services so as to jeopardize the continued existence of these support services and thus, the viability of the farms remaining in the area?
Substantial reduction in demand for support services if the site is converted - 25 points
Some reduction in demand for support services if the site is converted - 1 to 24 point(s)
No significant reduction in demand for support services if the site is converted - 0 points

(10) Is the kind and intensity of the proposed use of the site sufficiently incompatible with agriculture that it is likely to contribute to the eventual conversion of surrounding farmland to nonagricultural use?
Proposed project is incompatible to existing agricultural use of surrounding farmland - 10 points
Proposed project is tolerable to existing agricultural use of surrounding farmland - 9 to 1 point(s)
Proposed project is fully compatible with existing agricultural use of surrounding farmland - 0 points

Soils Inventory Report

Site A

CALTRANS

Map Unit Symbol	Map Unit Name	Acres	Percent
DaC	Diablo clay, 2 to 9 percent slopes	83.1	37%
DaD	Diablo clay, 9 to 15 percent slopes	52.6	24%
HrC	Huerhuero loam, 2 to 9 percent slopes	32.1	14%
HrC2	Huerhuero loam, 5 to 9 percent slopes, eroded	42.5	19%
HrD2	Huerhuero loam, 9 to 15 percent slopes, eroded	3.4	2%
ScA	Salinas clay, 0 to 2 percent slopes	9.4	4%
	Total:	223.1	

Soils Inventory Report

Site B

CALTRANS

Map Unit Symbol	Map Unit Name	Acres	Percent
DaC	Diablo clay, 2 to 9 percent slopes	57.6	23%
DaD	Diablo clay, 9 to 15 percent slopes	44.7	18%
HrC	Huerhuero loam, 2 to 9 percent slopes	43.1	17%
HrC2	Huerhuero loam, 5 to 9 percent slopes, eroded	34	14%
HrD	Huerhuero loam, 9 to 15 percent slopes	19.4	8%
HrD2	Huerhuero loam, 9 to 15 percent slopes, eroded	23.3	9%
ScA	Salinas clay, 0 to 2 percent slopes	9.4	4%
SnG	San Miguel-Exchequer rocky silt loams, 9 to 70 percent slopes	20.3	8%
	Total:	251.8	

Site A Corridor
N
ScA
DaC
DaD
HrC
HrC2
HrD2
Feet
0 450 900 1,800 2,700 3,600

Site B Corridor
N
ScA
DaC
DaC
DaD
DaC
DaD
DaC
DaD
DaC
DaD
DaC
DaD
DaC
DaD
DaC
DaD
DaC
DaD
HrD
SnG
HrC2
SnG
HrC2
HrC
HrC
HrC
Feet
0 550 1,100 2,200 3,300 4,400

APPENDIX C

CALTRANS TITLE VI POLICY STATEMENT

DEPARTMENT OF TRANSPORTATION
OFFICE OF THE DIRECTOR
1120 N STREET
P. O. BOX 942873
SACRAMENTO, CA 94273-0001
PHONE (916) 654-5266
FAX (916) 654-6608
TTY (916) 653-4086

Flex your power!
Be energy efficient!

January 14, 2005

TITLE VI
POLICY STATEMENT

The California Department of Transportation under Title VI of the Civil Rights Act of 1964 and related statutes, ensures that no person in the State of California shall, on the grounds of race, color, national origin, sex, disability, and age, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity it administers.

Will Kempton

WILL KEMPTON
Director

Appendix D

CALTRANS RELOCATION ASSISTANCE PROGRAM

RELOCATION ASSISTANCE INFORMATION

I IMPORTANT RELOCATION ASSISTANCE INFORMATION

The following explanation is general in nature and is not intended to be a complete statement of Federal and State relocation laws and regulations. Any questions concerning relocation should be addressed to Caltrans Right-of-Way.

Any persons to be displaced will be assigned to a relocation advisor, who will work closely with each displacee in order to see that all payments and benefits are fully utilized and that all regulations are observed, thereby avoiding the possibility of displacees jeopardizing or forfeiting any of their benefits or payments. At the time of the first written offer to purchase, owner-occupants are given a detailed explanation of the State's relocation services. Tenant occupants of properties to be acquired are contacted soon after the first written offer to purchase and also are given a detailed explanation of the Caltrans Relocation Program. To avoid loss of possible benefits, no individual, family, business, farm, or nonprofit organization should commit to purchase or rent a replacement property without first contacting a Caltrans relocation advisor.

II RELOCATION ASSISTANCE ADVISORY SERVICES

In accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, Caltrans will provide relocation advisory assistance to any person, business, farm, or nonprofit organization displaced as a result of the acquisition of real property for public use. Caltrans will assist displacees in obtaining comparable replacement housing by providing current and continuing information on the availability and prices of both houses for sale and rental units that are "decent, safe, and sanitary". Nonresidential displacees will receive information on comparable properties for lease or purchase. (For business, farm, and nonprofit organization relocation services, see Section IV.)

Residential replacement dwellings will be in equal or better neighborhoods at rents or prices within the financial ability of the individuals and families displaced and reasonably accessible to their places of employment. Before any displacement occurs, comparable replacement dwellings will be offered to displacees that are open to all persons regardless of race, color, religion, sex, national origin, and consistent with the requirements of Title VIII of the Civil Rights Act of 1968. This assistance will also include the supplying of information concerning Federal- and State-assisted housing programs and any other known services being offered by public and private agencies in the area.

Persons who are eligible for relocation payments and who are legally occupying the property required for the project will not be asked to move without first being given at least 90 days' written notice. Occupants eligible for relocation payment(s) will not be required to move unless at least one comparable "decent, safe, and sanitary" replacement residence, available on the market, is offered to them by Caltrans.

III RESIDENTIAL RELOCATION PAYMENTS PROGRAM

The Relocation Payment Program will help eligible residential occupants by paying certain costs and expenses. These costs are limited to those necessary for or incidental to the purchase or rental of the replacement dwelling and actual reasonable moving expenses to a new location within 50 miles of the displacement property. Any actual moving costs in excess of the 50 miles are the responsibility of the displacee. The Residential Relocation Program can be summarized as follows:

Moving Costs

Any displaced person who lawfully occupied the acquired property, regardless of the length of occupancy in the property acquired, will be eligible for reimbursement of moving costs. Displacees will receive either the actual reasonable costs involved in moving themselves and personal property up to a maximum of 50 miles, or a fixed payment based on a fixed moving-cost schedule.

Purchase Supplement

In addition to moving and related expense payments, fully eligible homeowners may be entitled to payments for increased costs of replacement housing.

Homeowners, who have owned and occupied their property for 180 days or more prior to the date of the first written offer to purchase the property, may qualify to receive a price differential payment and may qualify to receive reimbursement for certain non-recurring costs incidental to the purchase of the replacement property. An interest differential payment is also available if the interest rate for the loan on the replacement dwelling is higher than the loan rate on the displacement dwelling, subject to certain limitations on reimbursement based upon the replacement property interest rate. The maximum combination of these three supplemental payments that the owner-occupant can receive is $22,500. If the total entitlement (without the moving payments) is in excess of $22,500, the Last Resort Housing Program will be used. (See the explanation of the Last Resort Housing Program below.)

Rental Supplement

Tenants who have occupied the property to be acquired by Caltrans for 90 days or more and owner-occupants of 90-179 days prior to the date of the first written offer to purchase may qualify to receive a rental differential payment. This payment is made when Caltrans determines that the cost to rent a comparable "decent, safe, and sanitary" replacement dwelling will be more than the present rent of the displacement dwelling. As an alternative, the tenant may qualify for a down payment benefit designed to assist in the purchase of a replacement property and the payment of certain costs incidental to the purchase, subject to certain limitations noted below under the Down Payment section. The maximum amount payable to any tenant of 90 days or more and any owner-occupant of 90-179 days, in addition to moving expenses, is $5,250. If the total entitlement for rental supplement exceeds $5,250, the Last Resort Housing Program will be used.

In addition to the occupancy requirements in order to receive any relocation benefits, the displaced person must buy or rent and occupy a "decent, safe, and sanitary" replacement dwelling within one year from the date the department takes legal possession of the property, or from the date the displacee vacates the displacement property, whichever is later.

Down Payment

The down payment option has been designed to aid owner-occupants of 90-179 days and tenants with no less than 90 days of continuous occupancy prior to Caltrans first written offer. The down payment and incidental expenses cannot exceed the maximum payment of $5,250. The one-year eligibility period in which to purchase and occupy a "decent, safe, and sanitary" replacement dwelling will apply.

Last Resort Housing

Federal regulations (49 CFR 24) contain the policy and procedure for implementing the Last Resort Housing Program on Federal-aid projects. Last Resort Housing benefits are, except for the amounts of payments and the methods in making them, the same as those benefits for standard residential relocation as explained above. Last Resort Housing has been designed primarily to cover situations where a displacee cannot be relocated because of lack of available comparable replacement housing, or when the anticipated replacement housing payments exceed the $5,250 and $22,500 limits of the standard relocation procedure, because either the displacee lacks the financial ability or other valid circumstances. In certain exceptional situations, Last Resort Housing may also be used for tenants of less than 90 days.

After the first written offer to acquire the property has been made, Caltrans will, within a reasonable length of time, personally contact the displacees to gather important information, including the following:

- Preferences in area of relocation;
- Number of people to be displaced and the distribution of adults and children according to age and sex;
- Location of school and employment;
- Specific arrangements needed to accommodate any family member(s) special needs; and
- Financial ability to relocate into comparable replacement dwelling that will adequately house all members of the family.

IV THE NONRESIDENTIAL RELOCATION ASSISTANCE PROGRAM

The Nonresidential Relocation Assistance Program provides assistance to businesses, farms, and nonprofit organizations in locating suitable replacement property and reimbursement for certain costs involved in relocation. The Relocation Advisory Assistance Program will provide current lists of properties offered for sale or rent suitable for the specific relocation needs of a particular business. The types of payments available to eligible businesses, farms, and nonprofit

organizations are moving and searching expenses and, possibly, re-establishment expenses or a fixed in lieu payment instead of any moving, searching, and re-establishment expenses. The payment types can be summarized as follows:

Moving Expenses

Moving expenses may include the following actual reasonable costs:

- The moving of inventory, machinery, equipment, and similar business-related property dismantling, disconnecting, crating, packing, loading, insuring, transporting, unloading, unpacking, and reconnecting of personal property;
- Loss of tangible personal property provides payment for actual, direct loss of personal property that the owner is permitted not to move; and
- Expenses related to searching for a new business site, up to $1,000 for reasonable expenses actually incurred.

Re-establishment Expenses

Re-establishment expenses related to the operation of the business at the new location, up to $10,000 for reasonable expenses actually incurred.

Fixed In Lieu Payment

A fixed payment in lieu of moving and searching payments and re-establishment payment may be available to businesses which meet certain eligibility requirements. This payment is an amount equal to the average annual net earnings for the last two taxable years prior to the relocation and may not be less than $1,000 nor more than $20,000.

V ADDITIONAL INFORMATION

Relocation Payments Not Income

Reimbursement for moving costs and replacement housing payments are not considered income for the purpose of the Internal Revenue Code of 1954, or resources for the purpose of determining the extent of eligibility of a displacee for assistance under the Social Security Act, local "Section 8" Housing programs, or other Federal assistance programs.

Right to Appeal

Any person, business, farm, or nonprofit organization which has been refused a relocation payment by the Caltrans relocation advisor or believes that the payment(s) offered by the agency are inadequate, may appeal for a special hearing of their complaint. No legal assistance is required. Information about the appeal procedure is available from the relocation advisor.

Your Rights and Benefits as a Displaced Business, Farm or Nonprofit Organization Under the Uniform Relocation Assistance Program

Introduction

In building a modern transportation system, the displacement of a small percentage of the population is often necessary. However, it is the policy of Caltrans that displaced persons shall not suffer unnecessarily as a result of programs designed to benefit the public as a whole.

Displaced businesses, farms, and nonprofit organizations may be eligible for relocation advisory services and payments.

This brochure provides information about available relocation services and payments. If you are required to move as the result of a Caltrans transportation project, a Relocation Agent will contact you. The Relocation Agent will be able to answer your specific questions and provide additional information.

Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 As Amended "The Uniform Act"

The purpose of this Act is to provide for uniform and equitable treatment of persons displaced from their business, farm or nonprofit organization, by federal and federally assisted programs and to establish uniform and equitable land acquisition policies for federal and federally assisted programs.

49 Code of Federal Regulations Part 24 implements the "Uniform Act" in accordance with the following relocation assistance objective:

> To ensure that persons displaced as a direct result of federal or federally-assisted projects are treated fairly, consistently and equitably so that such persons will not suffer disproportionate injuries as a result of projects designed for the benefit of the public as a whole.

While every effort has been made to assure the accuracy of this booklet, it should be understood that it does not have the force and effect of law, rule, or regulation governing the payment of benefits. Should any difference or error occur, the law will take precedence.

Relocation Services

The California Department of Transportation has two programs to aid businesses, farms and nonprofit organizations which must relocate.

These are:

1. The Relocation Advisory Assistance Program, which is to aid you in locating a suitable replacement property, and

2. The Relocation Payments Program, which is to reimburse you for certain costs involved in relocating. These payments are classified as:

    - Moving and Related Expenses (costs to move personal property not acquired).

    - Reestablishment Expenses (expenses related to the replacement property).

    - In-Lieu Payment (a fixed payment in lieu of moving and related expenses, and reestablishment expenses).

NOTE: *Payment of loss of goodwill is considered an acquisition cost. California law and the federal regulations mandate that relocation payments cannot duplicate other payments such as goodwill. You will* **not** *be eligible to receive any relocation payments until the State has actually made the first written offer to purchase the property. You will also receive at least 90 days' written notice before you must move.*

Some Important Definitions...

Your relocation benefits can be better understood if you become familiar with the following terms:

Business: Any lawful activity, with the exception of a farm operation, conducted primarily for the purchase, sale, lease and rental of personal or real property, or for the manufacture, processing, and/or marketing of products, commodities, or any other personal property, or for the sale of services to the public, or solely for the purpose of this Act, and outdoor advertising display or displays, when the display(s) must be moved as a result of the project.

Displaced Person or Displacee: Any person who moves from real property or moves personal property from real property as a result of the acquisition of the real property, in whole or in part, or as the result of a written notice from the agency to vacate the real property needed for a transportation project. In the case of a partial acquisition, Caltrans shall determine if a person is displaced as a direct result of the acquisition.

Owners and tenants **not lawfully present** in the United States are not eligible to receive relocation payments and assistance.

Contributes Materially: A business or farm operation must have had average annual gross receipts of at least $5,000 **or** average annual net earnings of at least $1,000, or their income must have contributed at least 33 1/3 percent of the owner's or operator's average annual gross income form all sources, in order to qualify as a bona-fide operation.

Farm Operation: Any activity conducted solely or primarily for the production of one or more agricultural products or commodities, including timber, for sale and home use, and customarily producing such products or commodities in sufficient quantity to be capable of contributing materially to the operator's support.

Nonprofit Organization: A public or private entity that has established its nonprofit status under applicable law.

MOVING EXPENSES

If you qualify as a displaced business, farm or nonprofit organization, you are entitled to reimbursement of your moving costs and certain related expenses incurred in moving. To qualify you must legally occupy the property as the owner or lessee/tenant when Caltrans initiates negotiations for the acquisition of the property **OR** at the time Caltrans acquires title or takes possession of the property. However, to assure your eligibility and prompt payment of moving expenses, you should contact your Relocation Agent before you move.

You Can Choose Either:

Actual Reasonable Moving Costs – You may be paid for your actual reasonable moving costs and related expenses when a commercial mover performs the move. Reimbursement will be limited to a move of 50 miles or less. Related expenses, with limitations, ***may*** include:

- Transportation.
- Packing and unpacking of personal property.
- Disconnecting and reconnecting personal property related to the operation.
- Temporary storage of personal property.
- Insurance while property is in storage or transit, or the loss and damage of personal property if insurance is not reasonably available.
- Expenses in finding a replacement location.
- Professional services to plan and monitor the move of the personal property to the new location.
- Licenses, permits and fees required at the replacement location.

OR

Self-Move Agreement – You may be paid to move your own personal property based on the lower of two acceptable bids obtained by Caltrans.

Under this option, you will still be eligible for reimbursement of related expenses listed above that were not included in the bids.

OR

In-Lieu Payment – You can accept a fixed payment between $1,000 and $20,000, based on your annual earnings IN LIEU OF the moving cost, related expenses and reestablishment cost.

Actual Reasonable Moving Costs

You may be paid the actual reasonable and necessary costs of your move when a professional mover performs the move. All of your moving costs must be supported by paid receipts or other evidence of expenses incurred. In addition to the transportation costs of your personal property, certain other expenses may also be reimbursable, such as packing, crating, unpacking and uncrating, and the disconnecting, dismantling, removing, reassembling, and reinstalling relocated machinery, equipment, and other personal property.

Other expenses such as professional services necessary for planning and carrying out the move, temporary storage costs, and the cost of licenses, permits and certifications may also be reimbursable. This is not intended to be an all-inclusive list of moving related expenses. Your Relocation Agent can provide you with a complete explanation of reimbursable expenses.

Self-Move Agreement

If you agree to take full responsibility for all or part of the move of your business, farm, or nonprofit organization, the Department may approve a payment not to exceed the lower of two acceptable bids obtained by the Department from qualified moving firms or a qualified Department staff employee. A low-cost or uncomplicated move may be based on a single bid or estimate at the Department's discretion. The advantage of this moving option is the fact that it relieves the displaced business, farm or nonprofit organization operator from documenting all moving expenses. The Department may make the payment without additional documentation as long as the payment is limited to the amount of the lowest acceptable bid or estimate. Other expenses, such as professional services for planning, storage costs, and the cost of licenses, permits, and certifications may also be reimbursable if determined to be necessary. These latter expenses must be pre approved by the Relocation Agent.

Requirements:

Before you move, you must provide Caltrans with the:

- Certified inventory of all personal property to be moved.
- Date you intend to vacate the property.
- Address of the replacement property.
- Opportunity to monitor and inspect the move from the acquired property to the replacement property.

Related Expenses

1. **Searching Expenses for Replacement Property:** Displaced businesses, farms and nonprofit organizations are entitled to reimbursement for actual reasonable expenses incurred in searching for a replacement property, not to exceed $2,500. Expenses may include transportation, meals, and lodging when away from home; the reasonable value of the time spent during the search; fees paid to the real estate agents, brokers or consultants; and other expenses determined to be reasonable and necessary by the Department.

2. **Direct Loss of Tangible Personal Property:** Displaced businesses, farms, and nonprofit organizations may be eligible for a payment for the actual direct loss of tangible personal property which is incurred as a result of the move or discontinuance of the operation. This payment will be based upon the lesser of:

    a. The fair market value of the item for continued use at the displacement site minus the proceeds from its sale.

    OR

    b. The estimated cost of moving and reinstalling the replaced item, based on the lowest acceptable bid or estimate obtained by the Department for eligible moving and related expense4s, including dismantling and reassembly, but with no allowance for storage, cost of code requirement betterments or upgrades at the replacement site.

EXAMPLE:
You determine that the "document shredder" cannot be moved to the new location because of its condition, and you will not replace it at the new location.

Fair Market Value of the Document Shredder Based on its use at the current location	$ 1,500
Proceeds: Price received from selling the Document Shredder	- $ 500
Net Value	$ 1,000

OR

Estimated cost to move	$ 1,050

Based on the "lesser of", the amount of the "Loss of Tangible Personal Property" =	**$ 1,000**

Note: You are also entitled to all reasonable costs incurred in attempting to sell the document shredder (e.g. advertisement).

3. Purchase of Substitute Personal Property: If an item of personal property, which is used as part of the business, farm, or nonprofit organization, is not moved but is promptly replaced with a substitute item that performs a comparable function at the replacement site, the displacee is entitled to payment of the lesser of:

   a. The cost of the substitute item, including installation costs at the replacement site, minus any proceeds from the sale or trade-in of the replaced item;

   OR

   b. The estimated cost of moving and reinstalling the replaced item, based on the lowest acceptable bid or estimate obtained by the Department for eligible moving and related expenses, including dismantling and reassembly, but with no allowance for storage, cost of code requirement betterments or upgrades at the replacement site.

EXAMPLE A:

You determine that the copying machine cannot be moved to the new location because it is now obsolete and you will replace it.

Cost of a substitute copy machine		
Including installation costs at the replacement site		$ 3,000
Trade-in Allowance	-	$ 2,500
Net Value		$ 500

OR

Estimated cost to move	$ 550
Based on the "lesser of", the amount of the "Substitute Personal Property" =	**$ 500**

EXAMPLE B:

You determine that the chairs will not be used at the new location because they no longer match the décor and you will replace them.

Cost of substitute chairs		$ 1,000
Proceeds from selling the chairs	-	$ 100
Net Value		$ 900

OR

Estimated cost to move	$ 200
Based on the "lesser of", the amount of the "Substitute Personal Property" =	**$ 200**

Note: You are also entitled to all reasonable costs incurred in attempting to sell the copy machine and/or chairs.

4. **Disconnecting and Reinstallation:** You will be reimbursed for your actual and reasonable costs to disconnect, dismantle, remove, reassemble and reinstall any machinery, equipment or other personal property in relation to its move to the new location. This includes connection to utilities available nearby and any modifications to the

personalty that is necessary to adapt it to utilities at the replacement site.

5. **Physical changes at the new location:** You may be reimbursed for certain physical changes to the replacement property if the changes are necessary to permit the reinstallation of machinery or equipment necessary for the continue operation of the business. ***Note:*** *The changes cannot increase the value of the building for general purposes, nor can they increase the mechanical capability of the buildings beyond its normal requirements.*

6. The cost of installing utilities from the right of way line to the structure(s) or improvements on the replacement site.

7. Marketing studies, feasibility surveys and soil testing.

8. Professional real estate services needed for the purchase or lease of a replacement site.

9. One-time assessments or impact fees for anticipated heavy utility usage.

Reestablishment Expenses

A small business, farm or nonprofit organization may be eligible for a payment, not to exceed $10,000, for expenses actually incurred in relocating and reestablishing the enterprise at a replacement site.

Reestablishment expenses may include, but are not limited to, the following:

1. Repairs or improvements to the replacement real property required by Federal, State or local laws, codes or ordinances.

2. Modifications to the replacement real property to make the structure(s) suitable for the business operation.

3. Construction and installation of exterior signing to advertise the business.

4. Redecoration or replacement such as painting, wallpapering, paneling or carpeting when required by the condition of the replacement site or for aesthetic purposes.

5. Advertising the new business location.

6. The estimated increased costs of operation at the replacement site during the first two years, for items such as:

    a) Lease or rental charges
    b) Personal or real property taxes
    c) Insurance premiums, and
    d) Utility charges (excluding impact fees).

7. Other items that the Department considers essential for the reestablishment of the business or farm.

Note: *A nonprofit organization must substantiate that it cannot be relocated without a substantial loss of existing patronage (membership or clientele). The payment is based on the average of two years annual gross revenues less administrative expenses.*

In-Lieu Payment (Fixed)

Displaced businesses, farms and nonprofit organizations may be eligible for a fixed payment in lieu of (in place of) actual moving expenses, personal property losses, searching expense, and reestablishment expenses. The fixed payment may not be less than $1,000 or more than $20,000.

For a business to be eligible for a fixed payment, the Department must determine the following:

1. The business owns or rents personal property that must be moved due to the displacement.

2. The business cannot be relocated without a substantial loss of existing patronage.

3. The business is not part of a commercial enterprise having more than three other businesses engaged in the same or similar activity, which are under the same ownership and are not being displaced by the department.

4. The business contributed materially to the income of the displaced business operator during the two taxable years prior to displacement.

Any business operation that is engaged solely in the rental of space to others is not eligible for a fixed payment. This includes the rental of space for residential or business purposes.

Eligibility requirements for farms and nonprofit organizations are slightly different than business requirements. If you are being displaced from a farm or your represent a nonprofit organization and are interested in a fixed payment, please consult your relocation counselor for additional information.

The Computation of Your In-Lieu Payment:

The fixed payment for a displaced business or farm is based upon the average annual net earnings of the operation for the two taxable years immediately preceding the taxable year in which it is displaced. Caltrans can use a different two year period if it is determined that the last two taxable years do not accurately reflect the earnings of the operation.

EXAMPLE: Caltrans acquires your property and you move in 2005:

2003 Annual Net Earnings	$ 10,500
2004 Annual Net Earnings	$ 12,500
TOTAL	$ 23,000
Average over two years	**$ 11,500**

This would be the amount of your in-lieu payment. Remember – this is in-lieu of all other moving benefits, including reestablishment expenses. You must provide the Department with proof of net earnings to support your claim.

Proof of net earnings can be documented by income tax returns, certified financial statements, or other reasonable evidence of net earnings acceptable to the Department.

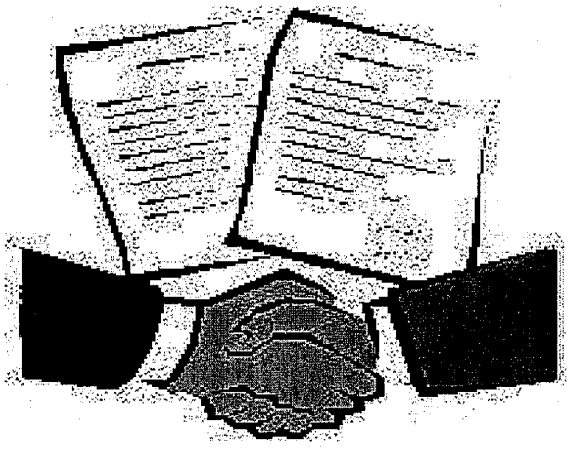
Note: The computation for nonprofit organizations differs in that the payment is computed on the basis of average annual gross revenues less administrative expenses for the two year period specified above.

Before You Move:

A. Request a determination of entitlement for in-lieu payment from your Relocation Agent.
B. Include a written statement of the reasons the business cannot be relocated without a substantial loss in net earnings.

C. Provide certified copies of tax returns for the two tax years immediately preceding the tax year in which you move. (If you move anytime in the year 2005, regardless of when negotiations began or the State took title to the property, the taxable years would be 2003 and 2004).
D. You will be notified of the amount you are entitled to after the application is received and approved.
E. You cannot receive the payment until after you vacate the property, AND submit a claim for the payment within 18 months of the date of your move.

Relocation Advisory Assistance



Any business, farm or nonprofit organization displaced by Caltrans shall be offered relocation advisory assistance for the purpose of locating a replacement property. Relocation services are provided by qualified personnel employed by Caltrans. It is their goal and desire to be of service to you and assist in any way possible to help you successfully relocate.

A Relocation Agent from Caltrans will contact you personally. Relocation services and payments will be explained to you in accordance with your eligibility. During the initial interview with you, your needs and desires will be determined as well as your need for assistance.

You can expect to receive the following services, advice and assistance from your Relocation Agent who will:

- Determine your needs and preferences.
- Explain the relocation benefits and eligibility requirements.
- Provide information on replacement properties for your consideration.
- Provide information on counseling you can obtain to help minimize hardships in adjusting to your new location.
- Assist you in completing loan documents, rental applications or Relocation Claims Forms.

AND provide information on:

- Security deposits
- Interest rates and terms
- Typical down payments
- Permits, fees and local planning
- SBA loan requirements
- Real property taxes.
- Consumer education literature

If you desire, your Relocation Agent will give you current listings of other available replacement property. Transportation will be provided to inspect available property, especially if you are elderly or handicapped. Though you may use the services of a real estate broker, Caltrans cannot provide a referral.

Your Relocation Agent is familiar with the services provided by others in your community and will provide information on other federal, state, and local programs offering assistance to displaced persons. If you have special needs, your Relocation Agent will make every effort to secure the services of those agencies with trained personnel who have the expertise to help you.

If the highway project will require a considerable number of people to be relocated, Caltrans will establish a temporary Relocation Field Office on or near the project. Project relocation offices will be open during convenient hours and evening hours if necessary.

In addition to these services, Caltrans is required to coordinate its relocation activities with other agencies causing displacements to ensure that all persons displaced receive fair and consistent relocation benefits.

Remember - YOUR RELOCATION AGENT is there to offer advice and assistance. Do not hesitate to ask questions. And be sure you fully understand all of your rights and available benefits.

YOUR RIGHTS AS A DISPLACEE

It is important to remember that your relocation benefits will not have an adverse affect on your:

- Social Security Eligibility
- Welfare Eligibility
- Income Taxes

In addition, the Title VIII of the Civil Rights Act of 1968 and later acts and amendments make discriminatory practices in the purchase and rental of most residential units illegal if based on race, color, religion, sex, or national origin.

Caltrans' Non-Discrimination Policy ensures that all services and/or benefits will be administered to the general public without regard to race, color, national origin, or sex in compliance with Title VI of the 1964 Civil Rights Act (42 USC 2000d. et seq.).

And you always have the Right to Appeal any decision by Caltrans regarding your relocation benefits and eligibility.

Your Right of Appeal is guaranteed in the "Uniform Act" which states that any person may file an appeal with the head of the responsible agency if that

person believes that the agency has failed to properly determine the person's eligibility or the amount of a payment authorized by the Act.

If you indicate your dissatisfaction, either verbally or in writing, Caltrans will assist you in filing an appeal and explain the procedures to be followed. You will be given a prompt and full opportunity to be heard. You have the right to be represented by legal counsel or other representative in connection with the appeal (but solely at your own expense).

Caltrans will consider all pertinent justifications and materials submitted by you and other available information needed to ensure a fair review. Caltrans will provide you with a written determination resulting from the appeal with an explanation of the basis for the decision. If you are still dissatisfied with the relief granted, Caltrans will advise you that you may seek judicial review.

APPENDIX E

COUNTY OF SAN DIEGO FLOODPLAIN LETTER

County of San Diego

DEPARTMENT OF PUBLIC WORKS

JOHN L. SNYDER
DIRECTOR

5555 OVERLAND AVE, SUITE 2188
SAN DIEGO, CALIFORNIA 92123-1295

(858) 694-2212 FAX: (858) 268-0461
Web Site: sdcdpw.org

July 3, 2007

Mr. Tim Brownson
District Hydraulic Engineer
California Department of Transportation – District 11
4050 Taylor Street
San Diego, CA 92110

FLOODPLAIN IMPACT ASSESSMENT OF PROPOSED OTAY MESA EAST POE AND SR-11

Dear Mr. Brownson:

We have reviewed your letter of May 14, 2007, requesting our endorsement of your conclusion that there is no need for a Floodplain Impact Assessment of the proposed Otay Mesa East POE and SR-11.

The subject proposed project as depicted on Exhibit 2A is partially located within the FIRM No. 06073C2183F, which determined the area as Zone X outside the 500-year floodplain. Therefore, we concurred with your conclusion that the subject proposed project does not require a Floodplain Impact Assessment.

However, with regard to flood management in East Otay Mesa all developments are subject to guidelines of the County's East Otay Mesa Specific Plan Comprehensive Flood Control Master Plan 1994. Essentially, developments within East Otay Mesa area are required to provide local or regional detention basins.

If you have any questions or need additional information, please contact me at (858) 694-3672 or by email Cid.Tesoro@sdcounty.gov.

Sincerely,

CID TESORO, Manager
Watershed Protection Program

CT/ez

cc: Hung Tran, Department of Public Works, MS 0384

Appendix F

USFWS CONSULTATION LETTER

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ecological Services
Carlsbad Fish and Wildlife Office
6010 Hidden Valley Road
Carlsbad, California 92011

In Reply Refer To:
FWS-SDG-1803.2

OCT 6 2006

Ms. Deborah Leonard
Helix Environmental Inc.
7578 El Cajon Boulevard, Suite 200
La Mesa, California 91941

Subject: Request for Candidate, Proposed, Threatened, or Endangered Species for the Proposed State Route 11 and East Otay Mesa Port-of-Entry Project, San Diego County, California

Dear Ms. Leonard:

The U.S. Fish and Wildlife Service has reviewed the information provided in your letter dated September 12, 2006, and received at our office on September 13, 2006, to assess the potential presence of federally listed threatened, endangered, or proposed species at the proposed project site. We do not have site specific information for your project area however, to assist you in evaluating whether or not the proposed project may affect listed species, we are providing the attached list of federally listed species that may occur in the general project area. Please note that only general biological information is available for the project area and this may not be a comprehensive list. You should contact the California Department of Fish and Game for State-listed and other sensitive species that may occur in the area of the proposed project. Please note that State-listed species are protected under the provisions of the California Endangered Species Act. We recommend that you seek assistance from a biologist familiar with the project site, and experienced in assessing the potential for direct, indirect, and cumulative effects to species and their habitats likely to result from the proposed activity.

If it is determined that the proposed project may affect a listed or proposed species, or designated or proposed critical habitat, consultation (or conference for proposed species) with the Service pursuant to section 7 of the Endangered Species Act (Act) of 1973, as amended, should be initiated. Informal consultation may be used to exchange information and resolve conflicts with respect to listed species prior to a written request for formal consultation.

TAKE PRIDE IN AMERICA

Should you have any questions regarding the species on the enclosed list or your responsibilities under the Act, please call Kurt Roblek of my staff at (760) 431-9440, extension 308.

Sincerely,

Therese O'Rourke
Assistant Field Supervisor

Cc: Susanne Glasgow, Caltrans District 11
Steve Healow, FHWA
Susan Wynn, USFWS

Federally Listed Species Which Occur or May Occur
Within the Project Site of the Proposed
State Route 11 and East Otay Port-of-Entry Project

Common Name	Scientific Name	Status
PLANTS		
San Diego thornmint	*Acanthomintha ilicifolia*	T
Otay tarplant	*Deinandra conjugens*	T, CH
San Diego button celery	*Eryngium aristulatum* var. *parishii*	E
willowy monardella	*Monardella linoides* ssp. *viminea*	E
Otay Mesa mint	*Pogogyne nudiuscula*	E
BIRDS		
southwestern willow flycatcher	*Empidonax traillii extimus*	E, CH
coastal California gnatcatcher	*Polioptila californica californica*	T, CH
least Bell's vireo	*Vireo bellii pusillus*	E, CH
INVERTEBRATES		
San Diego fairy shrimp	*Branchinecta sandiegonensis*	E, CH
Quino checkerspot butterfly	*Euphydryas editha quino*	E, CH
Riverside fairy shrimp	*Streptocephalus wootoni*	E, CH
AMPHIBIANS		
arroyo toad	*Bufo californicus*	E, CH

E: Endangered T: Threatened CH: Critical Habitat

APPENDIX G

LIST OF ACRONYMS

LIST OF ACRONYMS AND ABBREVIATIONS

ac	acre(s)
ACOE	U.S. Army Corps of Engineers
ACP	Asbestos cement pipe
ADT	average daily traffic
APCD	Air Pollution Control District
APE	Area of Potential Effect
APN	Assessor's Parcel Number
ARB	Air Resources Board
BCC	Bird of (federal) Conservation Concern
BMI	benthic macroinvertebrate
BMPs	best management practices
BRT	Bus Rapid Transit
BSA	Biological Study Area
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CBP	U.S. Customs and Border Protection
CCAA	California Clean Air Act
CDFG	California Department of Fish and Game
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act of 1980
CERFA	Community Environmental Response Facilitation Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
CFS	Cubic feet per second
CHP	California Highway Patrol
CIA	Community Impact Assessment
City	City of San Diego
CNPS	California Native Plant Society
CO	carbon monoxide
COCs	constituents of concern
COD	Chemical Oxygen Demand
County	County of San Diego
CTC	California Transportation Commission
CVEF	Commercial Vehicle Enforcement Facility
CWA	Clean Water Act
DEH	Department of Environmental Health
DOS	U.S. Department of State
DOT	U.S. Department of Transportation
DSA	disturbed soil areas

EA	Environmental Assessment
EIR	Environmental Impact Report
EO	Executive Order
EOMSP	East Otay Mesa Specific Plan Amendment
EOMBPSP	East Otay Mesa Business Park Specific Plan
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FHWA	Federal Highway Administration
FIFRA	Federal Insecticide, Fungicide and Rodenticide Act
FP	Fully Protected
General Plan	City of San Diego Progress Guide and General Plan
GHG	Green House Gas
GRP	gross regional product
GSA	General Services Administration
HA	Hydrolic Area
HDM	highway design manual
HELIX	HELIX Environmental Planning, Inc.
HOV	high occupancy vehicle lanes
HSA	Hydrolic Subarea
HU	Hydrologic Unit
IBWC	International Boundary and Water Commission
IPCC	Intergovernmetnal Panel on Climate Change
IRIS	Integrated Risk Information System
ISA	Hazardous Waste Initial Site Assessment
LEDPA	least environmentally damaging practicable alternative
LOS	level of service
LSAA	lake or streambed alteration agreement
MCE	Maximum Credible Earthquake
mg/l	milligrams per liter
MLS	Mass Loading Station
MOU	Memorandum of Understanding
mph	miles per hour
MSAT	mobile source air toxics
MSCP	Multiple Species Conservation Program
NAAQS	National Ambient Air Quality Standards
NAC	noise abatement criteria
NAFTA	North American Free Trade Agreement
NATA	National Air Toxics Assement
NCCPP	Natural Community Conservation Planning Program
NEPA	National Environmental Quality Act
NHPA	National Historic Preservation Act of 1966, as amended

NLEV	national low emission vehicle
NOAA	National Oceanic and Atmospheric Administration
NO_2	nitrogen dioxide
NPDES	National Pollutant Discharge Elimination System
O_3	ozone
OHWM	ordinary high water mark
OMCP	Otay Mesa Community Plan
OSHA	Occupational Safety & Health Administration
OSP	Otay Subregional Plan
Pb	lead
PEIR/PEIS	Program Environmental Impact Report/Statement
$PM_{2.5}$	fine particulate matter with a diameter of 2.5 microns or less
PM_{10}	fine particulate matter with a diameter of 10 microns or less
POE	port of entry
ppm	parts part million
PSI	Preliminary Site Investigation
PSR	Project Study Report
RAP	relocation assistance program
RAQS	Regional Air Quality Strategy
RCA	resource conservation area
RCP	Regional Comprehensive Plan
RCRA	Resource Conservation and Recovery Act of 1976
RFG	reformulated gasoline
RSA	resources study area
RTIP	Regional Transportation Improvement Program
RTP	Transportation Plan for the San Diego Region (also referred to as Mobility 2030)
R/W	right-of-way
RWQCB	San Diego Regional Water Quality Control Board
SANDAG	San Diego Association of Governments
SDAB	San Diego Air Basin
SDMSE	San Diego Medical Services Enterprise
SDRFPD	San Diego Rural Fire Protection District
SER	standard environmental reference
SHPO	State Historic Preservation Officer
SIP	State Implementation Plan
SO_2	sulfur dioxide
SPA	specific plan amendment
SR	State Route
SRA	subregional areas
SSC	State Species of Special Concern
SWMP	Storm Water Management Plan
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TDM	transportation demand management
TMDL	total maximum daily load

TSCA	Toxic Substances Control Act
TSM	transportation system management
TSS	total suspended solids
U.S.	United States
USC	United States Code
USFWS	United States Fish and Wildlife Service
v/c	volume-to-capacity
VMT	vehicle miles traveled