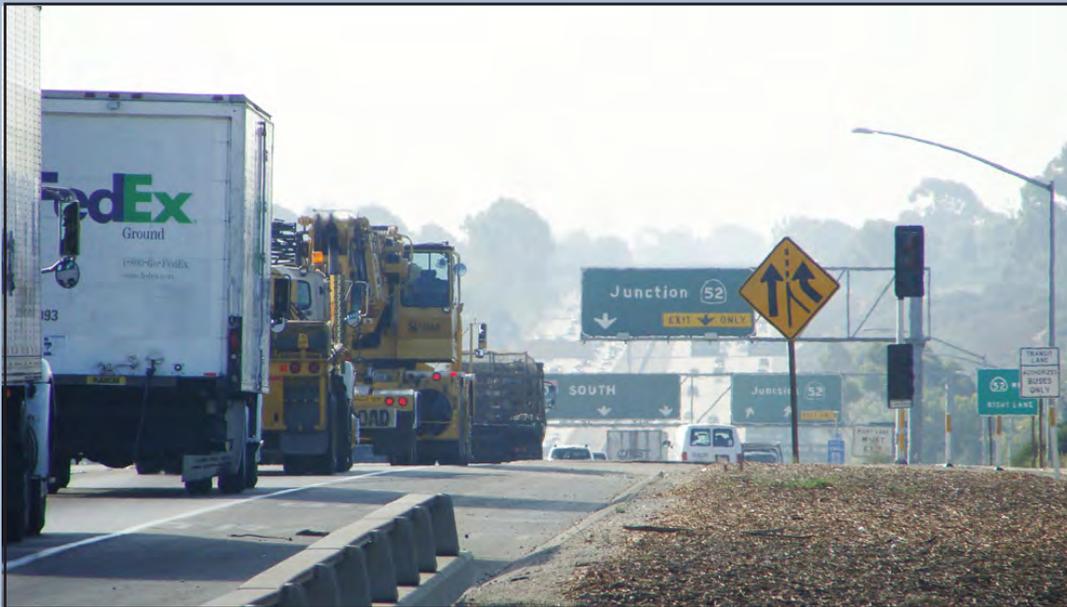


I-805 Managed Lanes North Project

SAN DIEGO, CALIFORNIA
DISTRICT 11-SD-805 (PM 23.3/27.7), 11-SD-52 (PM 3.5/4.1)
EA: 081630 Project #1100000061

Initial Study with Mitigated Negative Declaration/Environmental Assessment With Finding of No Significant Impact



Prepared by the
State of California Department of Transportation

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



December 2010

GENERAL INFORMATION ABOUT THIS DOCUMENT

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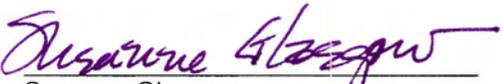
Construct Interstate 805 Managed Lanes North Project, in the City and County of San Diego,
from Postmile 23.3-27.7 and State Route 52 from Postmile 3.5-4.1

Initial Study with Proposed Mitigated Negative Declaration/ Environmental Assessment

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

THE STATE OF CALIFORNIA
Department of Transportation

1 FEB 2010
Date of Approval


Susanne Glasgow
Deputy District Director – Environmental
California Department of Transportation

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Mitigated Negative Declaration

Pursuant to: Division 13, Public Resources Code

Project Description

The California Department of Transportation (Caltrans) proposes to add four managed lanes (two in each direction) on Interstate 805 (I-805) from State Route 52 (SR-52) to La Jolla Village Drive. Two high occupancy vehicle (HOV) lanes (one in each direction) from La Jolla Village Drive to just north of Mira Mesa Boulevard (Blvd). The project will also construct a transit station and Direct Access Ramp (DAR) at Nobel Drive, a park-n-ride at Governor Drive, the south facing portion of the Carroll Canyon DAR, and a direct connector from the SR-52 to the I-805 Managed Lanes.

Determination

This proposed Mitigated Negative Declaration (MND) is included to give notice to interested agencies and the public that it is Caltrans' intent to adopt a MND for this project. This does not mean that the Caltrans' decision regarding the project is final. This MND is subject to modification based on comments received by interested agencies and the public.

Caltrans has prepared an Initial Study for this project, and pending public review, expects to determine from this study that the proposed project will not have a significant effect on the environment for the following reasons:

The proposed project will have no effect on:

- Farmlands or Timberlands
- Growth
- Community Impacts
- Land Use
- Environmental Justice
- Hydrology/Floodplain
- Cultural Resources
- Pedestrian/Bicycle Facilities

In addition, the proposed project will not have a significant effect on:

- Transportation/Traffic
- Geology/Soils/Seismic/Topography
- Air Quality
- Noise
- Wetlands and other Waters
- Animal Species
- Utilities/Emergency Services
- Visual Resources
- Water quality
- Hazardous Waste
- Paleontological Resources
- Cumulative Impacts
- Plant Species
- Natural Communities

The proposed project will not have a significantly adverse effect on Threatened or Endangered Species because the following mitigation measures will reduce potential effects to insignificance:

- Coastal sage scrub, coastal sage-chaparral, and broom baccharis vegetation communities will be offset by preservation at the Sage Hill Mitigation site and Del Mar Mesa (Zamudio) Mitigation Site. Sage Hill is located near the Elfin Forest and is a pre-approved mitigation site for the project by both the Fish and Wildlife Service (USFWS) and Department of Fish and Game (CDFG) through SANDAGs Environmental Mitigation Program (EMP). Sage Hill is in a pre-approved mitigation area (PAMA) for the Draft North County Multiple Species Conservation Program (NCMSCP) and is in a Core California Gnatcatcher Area.
- Permanent impacts to chaparral communities, road rut pools, and a portion of the coastal sage scrub will be completed at the Del Mar Mesa (Zamudio) Mitigation Site. This is a 32.5 acre parcel purchased by Caltrans for mitigation. It is designated as Multi-Habitat Planning Area habitat.
- Permanent impacts to San Diego fairy shrimp will be offset on Del Mar Mesa (Zamudio) Mitigation Site recently purchased by Caltrans. Mitigation is proposed at a 2:1 creation and/or restoration and management ratio similar to what was required for the road rut pool in Sorrento Valley impacted by the Carroll Canyon Project. The 263 ft² of road rut pool impacted will be mitigated with 526 ft² of restored vernal pool. Impacts to critical habitat for spreading navarretia are also proposed at Del Mar Mesa (Zamudio). In addition, 526 ft² of vernal pool habitat will be restored in the conserved area remaining at Nobel. San Diego fairy shrimp cysts will be salvaged from the road rut pool to be impacted and placed in restored pools. All details concerning the locations and ratios will be developed through consultation with the appropriate resource agencies to determine the appropriate location and amount of mitigation. Conceptual plans will be completed and submitted to the agencies for review.
- Wetland and grassland habitats will be mitigated at the Deer Canyon (Pardee) Mitigation Site in McGonigle Canyon south of SR 56. Southern willow scrub will be created immediately east of another riparian mitigation site. Native grassland will be created on the slope immediately north of the wetland creation area. Nonnative grassland will be preserved onsite. A mitigation plan will be submitted to all the resource agencies for

review prior to construction. Construction on the Deer Canyon Site is proposed to begin in late 2011 or early 2012.

The following are proposed measures to minimize impacts to special status species during construction:

- All native or sensitive habitats outside the permanent and temporary construction limits should be designated as Environmentally Sensitive Areas (ESAs) on project maps. ESAs should be temporarily fenced during construction with orange plastic snow fence. No personnel, equipment, or debris will be allowed within the ESAs.
- All native vegetation and non-native shrubs and trees within the impact areas will be removed outside of the upland bird breeding season (February 15 to August 31) to avoid impacts to nesting birds. Otherwise, a qualified biologist will thoroughly survey all vegetation prior to removal during the breeding season to ensure there are no nesting birds onsite. If nesting birds are identified onsite, vegetation removal will be delayed until the nest no longer supports eggs or chicks.
- All pile driving near the creeks that support threatened and endangered bird species will be completed outside the wetland bird breeding season (March 15 to September 15) to avoid construction noise impacts to sensitive riparian-nesting bird species.
- All debris from the expansion of bridges will be contained so that it does not fall into rivers and creeks.
- A qualified biologist will be available for both the pre-construction and construction phases to review grading plans, address protection of special status biological resources, and monitor ongoing work. The biologist will be familiar with the habitats, plants, and wildlife of the project area, and maintain communications with the resident engineer, to ensure that issues relating to biological resources are appropriately and lawfully managed.
- Appropriate best management practices (BMPs) will be used to control erosion and sedimentation. No sediment or debris will be allowed to enter the vernal pools, creeks, rivers, or other drainages.
- Cut slopes will be revegetated with native upland habitats with similar composition to those within the project study area. Fill slopes and areas adjacent to wetlands and drainages will be revegetated with appropriate native upland and wetland non-invasive

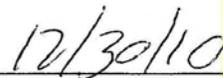
species. The revegetated areas will have temporary irrigation and be planted with native container plants and seeds selected by the biologist. There will be at least three years of plant establishment/maintenance on these slopes to control invasive weeds.

Bioswales and detention basins will be planted with appropriate native species as determined by the biologist and storm water pollution prevention professional. Slopes adjacent to developed urban areas will be vegetated with native and drought tolerant non-invasive species selected by the biologist and landscape architect. Interchanges located in urban areas will be landscaped with native or ornamental non-invasive species.

- Duff from areas with coastal sage scrub and chaparral may be saved to aid in revegetating slopes with native species.
- Salvaging of soil supporting San Diego fairy shrimp prior to grading is recommended where practicable.
- Lighting used at night for construction will be shielded away from ESAs and directed at the work areas.
- Temporary impacts to 2.86 acres of California gnatcatcher occupied coastal sage scrub will be mitigated at a 1:1 ratio at the Sage Hill mitigation site.



Bruce April
Deputy District Director
District 11, Environmental
California Department of Transportation



Date

CALIFORNIA DEPARTMENT OF TRANSPORTATION
FINDING OF NO SIGNIFICANT IMPACT

FOR

Interstate 805 Managed Lanes North, City of San Diego, San Diego County

The California Department of Transportation (Caltrans) has determined that the Build Alternative will have no significant impact on the human environment. This FONSI is based on the attached EA which has been independently evaluated by Caltrans and determined to adequately and accurately discuss the need, environmental issues, and impacts of the proposed project and appropriate mitigation measures. It provides sufficient evidence and analysis for determining that an EIS is not required. Caltrans takes full responsibility for the accuracy, scope, and content of the attached EA (and other documents as appropriate).

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

12/30/10
Date

 for
Laurie Berman
Caltrans District Director

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Chapter 1 Proposed Project

INTRODUCTION

The California Department of Transportation (Caltrans), in conjunction with the San Diego Association of Governments (SANDAG), has proposed a Managed Lanes project located in San Diego County, California on Interstate 805 (I-805) from just south of State Route 52 (SR-52) (Postmile 23.3) to just north of Mira Mesa Boulevard (Postmile 27.7). The project length is 4.4 miles. The project location and vicinity map are shown on Figures 1 and 2.

The project is in SANDAG's 2007-2008 Revenue Constrained Regional Transportation Plan (RTP) which was found to be conforming by the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) on December 10, 2007. The funding for this project will come from federal, state, and local sources. The total project cost is estimated to be \$587 million. The environmental phase has been funded with \$1.8 million of federal funds (Regional Surface Transportation Program) and \$8.1 million of local funds (TransNet II).

PURPOSE AND NEED

PURPOSE

The overall purpose of this project is to provide a backbone of multi-modal transportation facilities for the I-805 North project area while providing safe and efficient regional movement of people and goods through design year 2030.

The objectives of this project are:

- Provide facilities to enable the use of transit and encourage carpooling
- Increase mobility for all users of the I-805 corridor
- Provide consistency with the 2030 Regional Transportation Plan, Pathways for the Future, where feasible and in compliance with federal and state regulations
- Maintain or improve current traffic levels of service and travel times within the corridor

- Protect or enhance the human and natural environment along the I-805 project area

NEED

Capacity & Transportation Demand, Roadway Deficiencies

The I-805 freeway was opened to traffic in the early 1970s. It is a major north-south freeway beginning at its southern junction with Interstate 5 (I-5) near the international border with Mexico and continuing approximately 29 miles north where it again joins with the I-5 in Sorrento Valley. I-805 runs generally parallel to I-5, traversing the central portion of the San Diego urbanized area. I-805 provides an alternative route for I-5 north-south movement of traffic through San Diego, bypassing Downtown San Diego and other urban areas. It provides direct access to the major employment centers in Otay Mesa, Kearny Mesa, University City and Sorrento Valley, and is a major commuter route.

Traffic currently using I-805 within the study limits is subjected to congestion and delay during peak periods. The delay occurs when there is a lack of other non-congested transportation options for motorists traveling through the project area. I-5 parallels I-805 to the west and is not a desirable option due to its congested state and the fact that the east-west links (SR-56, SR-52, I-8 and SR-94) that connect the two freeways are also heavily congested.

I-805 (within the project limits) currently has eight general-purpose lanes but lacks high occupancy vehicle (HOV) lanes, managed lanes, or other dedicated facilities for transit or other modes of travel. I-805 in the project area currently operates at or near capacity during peak commute hours.

The managed lanes will allow transit vehicles and HOVs to bypass congestion on the general purpose lanes benefiting both HOV and general purpose lane users. They will increase person throughput rather than vehicle throughput, and make more efficient use of existing roadway capacity by moving more people per vehicle trip while reducing vehicle trips and congestion. In order to accommodate other modes of travel, the project proposes to construct transit facilities and managed lanes, the latter of which will accommodate transit vehicles, HOVs, and tolled single occupancy vehicles (SOVs).

One of the key components of the 2030 RTP (amended in November 2007), is to provide multiple commuter travel choices by transforming the existing freeway network into a more efficient system which can be used effectively by single SOVs, HOVs, and Bus Rapid Transit (BRT). The RTP recommends an extensive regional HOV network, termed the “flexible” highway system, whereby new connections will be developed to more efficiently manage capacity on the freeway system. The goal is to create HOV lanes which will be used by both BRT and HOV traffic while at the same time attempting to improve or maintain the existing congestion within the SOV lanes. This project will be consistent with the 2030 RTP and the plans of the Metropolitan Transit System (MTS), San Diego County Transit, and North County Transit District (NCTD) in accommodating the High-Speed Bus Rapid Transit System.

In addition to the need for other modes of travel, various bottlenecks exist that lead to a reduction in performance of the facility. Due to the congestion on the facility, a Comprehensive Performance Assessment and Causality Report was prepared for the August 2009 I-805 Corridor System Management Plan (CSMP). This report identified that bottlenecks lead to less than optimal performance on the I-805 in the project area. Though the removal of the bottlenecks does not solve the capacity need or lack of other modes available it will improve the operational efficiency of the general purpose lanes.

By definition, a bottleneck is a condition where traffic demand exceeds the capacity of the roadway facility. In most cases, the cause of bottlenecks is related to a sudden reduction in capacity, such as a reduction in lanes, heavy merging and weaving, driver distractions; or an increase in demand that the facility cannot accommodate. Below is a summary of bottlenecks within the project limits:

- The first bottleneck occurs in the AM peak hours when 2,730 westbound (WB) SR-52 vehicle trips attempt to merge with the northbound (NB) 805 traffic, exceeding the freeway capacity.
- The second bottleneck is in the PM on NB I-805 between the La Jolla Village Drive/Miramar Road on ramp and the Mira Mesa Boulevard off ramp in Sorrento Valley. The primary cause of this bottleneck is the 2,075 PM peak hour vehicles that merge onto I-805 from La Jolla Village Drive/Miramar Road.

- The third bottleneck occurs in the PM on SB I-805 between La Jolla Village Drive and SR-52. The high mainline and on ramp volumes at this location exceed the freeway capacity. The SB entrance ramps from La Jolla Village Drive/ Miramar Road and Nobel Drive add 2,175 vehicles per hour to the freeway which is already at capacity. These vehicles entering the SB I-805 have trouble merging into the general purpose lanes and conflict with traffic preparing to exit onto SR-52.

Modal Interrelationships & System Linkage

SANDAG has been the regional agency responsible for transit planning and funding administration in the San Diego area since 2003. SANDAG shares transit planning responsibilities with Caltrans, the Metropolitan Transit System (MTS), and the North County Transit District (NCTD).

Enhancing transit is a major part of the 2030 RTP. It has a specific element calling for the implementation of a regional transit system that will provide a network of “fast, reliable, safe and convenient transit services” connecting the major activity centers of the region.

The regional BRT network will complement the existing and planned investments in the San Diego Trolley, NCTD's Sprinter and Coaster facilities, providing similar levels of service, travel speed, and customer experience. BRT vehicles will be able to bypass congestion in general purpose freeway lanes by taking advantage of managed lanes and HOV facilities. BRT routes have limited stations that are accessed through direct access ramps (DAR).

BRT routes are planned along several corridors in the region including I-805 south, I-15, and SR-94. The project serves as a critical link in this BRT system providing users from outlying residential areas connection to downtown San Diego and other major employment centers. In terms of the planned BRT service that will utilize the managed lanes system, other BRT routes will link South Bay communities, East San Diego County, and the northern inland communities with downtown San Diego and other major employment centers. The project, in conjunction with other planned route improvements, will ensure that BRT commuters could bypass general purpose lane congestion through the project area.

The proposed managed lanes will be dedicated to HOV and BRT commuters, and will allow for toll paying SOVs to utilize the lanes when extra capacity exists. They are critical to the planned, regional, freeway-based BRT system and enable MTS to have a reliable schedule for commuters. The managed lanes will provide free-flow speeds for carpools/vanpools and toll paying SOVs during peak periods. The RTP recognizes the benefits of managed lanes, and includes specific improvements on the I-805 and other major freeways throughout the region. Increasing vehicle occupancy through higher usage of transit and ridesharing improves the efficiency of the region's transportation system.

Traffic

A Traffic Study Report, November 2009, was prepared for this project. As part of this study, traffic volumes were developed using the SANDAG Series 11 Transportation Model.

Level of Service (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. The I-805 corridor traffic LOS were analyzed comparing the existing conditions, the Build and No-Build Conditions for Year 2020 and 2030. The existing traffic is directional in nature and is heavy during the AM peak hour in the northbound direction and heavy during the PM peak hour in the southbound direction. In the southbound direction the volumes approach or exceed the freeway capacity (LOS E or F) between the Miramar Road collector/distributor SB on ramp and SR-52 EB/WB off ramp. In the AM peak hour, all segments currently operate at LOS D or better in the southbound direction. The northbound freeway currently operates at LOS E or F under existing conditions in the AM peak hour (see Table 1: LOS for Multi-Lane Highways and Table 2: Freeway LOS Comparison).

Table 1: LOS for Multi-Lane Highways

LEVELS OF SERVICE

for Freeways

Level of Service	Flow Conditions	Operating Speed (mph)	Technical Descriptions
A		70	Highest quality of service. Traffic flows freely with little or no restrictions on speed or maneuverability. No delays
B		70	Traffic is stable and flows freely. The ability to maneuver in traffic is only slightly restricted. No delays
C		67	Few restrictions on speed. Freedom to maneuver is restricted. Drivers must be more careful making lane changes. Minimal delays
D		62	Speeds decline slightly and density increases. Freedom to maneuver is noticeably limited. Minimal delays
E		53	Vehicles are closely spaced, with little room to maneuver. Driver comfort is poor. Significant delays
F		<53	Very congested traffic with traffic jams, especially in areas where vehicles have to merge. Considerable delays

Table 2: Freeway LOS Comparison

	From	To	2006 Existing AM Peak	2006 Existing PM Peak	2020 No Build AM Peak	2020 No Build PM Peak	2020 Build AM Peak	2020 Build PM Peak	2030 No Build AM Peak	2030 No Build PM Peak	2030 Build AM Peak	2030 Build PM Peak
I-805 NB	Clairemont CD NB On ramp	Clairemont WB On ramp	D	C	D	C	E	C	F	D	D	C
	Clairemont WB On ramp	SR-52 Ingress/Egress	----	----	----	----	D	C	----	----	D	C
	SR-52 Ingress/Egress	SR-52 EB/WB Off ramp	D	C	D	C	C	C	E	D	D	C
	SR-52 EB/WB Off ramp	SR-52 EB On ramp	C	B	C	C	C	B	D	C	C	C
	SR-52 EB On ramp	SR-52 WB On ramp	D	C	D	C	D	B	E	C	D	C
	SR-52 WB On ramp	Governor Off ramp	F	C	F	D	E	C	F	E	E	C
	Governor Off ramp	Governor On ramp	F	C	F	D	C	B	F	F	D	C
	Governor On ramp	Nobel Off ramp	F	C	F	D	C	B	F	D	D	C
	Nobel Off ramp	Miramar Off ramp	E	C	F	C	C	B	F	D	D	C
	Miramar Off ramp	Miramar EB On ramp	D	B	D	C	C	B	F	D	D	C
	Miramar EB On ramp	Miramar WB On ramp	----	----	E	D	D	B	F	E	D	D
	Miramar WB On ramp	Mira Mesa Off ramp	D	C	D	D	D	C	F	E	E	D
	Mira Mesa Off ramp	Vista Sorrento HOV Ingress	C	C	C	C	D	C	D	D	C	D
	Vista Sorrento HOV Ingress	Vista Sorrento Off ramp	----	----	C	C	C	C	C	C	C	C
	Vista Sorrento Off ramp	Vista Sorrento On ramp	B	B	B	B	B	B	B	C	B	C
Vista Sorrento On ramp	SR-56 Bypass Off ramp	B	C	B	C	B	D	B	D	B	D	
SR-56 Bypass Off ramp	I-5 Merge	A	A	A	A	A	A	A	B	A	B	
I-805 SB	I-5 Diverge	SR-56 Bypass On ramp	C	B	C	B	C	B	C	B	D	B
	SR-56 Bypass On ramp	Mira Mesa Off ramp	D	B	E	C	D	B	F	C	F	C
	Mira Mesa Off ramp	Mira Mesa WB On ramp	D	C	D	C	C	B	F	D	C	B
	Mira Mesa WB On ramp	Mira Mesa EB On ramp	C	D	C	C	B	B	D	D	C	C
	Mira Mesa EB On ramp	Miramar Off ramp	C	D	C	E	B	C	D	F	C	D
	Miramar Off ramp	Miramar WB On ramp	B	D	B	E	B	C	C	F	C	D
	Miramar WB On ramp	Miramar EB On ramp			C	F	B	D	D	F	C	F
	Miramar EB On ramp	Nobel On ramp	C	E	C	F	B	C	D	F	C	D
	Nobel On ramp	Governor Off ramp	C	E	C	F	B	D	D	F	C	E
	Governor Off ramp	Governor On ramp	C	F	D	F	B	D	E	F	C	E
	Governor On ramp	SR-52 EB/WB Off Ramp	C	E	C	F	B	D	D	F	C	E
	SR-52 EB/WB Off Ramp	SR-52 WB On ramp	B	D	B	D	B	D	C	F	B	E
	SR-52 WB On ramp	SR-52 EB On ramp	B	D	B	E	B	D	C	F	B	E
	SR-52 EB On ramp	SR-52 Ingress/Egress	B	E	B	E	B	E	C	F	C	F

Notes:
 Shaded Cells indicate LOS E, F
 CD: collector distributor

Though LOS is maintained between the existing, 2020 and 2030 scenarios, incremental time savings will occur with the proposed project. Table 3: Travel Time Comparison shows that current corridor travel times for the AM Peak Period are 8 minutes for southbound and 8 minutes and 45 seconds for the northbound direction. In 2030, without the project, the travel times increase to 8 minutes for southbound and 9 minutes for the northbound direction. During the PM peak period, southbound travel times for the corridor are 8 minutes and 30 seconds for southbound and 9 minutes for the northbound. In 2030 PM peak no build travel times will be 9 minutes for southbound and 9 minutes and 45 seconds for northbound.

The 2020 Build scenario shows savings in the AM peak period of 30 to 45 seconds on the general purpose lanes, and 1 minute and 45 seconds to 2 minutes if using the carpool lane. For the PM peak period savings of 45 seconds to 1 minute will occur in the general purpose lanes and savings of 3 minutes and 15 seconds for carpool users. As shown on Table 3: Travel Time Comparison, similar savings will occur in 2030 while allowing more person trips to occur within the corridor due to additional travel options.

An analysis of the person trips within the corridor during the peak and off-peak periods indicates that the project results in an increase in the number of person trips when comparing Build and No-Build conditions in 2020 and 2030. These changes are summarized in Table 3: Travel Time Comparison. Furthermore, an analysis of the number of Vehicle Work Trips yields similar results. This data reveals that the number of work trips in the I-805 North corridor during the peak and off peak period increases over Existing and No-Build conditions. These increases are as a result of the modal shift from the general-purpose lanes to the HOV/Managed Lanes. They are also an indication that this project has the potential to promote use of public transportation in order to increase mobility within the I-805 North corridor. The travel times and the vehicle hours traveled were also analyzed within the corridor for peak and off peak periods. The results indicate that travel times and vehicle hours are reduced in the general purpose lanes when comparing the Build conditions to Existing and No-Build conditions. These reduced travel times on the general purpose lanes indicate that the I-805 North Managed Lanes Project is shifting trips from the general purpose lanes to the HOV/ML lanes.

These results indicate that the proposed project maintains or improves traffic operations in 2020 and 2030 scenarios when compared to the equivalent No-Build conditions. While the results of specific segment, weaving, or intersection analysis locations show a worse

LOS condition in some areas, the net changes in all cases maintain or improve conditions on the I-805 North corridor.

Independent Utility and Logical Termini

FHWA regulations require that transportation projects have independent utility and logical termini. A project that has independent utility does not depend on future transportation improvements to function as a stand-alone project. Logical termini are defined as rational end points for a transportation improvement and for review of environmental impacts.

The proposed project has independent utility, as it does not depend on future or additional transportation improvements to function as a stand-alone project. The Project would construct improvements to provide options for commuters that currently do not exist along the I-805 north.

The proposed boundaries are logical because they connect the essential elements of the proposed project and encompass the area potentially affected by project construction and operation. The termini of the project were determined based on regional traffic patterns and conditions along I-805 north. The southern Project terminus was selected because it would provide direct access to the proposed Managed Lanes facility via the proposed direct connect ramp from the westbound SR-52. The northern project terminus was selected because it would allow adequate vehicular movement to and from the Carroll Canyon DAR and the connection with the I-5 freeway.

Table 3: Travel Time Comparison

AM Peak Period	Unit	2006 Existing		2020 No Build		2020 Build		2030 No Build		2030 Build	
		NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
Travel time - GP Lane	Min:Sec	8:45	8:00	8:00	8:15	7:30	7:30	9:00	8:00	8:00	7:30
Travel time - ML Lane	Min:Sec	N/A	N/A	N/A	N/A	6:00	6:00	N/A	N/A	7:15	6:30
Travel Time Savings (1)	Min:Sec	N/A	N/A	0:45	-0:15	1:15	0:30	-0:15	0:00	0:45	0:30
Person Trips (2)	Person	46,975	42,910	49,363	51,045	49,474	51,845	52,734	50,642	59,897	54,825
Non SOV Person Work Trips	Person	701	942	839	1120	826	1174	1051	1176	1267	1299
PM Peak Period	Unit	2006 Existing		2020 No Build		2020 Build		2030 No Build		2030 build	
		NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
Travel time - GP Lane	Min:Sec	9:00	8:30	9:45	8:15	8:30	7:30	9:45	9:00	8:30	8:00
Travel time - ML Lane	Min:Sec	N/A	N/A	N/A	N/A	6:30	6:00	N/A	N/A	7:15	7:45
Travel Time Savings (1)	Min:Sec	N/A	N/A	-0:45	0:15	0:30	1:00	-0:45	-0:30	0:30	0:30
Person Trips (2)	Person	52,670	48,228	60,758	53,623	61,206	55,260	61,234	57,007	66,022	67,261
Non SOV Person Work Trips	Person	1280	964	1514	1095	1567	1168	1643	1346	1777	1702
Off Peak Period	Unit	2006 Existing		2020 No Build		2020 Build		2030 No Build		2030 Build	
		NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
Travel time - GP Lane	Min:Sec	7:15	7:15	7:15	7:15	6:45	6:45	7:30	7:30	7:00	7:00
Travel time - ML Lane	Min:Sec	N/A	N/A	N/A	N/A	5:45	6:00	N/A	N/A	6:00	6:00
Travel Time Savings (1)	Min:Sec	N/A	N/A	0:00	0:00	0:30	0:30	-0:15	-0:15	0:15	0:15
Person Trips (2)	Person	154,883	149,625	169,962	170,925	175,554	176,861	179,627	181,097	187,449	189,318
Non SOV Person Work Trips	Person	3916	3689	4692	4605	5007	4987	5252	5129	20522	20319

(1) GP Lane travel time savings compared to existing conditions. Negative number indicates an increase in travel time.

(2) Person trips by all modes (SOV and HOV)

(ML) Managed Lanes

(N/A) ML lanes do not exist under this scenario

PROJECT DESCRIPTION

This section describes the proposed action and the design alternatives that were developed by a multi-disciplinary team to achieve the project purpose and need while avoiding or minimizing environmental impacts. After careful consideration the Project Development Team (PDT) identified the Managed Lanes Alternative as the preferred build alternative.

The Managed Lanes alternative will meet the project objectives and the purpose and need by improving traffic operations and allowing efficient goods movement through the I-805 managed lanes north corridor, providing opportunities for other modes of travel and managing future needs. Managed lanes are being pursued to provide priority for buses and carpools. In addition, a value pricing program will allow single occupancy vehicles (SOV) to utilize any excess capacity on the lanes.

In addition to the Managed Lanes Alternative, the Transportation System Management and the No Build Alternatives were analyzed. Following is a discussion of these three alternatives.

ALTERNATIVES

Managed Lanes Alternative (Build Alternative) – Preferred Alternative

The Build Alternative proposes to construct four managed lanes (two lanes in each direction) in the existing freeway median from SR-52 to just north of La Jolla Village Drive and one HOV lane in each direction from just north of La Jolla Village drive to just north of Mira Mesa Blvd. In the median, northbound and southbound Portland Cement Concrete (PCC) lanes will be separated by a concrete barrier. PCC inside shoulders will be adjacent to the concrete barrier. A painted 4ft buffer will be used to separate the Managed Lanes from the general-purpose lanes. A typical cross section of the proposed facility can be seen on Figure 4. In order to accommodate the proposed 12ft lane widths in the median the existing facility will be expanded to the outside. Locations of project features are illustrated on the Project Features Maps, Figures 3-A to 3-D.

In addition, this project will construct a SR-52/I-805 direct connector ramp, a south facing Direct Access Ramp (DAR) at Carroll Canyon, a Nobel Dr. DAR, and a park and ride/transit station at the southwest quadrant of Nobel Dr. and I-805. Additional details on these and additional features can be found below.

Ramp Realignments

Direct connector ramps connect lanes of one highway to HOV or managed lanes of another highway. A direct connector ramp will be constructed to connect the SR-52 (SR- 52 westbound to I-805 northbound and I-805 southbound to SR-52 eastbound movements) to the proposed I-805 managed lanes. The direct connector will be a two-lane structure, with one lane in each direction, separated by a concrete barrier.

In addition to the proposed direct connector, the outward main lane shifts will necessitate the realignment of the following existing ramps and connectors within the project limits:

- Eastbound 52 to Northbound 805 connector
- Westbound 52 to Northbound 805 connector
- Eastbound 52 to Southbound 805 connector
- Westbound 52 to Southbound 805 connector
- Southbound 805 to Eastbound 52 connector
- Southbound 805 to Westbound 52 connector
- Northbound 805 off ramp to Governor Dr.
- Northbound 805 on ramp from Governor Dr.
- Southbound 805 off ramp to Governor Dr.
- Northbound 805 off ramp to Nobel Dr.
- Southbound 805 on ramp from Nobel Dr.
- Northbound 805 off ramp to La Jolla Village Dr
- Northbound 805 off ramp to La Jolla Village Dr
- Northbound 805 on ramp from East Bound of La Jolla Village Dr.
- Northbound 805 on ramp from West Bound La Jolla Village Dr.
- Southbound 805 on ramp from East Bound La Jolla Village Dr
- Southbound 805 on ramp from West Bound of La Jolla Village Dr.
- Southbound 805 off ramp to La Jolla Village Dr.
- Northbound 805 off ramp to Mira Mesa Blvd.
- Northbound 805 off ramp to Vista Sorrento Pkwy.
- Northbound 805 on ramp from Vista Sorrento Pkwy.
- Southbound 805 on ramp from Mira Mesa Blvd

The Governor Drive southbound on ramp will be modified in order to increase the distance between the ramp and the westbound SR-52 connector. The existing southbound on ramp will be replaced by a loop ramp in the northwest quadrant of the interchange where an existing park-n-ride lot is located. The I-805 widening will cause a soundberm that is currently located at

the Governor Drive southbound off ramp to be relocated. To account for this, a ditch, currently outside of the state right of way and west of I-805 and north of Governor Drive, will be filled with approximately 32,000 cubic yards of soil up to the fence line of 6 properties.

Auxiliary Lanes

Auxiliary lanes are lanes that run along a freeway from the on ramp of one interchange to the off ramp of the next; they do not continue through the interchange area. Auxiliary lanes will be added to the I-805 at the following locations:

- SR-52/I-805 Junction to Governor Drive (northbound and southbound)
- Governor Drive to Nobel Drive (northbound and southbound)
- La Jolla Village Drive to Mira Mesa Boulevard (northbound and southbound)

Bridges

The existing Rose Canyon Bridge will be widened 28ft in the median and up to 54ft on either side with 6 additional columns being added. The Carroll Canyon Bridge will be widened up to 53ft in the southbound direction and up to 44ft in the northbound direction with 22 additional columns added at the Carroll Canyon Bridge and Carroll Canyon DAR locations. The southbound ramp that connects the I-805 to SR-52 will be widened 28ft in the median and 18ft on the southbound side.

Access

Two types of access into and out of the proposed managed lanes will be incorporated into the project. The first type will be called intermediate access points (IAP). The IAP are at-grade and adjacent to the freeway main lanes. These IAPs will allow users to enter and exit the proposed managed lanes. The second type of access points are for the DARs. The DARs will provide a direct connection from the proposed managed lanes to local streets or transit stations. The DARs will consist of two 12 ft lanes with 8 ft outside shoulders and 4 ft inside shoulders. At the DAR locations, managed lanes will be separated from the DAR ramps with a combination of barriers and retaining walls. Direct access ramps are proposed at the following locations:

- Nobel Drive Transit Station
- Carroll Canyon Road (northbound off ramp and southbound on ramp only)

Bus Rapid Transit/Park and Ride

A park-n-ride lot with a Bus Rapid Transit (BRT) Station will be constructed at the southwest quadrant of Nobel Drive and I-805 (Figure 3C). Conceptually it will contain 170-200 parking spaces with a minimum of 6 that will be accessible for people with disabilities. The BRT Station will be approximately 257,000 sq ft (5.9 acres) in size. The layout of the Nobel Drive Transit Station will be developed during the design phase. Features that may be considered include a BRT station, a bus platform with pedestrian ramps, a waiting area with benches and overhead lighting, and a loading and drop-off zone.

A park-n-ride lot will also be located at the southwest quadrant of Governor Drive and I-805 (Figure 3b). This lot will contain 110 parking spaces and will be approximately 57,000 sq ft (1.3 acres) in size with a minimum of 6 spaces that will be accessible for people with disabilities. The layout of the park-n-ride Station will be developed during the design phase.

Ramp Meters and Traffic Signals

The project proposed to add one new traffic signal at Governor Drive as a result of the southbound off ramp modifications. Modifications to nine traffic signals and nine ramps meters will also occur at Governor Drive, Nobel Drive, La Jolla Village Drive and Mira Mesa Boulevard.

Cut Slopes

The proposed project will require extensive grading in some areas in order to accommodate the widening. Cut and fill lines are shown on the project feature maps located on Figures 3A through 3C. Major cut or fill slopes are defined as slopes that are greater than 15ft in height and 600ft or greater in length. Major cut slopes will be located at:

- East of I-805 by the junction with SR-52 up to the off ramp of Governor Drive
- West of I-805 by the junction with SR-52
- West of southbound I-805 to just north of the Governor Drive off ramp where the existing berm is being modified
- East and West of I-805 between the La Jolla Village Drive ramps and just south of the Carroll Canyon Bridge

Retaining Walls

Retaining walls will be utilized in numerous locations throughout the corridor to stabilize slopes, minimize biological impacts and to accommodate engineering structures.

Utilities

There are numerous utilities along the I-805 and several utility conflicts have been identified. San Diego Gas & Electric (SDG&E), AT&T, City of San Diego, TelePacific, Time Warner, MCI, and Qualcomm all have utility facilities located within the project limits and any relocations or protection measures will be coordinated with these utility owners during the design process. Specific utility relocations are discussed in the utility relocation section of this document (Section 2.4).

Railroads

The proposed project crosses the railroad in two locations, at Rose Canyon and Carroll Canyon bridges. Due to the widening of these bridges and the additional DAR structure over Carroll Canyon, easements and construction/maintenance agreements will be coordinated with the railroad agencies/owners. This includes the legal owner which is the Metropolitan Transit System (MTS), and other users of the rail track in this area. Permit application to the California Public Utilities Commission (CPUC) will be required.

Right of Way

Right of way requirements for the project include new right of way for the Nobel Drive Park and Ride/BRT Station (currently owned by the City of San Diego), additional railroad easements due to the widening of the bridges will be required at Rose Canyon Bridge and Carroll Canyon Bridge. Various right of way easements, both permanent and temporary, will be required to build the proposed noise barriers. I-805 crosses over the North County Transit District (NCTD) Coaster line in two locations; the Rose Canyon Bridge and Overhead and the Carroll Canyon Bridge and Overhead. A permit will be acquired from NCTD during the design phase of the project. All staging/storage areas will be located within the Caltrans right of way, and outside of any Environmentally Sensitive Areas (ESAs). Table 4, lists right of way that will be needed to construct the proposed project.

Table 4: Right of Way Parcels

Parcel #	Property Address	Type
355-442-47-00	5409 NORTHRIDGE CT	Easement
355-442-48-00	5419 NORTHRIDGE CT	Easement
355-442-49-00	5429 NORTHRIDGE CT	Easement
355-442-50-00	5439 NORTHRIDGE CT	Easement
355-442-51-00	5449 NORTHRIDGE CT	Easement
355-542-01-00	5459 NORTHRIDGE CT	Easement
355-542-02-00	5469 NORTHRIDGE CT	Easement
355-542-03-00	5384 PALMYRA AVE	Easement
355-542-04-00	5374 PALMYRA AVE	Easement
355-542-05-00	5364 PALMYRA AVE	Easement
348-830-16-00	6129 WOLFSTAR CT	Easement
348-830-17-00	6123 WOLFSTAR CT	Easement
348-830-18-00	6117 WOLFSTAR CT	Easement
348-830-19-00	6111 WOLFSTAR CT	Easement
348-830-20-00	6105 WOLFSTAR CT	Easement
348-530-30-00	7455 BOVET WAY	Easement
348-530-31-00	7445 BOVET WAY	Easement
348-530-36-00	7345 STEINBECK AVE	Easement
348-530-37-00	7335 STEINBECK AVE	Easement
348-530-38-00	7325 STEINBECK AVE	Easement
348-530-39-00	7315 STEINBECK AVE	Easement
348-530-40-00	7305 STEINBECK AVE	Easement
348-530-43-00	7273 STEINBECK AVE	Easement
348-530-44-00	7265 STEINBECK AVE	Easement
348-530-45-00	7257 STEINBECK AVE	Easement
348-540-22-00	7119 ENDERS AVE	Easement
348-540-23-00	7125 ENDERS AVE	Easement
348-540-24-00	7131 ENDERS AVE	Easement
348-540-25-00	7141 ENDERS AVE	Easement
348-540-26-00	7155 ENDERS AVE	Easement
348-540-28-00	7217 STEINBECK AVE	Easement
348-540-29-00	7225 STEINBECK AVE	Easement
348-540-30-00	7233 STEINBECK AVE	Easement
348-540-31-00	7241 STEINBECK AVE	Easement
348-540-32-00	7249 STEINBECK AVE	Easement
348-020-06-00	UNITED STATE OF AMERICA	Easement
348-020-03-00	SDMT DEV BOARD AGENCY	Easement
349-010-03-00	CITY OF SAN DIEGO	Easement
345-011-24-00	CITY OF SAN DIEGO	Fee
341-321-63-00	TRIZEC SORRENTO TOWER LLC	Easement
343-010-19-00	CARYON PROPERTY	Easement
341-321-37-00	CARYON PROPERTY	Easement
341-321-38-00	CARYON PROPERTY	Easement

Value Pricing Technologies

Assembly Bill 574 (2007) provided SANDAG the authority to conduct, administer, and operate a value pricing and transit demonstration program on a maximum of two transportation corridors in San Diego County. It also authorized SANDAG to operate the program indefinitely by removing a four-year limitation provision. These facilities combine pricing and vehicle eligibility to maintain free-flow conditions while still providing a travel time-savings incentive for HOVs and reducing demand on the general-purpose lanes.

Additional equipment will be required for the implementation of the Value Pricing Program. The proposed technology to be used is Electronic Toll Collection (ETC) equipment, this will include overhead support structures and antennas to read transponders, variable message signs to display the tolls, loop detectors to measure traffic volume and speed, and closed circuit cameras (CCTV) to view traffic on the facility and to help determine violation rates. The equipment to be utilized will be determined during the design phase.

Pullouts/Enforcement

There will be two California Highway Patrol (CHP) enforcement areas added to the HOV lanes. These CHP enforcement areas will be located at the following locations:

- Between Governor Drive and the Nobel Drive DAR in the northbound direction.
- Between Governor Drive and SR-52 in the southbound direction.

Drainage

All drainage inlets that are located on the edge of the existing shoulders will be relocated to the new edge of shoulders, requiring the extension of all the affected pipes.

Non Standard Features

Some design exceptions will be required. The following are the major design exception categories:

- Shoulder Width Reductions
- Interchange Spacing
- Connector Ramp Design Speed and Profile Grade
- Traveled Way Cross Slopes flatter than 1.5%
- Superelevation Exceptions
- Exit Ramp Divergence Angle

Proposed Construction Staging

Construction will be divided into stages. Staging will be necessary to minimize traffic disturbances and maintain current traffic flow during construction. The five segments currently proposed for this project are described below.

Stage 1: One HOV Lane Each Direction and the Southern Half of the Carroll Canyon DAR

This construction segment is approximately 3 miles on I-805 along the main lanes and will extend from just north of SR-52 to Mira Mesa Boulevard. The project features for this segment include:

- Carroll Canyon Bridge and Overhead (widening)
- Carroll Canyon Direct Access Ramp Bridge and Overhead
- Carroll Canyon Direct Access Ramp Walls
- Governor Drive Undercrossing (median widening)
- Mira Mesa Bridge (widening)
- Rose Canyon Bridge and Overhead (widening)
- Two inside HOV lanes (widening)
- Two outside lanes from La Jolla Village Drive to north of Mira Mesa Boulevard (widening)

This stage will include approval of railroad airspace easements at Carroll Canyon and Rose Canyon, and any required California Public Utilities Commission (CPUC) approvals.

Stage 2: Governor Drive Interchange

This construction segment includes interchange modifications and outside widening on the I-805 along the main lanes and will extend from south of SR-52 to the Rose Canyon Bridge. The project features for this segment include:

- Governor Drive Undercrossing (outside widening)
- Noise barriers north of Governor Drive
- Ramp modifications
- Two outside lanes (widening)

Stage 3: Second HOV Lane and Outside Widening

This construction segment includes outside lane widening on I-805 at various segments along the main lanes, extending from south of SR-52 to just north of La Jolla Village Drive. The project features for this segment include:

- La Jolla Village Drive retaining Walls
- Eastgate Mall retaining walls
- Ramp modifications
- SR-52 Separation (widening)
- Noise barriers at Northridge Court
- Two outside lanes (widening)

Stage 4: Nobel Interchange and DAR

This construction segment includes interchange modifications and construction of the DAR on I-805 along the main lanes and will extend from Rose Canyon to south of La Jolla Village Drive.

The project features for this segment include:

- Nobel Drive Park-and-Ride/Bus Rapid Transit (P&R/BRT) Station.
- Nobel Direct Access Ramp (DAR) Overcrossing.
- Ramp modifications.

Stage 5: 52/805 Connector Segment

This construction segment includes the HOV Connector Ramp that links SR-52 and I-805. The project features for this segment include:

- 52/805 HOV Connector Separation.
- Median grading and pavement associated with the connector ramp

The proposed construction staging, detailed stage construction plans, number of phases and the contract limits will be determined during final design.

ADA COMPLIANCE

ADA Compliance will be followed in the design of sidewalks and pedestrian ramps.

Transportation System Management (TSM) and Transportation Demand Management (TDM) Alternatives

TSM and Multi-modal Alternatives consist of strategies to maximize efficiency of the existing facilities by providing options such as ridesharing, parking, and traffic-signal optimization. TSM options to improve traffic flow typically increase the number of vehicle trips a facility can carry without increasing the number of through lanes. This ability to increase the number of vehicle trips is often included during consideration of existing and forecast operational characteristics of a facility. Such strategies include replacing existing stop signs with traffic signals at intersections to improve existing peak hour traffic flow and to reduce queuing of vehicles. TSM also encourages automobile, public and private transit, ridesharing programs, and bicycle and pedestrian improvements as elements of a unified urban transportation system. Multi-modal alternatives integrate multiple forms of transportation modes, such as pedestrian, bicycle, automobile, rail, and transit.

TDM Alternatives focus on regional strategies for reducing the number of vehicle trips and vehicle miles traveled, as well as, increasing vehicle occupancy. It facilitates higher vehicle

occupancy or reduces traffic congestion by expanding the traveler's transportation choice in terms of travel method, travel time, travel route, travel costs, and the quality and convenience of the travel experience. Typical activities within this alternative reduce the amount of single occupancy vehicle trips by providing contract funds to regional agencies that are actively promoting ridesharing, maintaining rideshare databases and providing limited rideshare services to employers and individuals. Promoting mass transit, or by facilitating non-motorized alternative means of transportation are two such examples. TDM strategies may also include reducing the need for travel altogether through initiatives such as telecommuting. In some cases, TDM may also involve changing work schedules, with the resultant greater travel flexibility producing a more even pattern of transportation network use, muting the effect of morning and evening rush hours.

Although TSM/TDM measures alone could not satisfy the purpose and need of the project, the following TSM/TDM measures have been incorporated into the Build Alternative for this project:

- Addition of Auxiliary Lanes at three locations.
- Access to/from HOV lanes on I-805 to encourage carpooling/ridesharing.
- Compatibility with future proposed BRT (Bus Rapid Transit).
- Addition of Park and Ride lots
- Addition of transit station

No-Build Alternative

The No-Build alternative proposes no improvements to the project area. The No-Build will not alleviate the current or anticipated traffic congestion on the I-805 or accommodate multi-modal use. Because this alternative does not create additional multi-modal transportation through the corridor or maintain or improve present and future traffic conditions, it will be inconsistent with the purpose and need of this project.

PERMITS AND APPROVALS NEEDED

The following permits, reviews, and approvals will be required for project construction:

Agency	Permit/Approval	Status
United States Fish and Wildlife Service	Section 7 Consultation for Threatened and Endangered Species	Pending
United States Army Corps of Engineers	Section 404 Permit for filling or dredging waters of the United States.	Pending
California Department of Fish and Game	1602 Agreement for Streambed Alteration	Pending
Regional Water Quality Control Board	Section 401 Water Quality Certification	Pending
City of San Diego Local Coastal Permit	Coastal Development Permit	Pending
California Public Utilities Commission	Permit	Pending



Figure 2
Project Vicinity Map

Chapter 2 – Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures

This chapter explains the impacts that the project will have on the human, physical and biological environments in the project area. It describes the existing environment that could be effected by the project and potential impacts.

RESOURCES WITHOUT IMPACTS

As part of the scoping and environmental analysis conducted for the project, the following environmental issues were considered but no adverse impacts were identified. Consequently, there is no further discussion regarding these issues in this document.

Farmlands/Timberlands: There are no farmlands and/or timberlands within the project footprint.

Wild and Scenic Rivers: There are no wild and scenic designated rivers within the project footprint.

Community Character and Cohesion: The proposed project will not create impacts to adjacent communities.

Relocations: The proposed project will not require the relocation of any homes or businesses.

Hydrology/Floodplain: Although the proposed project encroaches upon existing floodplains immediately upstream from the proposed bridge widening at Carroll Canyon, it will not exceed the Federal Emergency Management Agency (FEMA) 100 year floodplain boundary. The proposed project will not impact any hydrology or floodplain values.

Parks and Recreational Facilities: There are no impacts to Parks and Recreational Facilities, for a discussion of resources evaluated relative to Section 4(f) refer to Appendix A.

HUMAN ENVIRONMENT

2.1 LAND USE

The project is located entirely within the City of San Diego. The profile of the communities adjacent to the project area reflects a well-developed urbanized environment with a diverse mix of land uses, population, housing, and transit options. There are five defined communities, Clairemont Mesa, Kearny Mesa, University, Mira Mesa, and Torrey Pines that are adjacent to the project and are analyzed as part of the Community Impact Assessment. Marine Corps Air

Station Miramar is also adjacent to the project and included in the discussion. The City of San Diego communities that are located adjacent to the project are shown in Figure 5.

2.1.1 Existing and Future Land Use

The General Plan reflects that the City of San Diego's corporate limits contain approximately 219,241 acres of land. The planned land uses for the City show that 62,692 acres are planned for park, open space, and recreation; 55,842 acres are planned for residential; 3,809 acres are planned for agriculture; 37,184 acres are planned for institutional, public and semi-public facilities; 5,475 acres are planned for commercial employment, retail, and services; 12,278 acres are planned for industrial employment; 30,495 acres are planned for roads, freeways, and transportation facilities; and, 6,932 acres are planned for water bodies not used for recreational purposes.

Existing land uses on lands adjacent to the proposed project are diverse and include residential, commercial, industrial, public and recreational facilities. Figure 6A – 6C and Figure 7A-7C show existing and planned land use in the project vicinity.

The following are planned developments in the general project vicinity.

Table 5: General Vicinity Project List

Name	Jurisdiction	Proposed Uses	Status
UTC Revitalization	City of San Diego	The project proposes to redevelop and renovate the existing 1,061,400-sq. ft. Westfield University Towne Center (UTC) regional shopping center located southeast of the intersection of La Jolla Village Drive and Genesee Avenue; north of Nobel Drive, and west of Towne Centre Drive. The proposed project will be the renovation and expansion of retail uses by 750,000 sq. ft. of new retail and the development of 250 multi-family residential units. Alternatively, the applicant could implement a mix of land use scenarios that could include a reduction in new retail and the addition of up to 725 residential dwelling units; up to 250 hotel rooms; and/or up to 35,000 sq. ft. of office space.	Necessary Mitigation for Traffic Impacts et al. /Construction FEIR approved April 2008

2.1.2 Consistency with State, Regional, and Local Plans and Programs

Regional Transportation Plan & Regional Transportation Improvement Program

The proposed project is included in SANDAG's 2030 San Diego Regional Transportation Plan: Pathways for the Future (2007 update) and 2008 Regional Transportation Improvement Program (2008 RTIP). The project is identified in the 2030 RTP on page A-5 and A-10, Revenue Constrained Plan Tables A.1 and A.2 respectively, and in the 2008 RTIP on page 38, as MPO ID: CAL78B; Title: I-805 HOV/Managed Lanes - North, with the following description: On I-805 from the I-805 /SR 52 to Sorrento Valley, on SR 52 at the I-805/SR 52 separation – preliminary engineering for future construction of managed lanes. Amendment No. 25 to the SANDAG 2008 RTIP modified the proposed project to capacity increasing, matching the description in the 2030 RTP.

A conformity determination for SANDAGs new 2008 RTIP and conformity redetermination for SANDAGs 2030 RTP was made by USDOT on November 17, 2008, and Amendment No. 25 to the SANDAG 2008 RTIP was found to be conforming to the State Implementation Plan (SIP) for air quality on August 24, 2010. The design concept and scope of the proposed project are consistent with the project description in the 2030 RTP, the 2008 RTIP, and is consistent with the assumptions in the SANDAG regional emissions analysis. The project conforms to the 2030 RTP and the 2008 RTIP.

City of San Diego Progress Guide and General Plan

The City of San Diego Progress Guide and General Plan was originally approved in 1979, updated in 1989, and in 2002 to include a new Strategic Framework Element, and most recently in March 2008 to provide a comprehensive policy framework for how the City should plan for projected growth and development over the next 20 to 30 years. According to the General Plan, there is less than 4% of vacant developable land available in the City of San Diego. Infill development and redevelopment will play an increasingly significant role in providing needed housing, jobs, and services to communities because the majority of the City is developed. The population estimate for the year 2005 was 1,305,736 according to January 1, 2005 estimated figures available from the State Department of Finance, Demographic Research. SANDAG forecasts that the population of the City in 2010 will be 1,365,130 persons.

Clairemont Mesa Community Plan

The Clairemont Mesa community planning area encompasses approximately 6,755 acres. This community lies south of SR 52, west of I-805, north of the Linda Vista community, and east of

I-5. The population of the Clairemont Mesa community planning area in 2010, as projected by SANDAG, is 80,653 persons.

The Clairemont Mesa Community Plan was originally adopted by the City Council on September 26, 1989 and was updated in 2005. The plan describes the land uses and character of the community:

Of the 6,755 acres that comprise Clairemont Mesa, 4,213 acres (or 62%) are used for housing. Clairemont Mesa is an urbanized community and for the most part is built out. Future development of the vacant residential land and redevelopment opportunities could result in an addition of 1,100 dwelling units (not including mixed-use development) totaling 33,000 dwelling units or a 3% increase over the existing. Clairemont Mesa contains several commercially zoned sites evenly distributed throughout the community. These sites comprise approximately 297 acres, of which 251 acres are developed with commercial uses, 23 acres are used for residential purposes, 19 acres contain other uses, and four acres are vacant. The combined acreage of these industrial sites is approximately 192 acres, of which 149 acres are developed with industrial uses, 30 acres are used for commercial purposes, and 12 acres are vacant. The transportation network in Clairemont Mesa consists of automobile and public transportation systems, the bicycle system and pedestrian circulation. Objectives of the Clairemont Mesa Community Plan are met by the following:

- Improve the street system as necessary to accommodate the community's growth, while minimizing adverse effects on existing residential, industrial and commercial uses and the open space system.
- Provide an efficient and high level of public transit within and surrounding the community.
- Enhance the community's image through streetscape improvements and community identification signs along major streets.
- Minimize adverse noise impacts on major streets.

Kearny Mesa Community Plan

The Kearny Mesa planning area encompasses approximately 4,000 acres and is generally bounded by SR-52 on the north, I-805 on the west, Aero Drive on the south, and I-15 on the east. SANDAG projects that the population of this community in 2010 will be 5,761 persons. The Kearny Mesa Community Plan was adopted by the City Council in 1992, and last amended in 2002. Additional community planning information is found in the Montgomery Field Master

Plan (1980, currently in the process of being updated), Stonecrest Specific Plan (1988, last amended 1996), and New Century Center Master Plan (also known as Spectrum 1997, last amended 2002).

The Kearny Mesa Community Plan assumes that the private automobile will continue to be the preferred choice for transportation in Kearny Mesa. The capacity of the roadway network to accommodate vehicular trips is the prime constraint on development intensity. Vehicular trip generations will continue to be of paramount importance when reviewing development proposals in the future. In light of this, alternative modes of transportation that supplement the automobile are considered to be of particular importance in Kearny Mesa.

University Community Plan

The University community planning area encompasses approximately 8,500 acres. The area is bounded by Los Peñasquitos Lagoon and the toe of the east-facing slopes of Sorrento Valley on the north; the railroad track, MCAS Miramar and I-805 on the east; SR-52 on the south; and, I-5, Gilman Drive, North Torrey Pines Road, La Jolla Farms, and the Pacific Ocean on the west. SANDAG projects that the population in the University community will be 58,778 persons in 2010. The University Community Plan was originally adopted by the City Council in 1987, and was last amended in 2006.

The transportation of people in the University Community is highly dependent on the private automobile. The accommodation of these private automobile trips is the key constraint on development intensity in the community. While it is expected that the private car will continue to be the principal means of transportation, it is also true that the land uses proposed by this Plan are of an intensity which could support a wide variety of transportation alternatives. The University Community Plan element also attempts to consider the components of a viable, balanced transportation system. According to the Plan provisions must be made for pedestrians, bicycles, mass transit and other systems within the community.

Mira Mesa Community Plan

The Mira Mesa community planning area is approximately 10,500 acres. It is located in the north central portion of the City of San Diego, 16 miles north of downtown San Diego, between the I-805 and I-15 corridors. I-15 provides the eastern boundary of the planning area, I-805 and the Atchison, Topeka, and Santa Fe Railroad right of way provide the western boundary. Los Peñasquitos Canyon Preserve, which is a sensitive resource of regional significance, restricts access to the north of the community. MCAS Miramar has the same effect at the southern

boundary of the community. SANDAG projects that the population in the community in 2010 will be 74,460 persons.

The Mira Mesa Community Plan was adopted on December 6, 1994 and last amended on June 19, 2001.

Mira Mesa has experienced rapid residential and industrial development. This growth has been considered problematic because the provision of public facilities and services has not kept pace with the community's population. Deficiencies in facilities have resulted in peak hour traffic congestion (particularly at community exit points).

Torrey Pines Community Plan

The Torrey Pines community planning area encompasses approximately 2,600 acres. Torrey Pines is located in the northern coastal region of the City of San Diego and is bounded by I-5 on the east, the City of Del Mar and the Pacific Ocean to the west, the City of Solana Beach to the north, and the University community to the south.

Approximately 24% of Torrey Pines is designated for residential development, one percent for commercial, 15% for industrial, 42% for parks and open space, one percent for schools, and 17% for railroad, freeways and streets. SANDAG projects that this community will be 7,099 persons in 2010.

The residential neighborhoods are situated primarily in the Del Mar Terraces and the Del Mar Heights area in the central portion of the community. Small areas of commercial development are located along two transportation corridors in the community, Del Mar Heights Road and Carmel Valley Road. Industrial development is located in the southern portion of the community within Sorrento Valley.

The Torrey Pines community faces the challenge of planning and developing a transportation system that accommodates future traffic volumes, emphasizing mass transit, without disrupting the community's unique environment and the lifestyle of its residents.

The traditional services provided by a community's traffic circulation system are internal circulation from one part of the community to another and a means of connecting the entire community to other communities. Because of its location at the northern extent of the City of San Diego and its long, thin shape, the Torrey Pines circulation system must also carry through traffic (i.e. traffic without an origin or destination within the community). The Torrey Pines community forms a long, narrow area along I-5 and I-805 through which all east-west

traffic must pass. Among the areas to be served are the city of Del Mar, the beaches, the fairgrounds-race track area and other residential areas. The uses of some of these facilities (beaches and race track) vary considerably from winter to summer and causes a seasonal variation in traffic between these time periods.

Marine Corps Air Station (MCAS) Miramar

The primary mission of MCAS Miramar is to maintain and operate the facilities, and provide services and material to support the operations of the 3rd Marine Aircraft Wing and other tenant organizations. MCAS Miramar is an exclusive Federal land use under control of the Federal government and the Marine Corps. There is no public access to the facility without permission from MCAS Miramar.

The project boundary along MCAS Miramar is the very western edge of the military base, where no structures currently exist. Military housing is located near the intersection of Miramar Road and I-15, and future housing proposed at the MCAS Miramar is not in the vicinity of the proposed project. MCAS Miramar is not included in the evaluation of the community impact assessment for the proposed project. A construction access road that will be used to access Rose Canyon runs through the Miramar Wholesale Nursery, which leases the property from MCAS. Permission from the nursery to use the access road will be obtained prior to construction activities.

Multiple Species Conservation Program (MSCP)

The City of San Diego, the County of San Diego, United States Fish and Wildlife (USFWS), the California Department of Fish and Game (CDFG), and other local jurisdictions joined together in the late 1990s to develop the 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 City adopted the MSCP Subarea Plan in March 1997 to meet the requirements of the Natural Community Conservation Program (NCCP) Act of 1991, the Federal Endangered Species Act (FESA), and the California Endangered Species Act (CESA). The Subarea Plan regulates effects on natural communities throughout the City and identifies preserve areas within the City as the Multi-Habitat Planning Area (MHPA).

Environmental Consequences

Build Alternative

The proposed project is consistent with all General and Community Plans, and Transportation Plans/ Programs. The Nobel Transit Station/DAR location is partially within the City of San Diego's MHPA. Once Caltrans acquires this parcel the land will fall under state jurisdiction and local zoning and planning designations will no longer apply. Issues related to potential biological impacts to the parcel are addressed in the Biological Section of this document.

No-Build Alternative

The No-Build Alternative proposes no improvements to I-805 North and will not provide the new transit/transportation options discussed in the Community Plans.

Avoidance, Minimization, and/or Mitigation Measures

Because the Build Alternative does not have any impacts to the existing or planned development and land uses, no mitigation is required.

2.1.3 Coastal Zone

Regulatory Setting

A small portion of the proposed project is within the coastal zone (see Figure 3-D Project Features Map for the Coastal Zone jurisdiction). The Coastal Zone Management Act of 1972 (CZMA) is the primary federal law enacted to preserve and protect coastal resources. The CZMA sets up a program under which coastal states are encouraged to develop coastal management programs. States with an approved coastal management plan are able to review federal permits and activities to determine if they are consistent with the state's management plan.

California has developed a coastal zone management plan and has enacted its own law, the California Coastal Act of 1976, to protect the coastline. The policies established by the California Coastal Act are similar to those for the CZMA. They include the protection and expansion of public access and recreation, the protection, enhancement and restoration of environmentally sensitive areas, protection of agricultural lands, the protection of scenic beauty, and the protection of property and life from coastal hazards. The California Coastal Commission (CCC) is responsible for implementation and oversight under the California Coastal Act.

Just as the federal CZMA delegates power to coastal states to develop their own coastal management plans, the California Coastal Act delegates power to local governments (15 coastal counties and 58 cities) to enact their own local coastal programs (LCPs). LCPs determine the short- and long-term use of coastal resources in their jurisdiction consistent with the California Coastal Act goals.

Affected Environment

The northern terminus of the proposed project falls within the City of San Diego Local Coastal Program Jurisdiction (LCP). Figure 3-D shows the area of the proposed project that falls within the LCP.

Environmental Consequences

Build Alternative

The proposed project falls within the LCP's jurisdiction whose boundary is approximately 500ft north of Mira Mesa Blvd. Work in this portion of the coastal zone consists of creating two additional HOV lanes by restriping the already existing pavement, a ramp realignment of the Mira Mesa northbound on ramp, and a retaining wall which will be located at the edge of shoulder along the realigned on ramp. Caltrans will coordinate with the City of San Diego to obtain a Coastal Development Permit.

No-Build Alternative

There will be no impacts to the coastal zone as a result the No-Build alternative.

Avoidance, Minimization, and/or Mitigation Measures

All work that will take place within the limits of the City of San Diego Local Coastal Program Jurisdiction is inside the State right of way. The build alternative has been designed to avoid impacts to areas outside of the right of way that fall within the coastal zone. Caltrans will coordinate with the City of San Diego to obtain a Coastal Development Permit.

2.2 GROWTH

Regulatory Setting

The Council on Environmental Quality (CEQ) regulations, which implement the National Environmental Policy Act of 1969, requires 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 secondary impacts. Secondary impacts may include changes in land use, economic vitality, and population density, which are all elements of growth.

The California Environmental Quality Act (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...”

Affected Environment

The proposed project site is located within a highly urbanized area. Transportation projects in this type of area have a relatively low potential to cause growth-related impacts because the area has little remaining development capacity. As Table 6 shows, vacant land along the I-805 north corridor is drastically decreasing. MCAS Miramar borders much of the project area and is not available for development. The amount of unplanned growth and land use changes that could occur along the corridor will be limited due to a lack of developable land.

Table 6: City and Community Developable Land

	2000 Developable Acreage	2004 Developable Acreage	2010 Developable Acreage	2020 Developable Acreage
City of San Diego	14,576.5	13,120.6	9,077.9	5,554.2
Communities				
Clairemont Mesa	38.2	102.7	68.2	35.7
Kearny Mesa	287	203.6	120.4	58
University	537.2	410.6	194.2	95.1
Mira Mesa	846.4	878.1	593.7	337
Torrey Pines	37	52.6	49.9	27.7

Source: SANDAG Data warehouse, Land Use data, <http://datawarehouse.sandag.org>.

Environmental Consequences

Build Alternative

Consideration of factors including changes in accessibility, project location, nearby land uses and constraints to further growth lead to the conclusion that there is little or no potential to

influence growth or introduce growth-related impacts. The proposed project will not influence the overall amount, type, location, or timing of reasonably foreseeable growth in the project area.

No Build Alternative

The No Build alternative will not influence growth or cause growth related impacts. No further infrastructure will be provided that could result in growth or growth related impacts.

Avoidance, Minimization, and/or Mitigation Measures

No measures are required since the proposed project will not be expected to influence the overall amount, type, location or timing of reasonably foreseeable growth.

2.3 ENVIRONMENTAL JUSTICE

Regulatory Setting

All projects involving a federal action (funding, permit, or land) must comply with Executive Order (EO) 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, signed by President Clinton on February 11, 1994. This Executive Order directs federal agencies to take the appropriate and necessary steps to identify and address disproportionately high and adverse effects of federal projects on the health or environment of minority and low-income populations to the greatest extent practicable and permitted by law. Low income is defined based on the Department of Health and Human Services poverty guidelines. For 2009, this was \$22,050 for a family of four.

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

Affected Environment

There is an increasing proportion of Hispanic and other minority populations in San Diego. Nearly 80% of the total population increase in the region between 2000 and 2004 has been Hispanic. Of the ethnic groups represented in the 2000 Census, Hispanics experienced the highest growth (20%), followed by "Other" (18%), and Asian and Pacific Islanders (15%). Non-Hispanic Whites were the only group to experience negative population growth in San Diego.

The percentage breakdown of ethnicity at the Region and City level are similar; for example, the majority ethnic group being White (over 50%), followed by Hispanic (approximately 25%), then Some Other Race (around 13%). The Asian ethnic group is slightly larger at the City level (14%) while at the regional level this group makes up 9% of the population. All other ethnicities at the City and Region level make up 10% or less each.

The census tracts within the study area are equally diverse, as compared to the City and regional ethnicity percentages. Within the census tracts the majority group is White (over 50 %) Asian and Hispanic populations made up the second highest ethnic groups in the census tracts, between 17 and 37%. All other races make up less than 6% by group within the study area.

Environmental Consequences

Build Alternative

The project will include a Value Pricing Program. Value pricing allows the ability to manage any available capacity of managed lanes by allowing SOVs to pay to use the lanes. Current legislation (Assembly Bill 2032) exists for this project to allow for excess capacity to be sold on the HOV lanes as long as a LOS C or better is maintained on the Managed Lanes.

The value pricing program proposed for I-805 North will be similar to those on I-15 Managed Lanes and as proposed for I-5. Value pricing studies were conducted for both the I-15 Managed Lanes and the I-5 projects. These studies included public outreach, public meetings, mailers, and telephone surveys. Both negative and positive sentiments were equally distributed throughout all income and ethnic groups. Some respondents believed that the costs of the toll represented a significant barrier to public use of the value pricing program; however, this sentiment was not isolated to low income or minority populations and was spread through all segments of the populations surveyed. Most respondents did not associate a lack of fairness or equity with the value pricing program. They considered the extension of the value pricing program to be fair to both the users of the HOV lanes and the general purpose lanes. No identifiable pattern of opinions and attitudes based on ethnicity or income was found.

The proposed project, with the inclusion of the value pricing program, will not cause disproportionately high and adverse effects on any minority or low-income populations as discussed in EO 12898 regarding environmental justice. The addition of transit options and overall improvement of the flow of traffic will be beneficial to all users, in both the general

purpose and managed lanes. In addition, a percentage of the money collected from SOV users will go back in to the regional system, benefiting all users in the region.

No Build Alternative

The No Build alternative will not result in any disproportionately high and adverse effects on any minority or low-income populations as discussed in EO 12898 regarding environmental justice.

Avoidance, Minimization, and/or Mitigation Measures

The project will not result in any disproportionately high and adverse effects on any minority or low-income populations, and therefore no avoidance, minimization, and/or mitigation measures are required.

2.4 UTILITIES/EMERGENCY SERVICES

Affected Environment

There are several Utilities located within the project area that may need to be relocated. These include gas and electric lines owned by San Diego Gas and Electric (SDG&E), telephone lines owned by AT&T and MCI, cable lines owned by Time Warner and TelePacific, fiber optic lines owned by Qualcomm and water and sewer lines owned by the City of San Diego.

Environmental Consequences

Build Alternative

Several Utilities within the corridor will need to be relocated due to the construction of the HOV lanes, ramp realignments and bridge widening. A complete list of utilities can be found in Appendix F. The majority of relocations will be minor utility relocations that will occur within existing state right-of-way. These relocations will not create any additional environmental impacts.

Although not a relocation, the bridge widening at the Rose Canyon Bridge will require the temporary deactivation of two 69Kv electrical lines that run under the bridge. One line runs along the north and the other along the south side of Rose Canyon. In order to maintain service throughout construction, the electrical line along the north side of the canyon will be deactivated for approximately five months while one half of the bridge is widened. Once reactivated, the line on the south side of the canyon will be deactivated, for another five months so that the bridge widening could be completed. In order to maintain service to the area, SDG&E has requested that the lines remain active from June through October to ensure continuous service to

customers during months of heavy energy usage. In addition to the 69kv line, a 30" gas line that runs just south of Governor Drive may potentially need to be relocated.

No long term impacts to emergency services are anticipated from the project, but temporary delays could occur from the construction activities along the I-805.

No Build Alternative

No utility conflicts or impacts to emergency services will result from the No Build Alternative.

Avoidance, Minimization, and/or Mitigation Measures

Any required relocations or protection measures will be coordinated with the utility owners during the design process. The City of San Diego, SDG&E, AT&T, MCI, Time Warner, Qualcomm and TelePacific have utility facilities located within the project limits. Most utility companies affected by the project will design and construct their own relocation of utilities. In addition ongoing and continuing coordination with PUC will occur on all transmission lines exceeding 50 KV, per Public Utilities Commission (PUC) General Order 131-D.

Impacts to emergency services during construction will be minimized by the implementation of a Transportation Management Plan (TMP). The TMP may include the following strategies:

- A public awareness campaign prior to and during construction.
- Motorist information strategies, including changeable message signs, and ground mounted signs.
- Incident Management elements including Construction Zone Enhanced Enforcement Program (COZEEP) to provide police assistance and surveillance, and the Freeway Service Patrol and Traffic Management Team (TMT) to provide towing and assistance to motorists during breakdowns.

2.5 TRAFFIC AND TRANSPORTATION

Affected Environment

An Existing Conditions and Traffic Operations Analysis Report (June 2009) was prepared to analyze the existing and future traffic conditions in the project area. The 2006 Existing Traffic Conditions are shown in Figures 8-A to 8-B. The traffic study analyzed objective, quantifiable criteria to evaluate the performance of the transportation system and to determine how well the

planned improvements to the system will achieve the established objectives. As part of this study, traffic volumes were developed for the following five traffic scenarios using the SANDAG Series 11 Transportation Model:

- Existing 2006
- Year 2020 No Build
- Year 2020 Build
- Year 2030 No Build
- Year 2030 Build

The existing level of service (LOS) on I-805 in the northbound AM peak travel hour between SR-52 and the Governor Drive on ramp is F, and E between Governor Drive and Nobel Drive. All other segments currently operate at LOS D or better in both the AM and PM peak hours. In the southbound PM peak travel hour, the Miramar on ramp to the Governor Drive off ramp currently operates at LOS E, LOS F between the Governor Drive off ramp and the Governor Drive on ramp, and LOS E between the Governor Drive on ramp and the SR-52 eastbound/westbound off ramp. All other segments operate at a LOS D or better in the PM peak travel direction.

Currently, I-805 daily total freeway volumes vary between 158,100 and 222,400 Average Daily Traffic (ADT) south of La Jolla Village Drive and 123,100 and 190,800 ADT north of La Jolla Village Drive. Daily arterial ramp volumes vary between 3,800 (SB off ramp from Governor Drive) and 26,000 ADT (SB on ramp from Mira Mesa Blvd).

Environmental Consequences

Build Alternative

The 2020 and 2030 Build and No-Build Traffic Analysis Conditions are shown in Figures 8-C to 8-J. Traffic Volumes, are shown in Table 7: Traffic Volume Summary. The managed lanes combined with the BRT and HOV result in 2020 and 2030 Build Conditions that increase person trips in the corridor when compared to the 2020 and 2030 No-Build scenarios. The increase in person trips indicates that the I-805 North Project is shifting trips from the general purpose lanes to the new High Occupancy Vehicle/Managed lanes facilities and allows for more total trips. This modal shift is increasing the total number of person trips on this facility due to the increase in occupancy rate from the HOV/ML facilities.

Table 7: Traffic Volume Summary

	From	To	2006 Existing Peak	2020 No Build ADT	2020 Build ADT	2030 No Build ADT	2030 Build ADT
I-805 NB AM	Clairemont CD NB On ramp	Clairemont WB On ramp	85,500	89,000	91,600	100,500	87,900
	Clairemont WB On ramp	SR-52 Ingress/Egress			102,200		98,600
	SR-52 Ingress/Egress	SR-52 EB/WB Off ramp	94,600	99,500	90,800	111,100	100,600
	SR-52 EB/WB Off ramp	SR-52 EB On ramp	77,600	78,600	70,000	88,800	78,400
	SR-52 EB On ramp	SR-52 WB On ramp	85,200	86,300	77,700	96,600	86,300
	SR-52 WB On ramp	Governor Off ramp	114,500	121,000	112,800	132,800	116,300
	Governor Off ramp	Governor On ramp	108,400	114,700	90,800	126,300	104,200
	Governor On ramp	Nobel Off ramp	112,600	118,900	97,300	130,700	112,700
	Nobel Off ramp	Miramar Off ramp	100,100	106,100	86,600	117,600	100,800
	Miramar Off ramp	Miramar EB On ramp	79,700	84,900	66,400	95,900	77,400
	Miramar EB On ramp	Miramar WB On ramp		95,800	76,700	107,000	88,000
	Miramar WB On ramp	Mira Mesa Off ramp	98,100	103,900	93,200	115,300	105,700
	Mira Mesa Off ramp	Vista Sorrento HOV Ingress		78,800	70,100	90,000	80,800
	Vista Sorrento HOV Ingress	Vista Sorrento Off ramp	73,500	69,000	69,200	78,800	80,100
	Vista Sorrento Off ramp	Vista Sorrento On ramp	61,900	57,100	58,300	66,900	68,300
	Vista Sorrento On ramp	SR-56 Bypass Off ramp	74,400	75,400	77,800	85,900	90,600
SR-56 Bypass Off ramp	I-5 Merge	52,000	40,100	42,500	45,400	48,800	
I-805 SB PM	I-5 Split	SR-56 Bypass On ramp	45,000	41,100	40,600	46,300	49,300
	SR-56 Bypass On ramp	Mira Mesa Off ramp	74,200	78,600	77,500	91,200	93,000
	Mira Mesa Off ramp	Mira Mesa WB On ramp	61,200	60,100	57,400	71,800	71,600
	Mira Mesa WB On ramp	Mira Mesa EB On ramp	87,200	78,800	77,100	90,600	93,500
	Mira Mesa EB On ramp	Miramar Off ramp	92,700	102,200	93,900	116,600	111,500
	Miramar Off ramp	Miramar WB On ramp	74,300	83,300	69,700	97,200	84,700
	Miramar WB On ramp	Miramar EB On ramp		94,800	79,400	108,900	95,900
	Miramar EB On ramp	Nobel On ramp	95,800	105,300	90,300	119,700	108,400
	Nobel On ramp	Governor Off ramp	104,800	114,600	111,800	129,200	124,200
	Governor Off ramp	Governor On ramp	101,000	110,800	106,500	125,200	115,200
	Governor On ramp	SR-52 EB/WB Off Ramp	107,900	117,900	113,400	132,400	122,700
	SR-52 EB/WB Off Ramp	SR-52 WB On ramp	77,400	81,800	73,600	93,200	83,600
	SR-52 WB On ramp	SR-52 EB On ramp	80,500	85,500	77,400	97,100	87,500
	SR-52 EB On ramp	SR-52 Ingress/Egress	95,000	100,400	93,000	113,300	104,600

CD: collector distributor

In addition to pushing more trips through the corridor, travel times are reduced under 2020 Build and 2030 Build Conditions when compared to 2020 No-Build and 2030 No-Build Conditions. The 2020 Build scenario shows savings in the AM peak period of 30 to 45 seconds on the general purpose lanes, and 1 minute and 45 seconds to 2 minutes if using the carpool lane. For

the PM peak period savings of 45 seconds to 1 minute will occur in the general purpose lanes and savings of 3 minutes and 15 seconds for carpool users. Similar savings will occur in 2030 while allowing more person trips to occur within the corridor due to additional capacity and travel options. These reduced travel times on the general purpose lanes indicate that the I-805 North Project is shifting trips from the general purpose lanes to the HOV/ML lanes thus creating reduced travel times on all lanes.

The main lanes of I-805 will have the same number of freeway lanes during peak hours as currently exist. Therefore, additional delays during peak times due to construction on the main freeway lanes will be minimal. Delays may occur on the main lanes during nighttime work when lane closures are implemented. Complete freeway closures if required will generally occur on weekdays and weekends during the late night/early morning hours. The specific hours for lane and freeway closures will be determined during final design. Portions of the entire corridor are expected to be under construction from 2013 to 2020.

Construction delays may be experienced at local street interchanges due to bridge widening and ramp realignments. Each interchange will be under construction for a period between 12 and 24 months.

Avoidance, Minimization, and/or Mitigation Measures

A Transportation Management Plan (TMP) will be prepared for the proposed project. The objective of a TMP is to maintain the safe movement of vehicles through the construction zone, as well as to provide the highest level of traffic flow and access during construction periods. These measures will also aid in the avoidance of substantial social and economic impacts.

The preliminary TMP elements that were recommended are:

A Public Awareness Campaign will notify the public about the project and its impacts through brochures, press releases, advertising, public meetings/speakers bureau, construction bulletins and the District's Website (<http://www.dot.ca.gov/dist11/>).

Motorist Information Strategies will include portable Changeable Message Signs (CMS), ground mounted signs and the use of Web cameras. These strategies provide the current road conditions and will enable the motorist to make informed decisions about their own travel plans and the options they have for alternative routes.

Incident Management elements include the Construction Zone Enhanced Enforcement Program (COZEEP), the Freeway Service Patrol (FSP) and the Traffic Management Team (TMT).

Implementation of these elements will identify incidents that occur within the construction area and provide corrective action in a timely manner.

COZEEP provides California Highway Patrol (CHP) assistance and surveillance within construction areas. This can allow enforcement of speed limits and provide emergency response support within the work zones.

The Freeway Service Patrol provides towing service and assistance to motorists during vehicle breakdowns.

The TMT will be involved in the planning and coordinating of major lane or freeway closures. They can also help evaluate signs for detours and provide advance warning to motorists in case of an accident or non-recurring congestion.

The purpose of demand management is to reduce traffic volumes within the construction zones. Demand management techniques include promoting variable work hours to vary peak travel times; installing temporary ramp meters and/ or modifying existing ramp meters to control the volumes entering the freeway within the construction zones.

2.6 VISUAL/AESTHETICS

Regulatory Setting

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

Likewise, the California Environmental Quality Act (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])

Affected Environment

A Visual Impact Report (March 2009) was prepared to assess the potential visual impacts of the proposed project and to propose measures to offset visual impacts associated with the construction of the project on the surrounding visual environment. It is incorporated into this document by reference.

This project is located in an area that is highly disturbed, highly developed, and impacted by roadways, and landscaping. The project viewshed is illustrated in Figure 9. Views from within the project area vary. In the southern portion of the project area views are open toward the north and east, but diminish due to a change in topography as one approaches Nobel Drive. From Nobel Drive north through the Eastgate Mall area, views are limited to either the foreground or midground due to topography and existing built elements. The Sorrento Valley area offers limited views of the immediate valley. Views toward the west are typically limited to the foreground or the midground as residential and commercial development is present along the I-805 in most places. Distant views are very apparent when traveling the corridor. The extended views of the low mountaintops to the east comprise naturally tree-less hilltops that create an abrupt edge against the sky. There are limited extended views to the west available only where canyon valleys are present and allow visibility beyond the residential developments at the edge of the canyons. Where canyons are not present along the west edge, views are interrupted by residential developments with direct view of houses or sloped landscape areas.

Existing Visual Character

The existing visual character of the project area is a combination of natural and built elements, with a mix of typical suburban development amidst a once rural mesa top. The canyons located between the residential developments break the consistency of the development along the western edge providing visual relief and character to the corridor. Along the eastern edge, very little development is present or highly visible from the roadway, and is comprised mostly of manufactured slopes (foreground), rolling grasslands (midground), and built developments and mountaintops (far distance). Overall, the existing visual character can be considered suburban bordering rural open space.

Existing Visual Quality

Visual quality is evaluated by identifying the vividness, intactness, and unity present in the viewshed.

Vividness is the visual power or memorability of the landscape components as they combine in distinctive visual patterns. The project setting expresses a moderately high degree of vividness as a result of the distant views within the project viewshed.

Intactness is the visual integrity of the landscape and its autonomy from encroaching elements. At present there are two distinct parts to the landscape, the mostly natural canyons and built environment. Few views within the project area give one extended views with high clarity beyond the foreground. Most views are distracted by the presence of manufactured slopes built with the roadway, tall utility towers and power lines in the foreground. The visual integrity of the project area is considered to be moderately low.

Unity is the visual coherence and compositional harmony of the landscape considered as a whole. It frequently attests to the careful design of individual components in the landscape. The compositional integrity, or unity, is moderately low. Views are disrupted by the man-made elements in the project area. The distracting elements include, utility towers, power lines, manufactured slopes, the I-805 roadway, and businesses that line the corridor.

Existing Viewer Groups, Viewer Exposure, and Viewer Awareness

Viewer exposure within the project site varies. The majority of viewers travel at high rates of speed, and will likely see the proposed structures from a distance away, giving them longer durations, several seconds at a time, to view these elements. The lesser number of viewers are motorists, bicyclists or pedestrians that travel City streets which traverse across the project corridor at slower speeds, and the adjacent residents that are stationary in locations with even longer exposure times, and have high exposure times and high sensitivity to the proposed roadway improvements.

Drivers and passengers in vehicles traveling on I-805 will be the largest group of viewers subject to the project impacts. Although they will be aware of the general regional context through which they are traveling, they typically cannot concentrate on the view in much detail due to the typically busy traffic conditions. Therefore, the exposure rating for this group is considered to be moderate.

Viewers from adjacent neighborhoods and commercial areas observe I-805 in longer durations, and with more intensity and concentration than those traveling in vehicles. Although they are typically farther removed from the project site, these viewers are the most likely group to perceive visual impacts. The exposure rating for this group is considered to be moderately high.

Viewers traveling in vehicles on city surface streets typically will stop at traffic lights, stop signs, or on ramp metering lights when within the project area. This leads to prolonged views and a moderate exposure rating.

Viewers riding in commuter trains that cross the project site at Rose Canyon or Carroll Canyon will have limited views of the project area. The exposure rating for this group is low due to their speed of travel and limited viewing ability.

Pedestrians and bicyclists traveling the project area via city streets have the most sensitivity to the visual affects of the project. Their exposure rating is considered to be moderately high.

Viewer Response

Viewer response is a combination of viewer sensitivity and viewer exposure. For the purposes of this project, viewer sensitivity is defined as the viewer's observation and understanding of the existing suburban visual conditions, combined with an acknowledgement of the importance of preserving and enhancing the regional visual context as expressed in the City of San Diego Community Plans. The viewer sensitivity is considered to be moderately high.

Environmental Consequences

Definition of Visual Impact Levels

Low (L) – Minor adverse change to the existing visual resource, with low viewer response to change in the visual environment. May or may not require abatement measures. Numerical designation: 1

Moderately Low (ML) – Low adverse change to the visual resource with a moderate viewer response, or moderate negative change to the resource with a low viewer response. Impact can be offset using conventional practices. Numerical designation: 2.

Moderate – Moderate adverse change to the visual resource with moderate viewer response. Impact can be offset within five years using conventional practices.
Numerical designation: 3

Moderately High – Moderate adverse visual resource change with high viewer response or high adverse visual resource change with moderate viewer response. Extraordinary abatement measures may be required. Landscape treatment required will generally take longer than five years to minimize. Numerical designation: 4

High – A high level of adverse change to the resource or a high level of viewer response to visual change such that architectural design and landscape treatment cannot offset the impacts.

Viewer response level is high. An alternative project design may be required to avoid highly adverse impacts. Numerical designation: 5

Build Alternative

Because it is not feasible to analyze all the views in which the proposed project will be seen, it is necessary to select a number of key viewpoints that will clearly display the visual effects of the project. Key views generally represent the primary viewer groups that will potentially be affected by the project. Figure 9 illustrates key view locations.

Key Views

Key View 1 – SR-52 Westbound at the I-805 Interchange

This key view (Figure 10-A to 10-B) illustrates the existing view from SR-52 westbound toward the SR-52 / I-805 interchange. Traveling westward on the SR-52 corridor one experiences a transition from an open landscape to a more suburban area bordering a natural canyon. The viewer will perceive a change from the open native landscape to a denser riparian landscape. The freeway landscaping is graded slopes covered by native shrubs which ultimately transitions to a riparian environment at lower elevations. The tops of trees extend above the roadway edges providing a vertical element that mildly contrasts with the ground plane yet reduces the apparent size of the freeway elements to a suburban scale.

The project will widen the existing roadway within the existing right-of-way to accommodate managed lanes in the median. Bridge structures will be widened, off ramps and loops realigned, and a connector bridge constructed to connect the east side of the SR-52 freeway median to the north side of the I-805 freeway median (figure 10-B).

Thousands will experience this view of the project each day for several seconds while traveling the freeway at high rates of speed. Given this, the viewer exposure will be moderate (2.7) as motorists will view the proposed improvements in their fore to mid-ground views. Viewer sensitivity will be moderate (2.7), as viewers will be more focused on the roadway than the view. Overall, viewer response will be moderate (2.7 on a scale of 1 to 5).

Key view 2 – Overlooking the I-805 / SR-52 Interchange from Private Residence

This key view (Figure 11-A & 11-B) illustrates the existing eastward view overlooking SR-52 / I-805 interchange and represents the viewing group who live in the vicinity of the SR-52/I-805. This is a representative view from private residences located along the top edges of the mesas near the SR-52/I-805 interchange. A clear view of the existing landscape and roadway elements in the foreground is typical. The viewpoint contains the SR-52 / I-805 connector as it

traverses from left to center in the view and drops away toward the east to connect with SR-52 alignment. The view is a conflicting scene of natural landscape imposed on by man-made built structures. The existing freeway bisects the view's mid-ground leaving remnants of the native landscape in the immediate foreground and mid to background portions of the view. Extended views to mountaintops in the distance are of high value. However, the buildings to the right mid-ground and distant center of the view slightly detract from the quality of the scene. Utility lines that cross the view are also a distraction.

The proposed project will widen I-805 to the east and west of its center alignment, realign on ramps to connect to the widened lanes, and construct a new connector bridge structure from the I-805 roadway median at the left of the existing view to the SR-52 median to the east (away from viewpoint). The connector bridge structure is visible in figure 11-B, traversing the view from the left and descending away from the viewer to the right-center of the view.

Although a low number of people will experience this view, their exposure will be for long periods with focused attention to the view. Viewer sensitivity will be high (4.7) these viewers will be keenly aware of the elements in the view. The viewer exposure will be moderately high (3.7) as the proposed improvements will be in their mid to foreground views.

Key view 3 – Governor Drive Southbound Off Ramp

This key view (Figure 12-A & 12-B) is a southerly view from the middle of the existing southbound off ramp at Governor Drive, traveling parallel to the existing sloped berm with residences located beyond. This key view is representative of the visual character and quality of freeway views adjacent to residential neighborhoods.

This exit is a primary access point to the southeastern corner of the University City Community for motorists traveling in a southbound direction on I-805. Motorists exiting here will perceive a continuation of the freeway landscaping along the off ramp until stopping at the Governor Drive intersection. The freeway landscaping is a manufactured berm with 2:1 slopes covered with ornamental groundcover and tall columnar trees separating the roadway from the adjacent residences at the right side of the roadway. To the left side of the view, bare soil is visible in the immediate foreground with taller shrubs and trees in the midground. The existing landscape has a natural suburban character.

Vividness is moderate as the landscape and built elements are simplistic. Intactness is moderately high as there are few distractions in the view. Unity is moderately high as the view is

a composition of man-made landscape elements. Combining vividness, unity and intactness, the resulting overall visual quality can be defined as moderately high (3.7 on a scale of 1 to 5).

The project will realign and widen the off ramp further to the west of its present location. The existing manufactured berm will be replaced with a wall located approximately 18-20ft from the edge of the proposed roadway. The wall will vary in height from 8ft to 12ft. A concrete barrier is proposed at the edge of the off ramp paving to protect the proposed landscaping. Drought tolerant shrubs and trees will be installed between the barrier and noise wall. A new I-805 southbound loop on ramp will be constructed and is located at the left middle of the view, but is not visible due to grading and landscape in the foreground.

The permanent removal of the landscaped berm will result in the loss of a natural buffer between the residences and the roadway. The removal of the trees will result in the loss of skyline articulation. The project will introduce more dominant roadway features typically found in urban areas, including a wider off ramp, concrete barrier, and tall noise wall, that will contrast with the existing landscape and character of the adjacent neighborhood. Community preferences for development improvements along freeways include the use of setbacks and elevation changes rather than solid walls for noise mitigation. Site sensitive wall designs with landscaped berms are also preferred. The change to existing visual character will decrease the vividness of the existing view to a moderately low (2.0) rating. Intactness will be slightly reduced to a moderately low (2.0) rating. Unity will decrease to a moderately low (2.0) rating. The change to the existing visual character will be high

Motorists exiting the freeway will experience this view of the project each day. Viewer sensitivity is anticipated to be moderately high (3.3) due to the high visibility of the project features. Viewer exposure will be moderate (2.7), as motorists will be focused on the immediate view for several seconds at a time. Overall viewer response is moderate (3.0).

Key view 4 – Approaching Governor Drive Exit

This key view (Figure 13-A & 13-B) shows the I-805 number four southbound lane approaching the Governor Drive exit. This is a typical view of the landscape for freeway motorists traveling in a southbound direction adjacent to residential neighborhoods nearing the Governor Drive exit. The freeway landscape is a 20-foot tall manufactured berm with 2:1 slopes covered with ornamental groundcover and randomly placed columnar trees to the right of the view. The roadway is the dominant element with distant views toward open space visible at the left of the view. The existing landscape has a suburban character and is representative of the visual character and quality of this transportation corridor adjacent to residential neighborhoods.

Vividness is moderate (3.0) due to the lack of striking landscape features. Intactness is moderately low (2.0) as the view is distracted by utility towers, power lines, and roadway signs. Unity is moderately high (4.0) due to the harmonious pattern of landscape and man-made elements in the view. Averaging the vividness, unity and intactness, results in an overall visual quality of moderate (3.0 on a scale of 1 to 5).

The project proposes to relocate the noise berm further to the west from its present location. The berm will be landscaped with shrubs and trees. Retaining walls will be constructed in fill locations where support of the widened roadway is required. A continuous concrete barrier will be built in the median and above retaining walls at roadway level. Grading improvements will include filling the low point between the existing residences and the new berm location.

A high number of viewers will experience this view of the project each day for several seconds when traveling the freeway at high rates of speed. Viewer exposure will be moderate (3.3) as motorists will view the proposed improvements in their mid to foreground views. Viewer sensitivity will be moderately low (2.3), as viewers will be focused on the roadway. Additionally, several resident viewers will view the project for hours at a time. Overall viewer response will be moderate.

Key view 5 – Nobel Drive DAR location

This key view (Figure 14-A & 14-B) illustrates the existing view from the shoulder of the southbound I-805 lanes toward the location of the proposed Nobel Drive Direct Access Ramp and bridge structure to provide access to the proposed Nobel BRT station. This is a typical view motorists experience when traveling the freeway in a southbound direction just south of the Nobel Drive interchange. The freeway landscape is comprised of manufactured slopes of various gradients to either side of the roadway and covered with ornamental groundcover and randomly placed columnar trees. The roadway is the dominant element in the view with distant views toward the east (left) and midground views toward the west (right). The existing landscape has a suburban character and quality that is representative of the regional transportation corridor landscaping found in the University community. The existing view shows four lanes of travel in each direction, separated by guardrails at the median.

The project will widen I-805 for the addition of the managed lanes, DAR structure, and bridge connector to the Nobel BRT station. Retaining walls will be constructed in fill locations where support of the widened roadway is required. A continuous concrete barrier will be built at the median and above retaining walls at roadway level. Landscaping along the outer edges of the roadway will consist of native plantings with drought tolerant trees.

A high number of viewers will experience this view of the project each day for several seconds when traveling the freeway at high rates of speed. Viewer exposure will be moderately high (3.7) as motorists will view the proposed improvements in their mid to foreground views. Viewer sensitivity will be moderate (3.3). Although focused on the roadway, motorists will be acutely aware of the DAR structure. Overall viewer response will be moderately high (3.5).

Key view 6 – Eastgate Mall Bridge

This key view (Figure 15-A & 15-B) illustrates the existing view from the northbound on ramp from the La Jolla Village Drive / Miramar Road interchange toward the Eastgate Mall Bridge. This is a typical view of the landscape for freeway motorists traveling in a northbound direction approaching the Eastgate Mall Bridge. The view is comprised of large-scaled elements including 2:1 slopes, the bridge structure and roadway. The bridge is the more dominant form in the composition of pattern elements creating a focal point in the view. The bridge is framed in the view by the roadway below, the landscape at both sides, and blue sky above. The existing landscape has a unique monumental scale unlike other standard freeway landscapes, yet retains a suburban character representative of the visual character and quality of this transportation corridor.

The project will widen the roadway at both edges, add managed lanes at the center of the alignment separated by a concrete barrier, and place retaining walls at the foot of the bridge abutment. Grading of slopes at both edges of the road will be required to accommodate the wider roadway. In this view the Carroll Canyon DAR lanes will begin separating from the standard and bypass lanes, descending toward the proposed Carroll Canyon Road extension below.

A high number of viewers will experience this view of the project each day for several seconds when traveling the freeway at medium to high rates of speed. Viewer exposure will be moderate (3.0) as motorists will view the proposed improvements in their mid to foreground views. Viewer sensitivity will be moderate (3.0) as viewers will be focused on the roadway yet very aware of the bridge's presence. Overall viewer response is moderate (3.0 on a scale of 1 to 5).

No Build Alternative

No visual impacts or improvements will result from the No Build Alternative.

Avoidance, Minimization, and/or Mitigation Measures

The landscape design provides a transition from each of the existing land uses along the I-805 project area. The goal of the design is to provide an attractive setting requiring a minimum of maintenance and water use. All visual measures will be designed and implemented with the concurrence of the District Landscape Architect.

To attain the visual goals, and reduce visual impact, the landscape design may include the following specific elements and recommendations:

Corridor Theme (Diegan Coastal Sage Scrub Vegetation) consists primarily of replacement plantings on freeway slopes that transition from edges of roadway to the edge of the Caltrans right of way. The intent is to provide a select mix of 3-4 California native shrubs planted on all exposed slopes. These container plants will be over seeded with a California natives hydroseed mix to assist with erosion control and establishment of slopes. Trees will generally be planted on slopes to provide visual interest and vertical elements along the corridor. The corridor theme will include the following:

- Native California trees such as oaks and pines will be planted near the middle of cut slopes (at least 30ft from traveled way) in grouped clusters. Trees will not be placed near the tops of cut slopes where vertical forms will diminish easterly views from neighborhoods and commercial properties.
- Native shrubs will be used on all disturbed slopes adjacent to natural areas. Native landscape plantings will be provided on short slopes and at the base of walls at either side of wall structures. Native plantings may include shrubs, groundcover, and trees.
- Open views to the east will be preserved by minimal tree planting at the base of fill slopes. Native shrub plantings will be used in these locations.
- Wildflower groundcover will be planted intermittently along the edges of the freeway corridor to add seasonal accent color and for compliance with Federal funding requirements.
- Drought tolerant ornamental trees, such as eucalyptus, will be planted at the vicinity of the structures to help visually diminish the scale.
- Riparian tree species, such as sycamores, will be planted where possible in the lowest areas to enhance the low valleys that cross the project and provide for a greater diversity of native tree species.

Landscape Themes

At interchanges themed landscape solutions will be used to transition to the intersecting roadways. Sloped areas along the on and off ramps or loops will be comprised of drought tolerant and/or native trees, shrubs and groundcovers to provide accent and enhance the entry to the community. Trees and landscaping can serve as gateways to the local community, giving travelers a sense of arrival.

I-805 / SR-52 Interchange

The existing native and drought-tolerant plantings in the interchange form a cohesive theme that transitions to the riparian landscape at the bottom of the valley. A majority of the new landscape improvements at this interchange will consist of repair plantings at roadway reconfigurations and bridge widening locations. Oaks will be planted on slopes and spaced a minimum of 30 feet from traveled way to provide interest along the corridor. Sycamores will be planted at the lowest elevations of fill slopes in swales or valleys comparable to natural drainage ways where sycamores might naturally be found. A variety of native shrubs may be planted in container plantings to form massings of shrub areas that will require less maintenance and little water after plant establishment watering periods.

Governor Drive Interchange

The use of eucalyptus trees at this intersection will provide an identifiable entry statement to the neighborhood. A mixed palette of drought-tolerant shrub and groundcover varieties will also be used within these planting areas to contrast with the trees, and unify the interchange theme.

Nobel Drive Interchange

Replacement trees will be planted along on and off ramps to maintain a consistent theme within the interchange area. Trees will also be planted along the streetscape to create an identifiable theme along Nobel Drive. Native shrubs and existing groundcover in the interchange areas will likely be retained as part of the planting improvements.

La Jolla Village Drive / Miramar Road Interchange

Landscape improvements will be designed as part of the La Jolla Village Drive project and is not included as part of the I-805 widening project.

Sorrento Valley Road / Mira Mesa Boulevard Interchange

The interchange will consist of Torrey pines, sycamores, and oak trees. The sycamores will be located at the lowest elevations near edges of proposed bio-swales and detention basins.

The Sorrento Valley Road / Carroll Canyon Road Extension

Landscape improvements will be designed as part of the Carroll Canyon Road Extension project and is not included as part of the I-805 widening project.

Nobel BRT Station

The BRT station will be landscaped with drought tolerant and native plant species. Trees and shrubs will be provided for shade and screening of parked vehicles fronting Nobel Drive. The landscaping will be compatible with local development requirements.

Proposed Noise Barriers

Noise barriers will be constructed as part of the project to abate noise levels at specific locations. Noise barriers will have varying degrees of visual impact on the surrounding viewshed. These impacts will be reduced by mitigation measures to be installed as part of the project construction. The section below outlines typical goals for noise barrier mitigation measures.

- Use berms in place of noise walls wherever possible, such as along the west side of the freeway approaching Governor Drive. The existing berm at this location will be relocated further to the west where space allows.
- Texture and color of walls will blend with surrounding landscape and indigenous soils.
- Provide screening of walls with tree, shrub, and vine plantings.
- Employ measures to minimize graffiti, such as tree, shrub and vine plantings on walls.
- Use transparent barriers when possible to preserve views from homes immediately adjacent to or that overlook the freeway at several locations near the I-805 / SR-52 interchange.

Landscaped Noise Berms

Landscaped noise berms will be constructed wherever possible as a preferred solution to noise walls. Berms are visually compatible with most land uses adjacent to the freeway. As part of the improvements approaching the Governor Drive southbound exit, a landscaped berm is proposed for the west side of the freeway, beginning about 1000ft south of the Rose Canyon undercrossing and continuing south to the Governor Drive exit where it transitions to a combination noise berm/wall, and then to standard sound wall along the exit ramp.

Noise Berm / Wall Combination

Approaching the Governor Drive southbound off ramp, the proposed improvements along the westerly side of the roadway include a noise berm/noise wall combination. Both alternatives one and two include this feature. Alternative one includes approximately 250 ft of this combo berm/barrier feature, transitioning at the south end to a noise wall and at the north to a planted noise berm. Alternative two includes about 1050 ft of this feature type transitioning to a noise wall at the south cut slope to the north nearest the Rose Canyon Bridge.

Noise Wall with Landscaped Buffer

Noise walls may be combined with landscaping located between the wall and roadway improvements to provide a visual buffer. Landscape shrubs can be planted along the base of the wall to visually shorten the amount of wall exposed to the viewer. At Governor Drive, the area in front of the proposed noise walls will be planted with a combination of trees, large shrubs, groundcover, and vines to provide screening. Trees will be planted along this area, as standard landscape setbacks allow tree plantings within 20ft of the edge of traveled way behind physical barriers such as concrete barriers.

Noise Wall Aesthetics

Noise walls will be designed to be visually compatible with the surrounding community. Architectural detailing will include pilasters, cap applications, wall coloring, wall textures, block patterns, and reveals to create shadow lines. These components of the wall design will add aesthetic interest and reduce the visual presence of the walls. The use of integral coloring and enhanced surface finishes will be carefully considered when matching existing structures.

Sound walls will be constructed of split face concrete masonry units and colored an earth tone (tan/brown) to blend with the surrounding landscape and the predominant colors of the surrounding mesa tops. Near the top of the wall, a simple accent line of darker colored, fluted, split face block can be provided for a subtle visual relief to the plain wall face or a wider block course can be used to give more depth with shadow lines for architectural accent. The grout joints will match the color of the block. The split face texture allows vines to cling firmly to the wall, and helps to deter graffiti.

Vine Planting

The project features vine planting on all noise walls fronting the Governor Drive exits on publicly maintained areas. Clinging vines may be planted at the base of walls and will grow upward to cover the wall face. The vines will provide a vegetated appearance, and in areas where screen

planting is also provided, will result in a densely landscaped appearance instead of the view of the wall.

Transparent Noise Walls

Glass view walls may be constructed to maintain the views from residences along the I-805. This type of wall has transparent upper portions to allow views to be seen while still providing an effective noise barrier. The visual impact of these walls is typically less than solid walls. The wall surface will be an earth tone color split face block or stucco. Walls will be made of vandal-resistant materials. View walls are suitable only where the walls can be maintained from both sides by the residents. The maximum height of the transparent view walls is typically 6 ft, or less.

Retaining Walls

Generally, retaining walls will be minimized to the shortest heights allowable and have a textured architectural finish for visual interest. Retaining walls will have a consistent, organized appearance, with a wider trim band along the top and vertical sides to provide a 'finished' edge. Vertical bands spaced at intervals on the face of the walls will provide architectural detail and break up the wall surface.

Landscape planting will be used to soften the appearance or screen the walls from neighboring developments.

All structures developed with the project widening will be designed as a cohesive integral component of the overall design theme for the corridor. Architectural treatments will be designed for consistency throughout the project.

Terrain Contoured Retaining Walls in Cut Sections

The Eastgate Mall Bridge will use walls with long radius curves with battered faces to be compatible with existing bridge forms. Retaining walls that follow the contours of the proposed topography and maintain a sloped top elevation at the top of the wall will lessen visual impacts. Wall layouts and profiles will consist of long radius curves and no tangents or points of intersection. Wall faces will complement the angles, textures and features of the bridge structure. Walls will be located at mid-slope, if possible, and be visually compatible with surrounding terrain. Walls will extend above grade as a safety barrier in lieu of a cable rail barrier. Landscape plantings will be considered at the base of the wall for screening purposes.

Retaining Walls at Overcrossing Structures

Retaining walls at freeway overcrossings designed as terrain contour walls will provide a gradual transition from bridge abutments to landscape areas.

Top-of-Slope Retaining Wall In-fill Sections

Retaining walls will be located at the top of slope in roadway fill sections to provide a buffer area for landscape screening between the wall and the community.

Vertical Concrete Safety Barriers

Vertical concrete safety barriers will be considered for locations where space for architectural detailing is limited. Barriers will add 12in of additional width in which architectural features such as pilasters and wall caps can be implemented. Such features will provide a complementary palette of textures to reduce glare and reflectivity off vertical surfaces.

Grading

Where conditions permit, grading will be designed using the techniques of contour grading that promote smooth transitions to existing landforms, eliminate appearance of engineered slopes and visually soften the contours. Stepped slopes in areas of cut will be considered.

Mechanically Stabilized Earth (MSE) Walls

Careful consideration for the use of mechanically stabilized earth walls will be taken due to their design constraints. Placement of landscape slopes, noise walls, barriers, drainage conveyances, and other roadway features can require special design. MSE walls will have custom designed panels that include enhanced surface texture, and a 4in minimum pattern reveal on each panel.

Direct Access Ramp (DAR) Structures

DAR structures are proposed at Carroll Canyon, Nobel Drive. DAR structure columns will match existing bridge columns supports when present. New DAR structures will feature smooth curved forms in profile and section to minimize stark shadow lines where possible. Retaining walls will have a maximum height of 10ft to minimize the structure height and retain views from adjacent neighborhoods.

Carroll Canyon DAR

Architectural features will be consistent with those being constructed on the I-805 HOV / Carroll Canyon Road Extension project and the proposed features are shown in Figure 16.

Figure 16: Proposed Southbound DAR Ramp Features at Carroll Canyon



Nobel BRT Station

Landscaping will be provided within the facility and on all slopes and transitions to roadways and streets. Landscaping will be compatible with local landscape standards, including guidelines for screening and shade. Parking will be compatible with local development standards.

Bridge Types, Columns, & Other Features

New bridge columns will match the existing bridge columns. Undercrossing widening will use cast-in-place box girder construction to match existing structures wherever possible.

Lighting, Signage, and Miscellaneous Freeway Appurtenances

Concrete lighting and signage pedestals will be designed in such a way that vertical barrier transitions are not required. Electrical and signal equipment at ramp termini will be placed in visually unobtrusive locations.

Gore pavings will incorporate an enhanced architectural color and textural finish.

Access control fencing will be placed in visually unobtrusive locations at interchanges and bridges, if possible.

Retaining walls and noise walls near right-of-way boundaries will be designed in such a way that access control fencing will not be needed. The 'dead' spaces that occur between walls and

fences will be avoided if at all possible. Fencing will abut proposed noise walls at ends of or at changes in direction of walls, if possible.

Drainage Facilities

Concrete interceptor ditches will not be placed at the toe of slopes adjacent to residential property or pedestrian use areas. Alternatives such as subterranean drainage placed below finish grade or a planted geo-reinforced drainage surface will be used.

Linear ditches or bio-swales will be designed for dual use as maintenance vehicle access facilities, wherever possible.

Concrete drainage devices located in highly visible areas will be colored to match the surrounding soil.

Soft surface alternatives to concrete ditches and rock slope protections will be utilized wherever possible.

Detention basins located at freeway interchanges or in areas of high visibility will incorporate the following design features. Basins will be located at least 10ft from clear recovery zones whenever possible to allow landscape screening to be installed. Basins will appear to be natural landscape features, such as, dry streambeds or riparian areas. Where possible they should be shaped in an informal, curvilinear manner, incorporate slope rounding, variable gradients, and be similar to the surrounding topography to deemphasize a defined outer edge. Maintenance access drives should be located in unobtrusive areas away from local streets and will consist of drivable inert materials with or without herbaceous groundcover that is visually compatible with the surrounding landscape. All visible concrete structures and surfaces will be of special design and adhere to the corridor design guidelines. Rock slope protection will consider use of aesthetically pleasing whole material of various sizes. Whenever feasible, standpipes and other vertical appurtenances will be placed in unobtrusive locations and be painted an unobtrusive color. Where possible, bio-swales will be located in non-obtrusive areas, be designed to appear as natural features, and incorporate applicable mitigation measures listed above for detention basins.

The use of pervious concrete for storm water pollution prevention will be considered to avoid adverse visual impacts. Project features such as interceptor ditches, inlet aprons, gutters, maintenance access roads, maintenance vehicle pullouts, and parking lots could consist of pervious concrete and perhaps serve a dual purpose.

Irrigation Systems

Irrigation will consist of below grade, permanent systems in all planted areas. The systems will be centrally-controlled to manage water use and monitoring of irrigation facilities.

With implementation of the proposed project and minimization measures the degree of visual change will be reduced.

2.7 CULTURAL RESOURCES

Regulatory Setting

“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 of 1966, as amended, (NHPA) 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 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, following regulations issued by the Advisory Council on Historic Preservation (36 CFR 800). On January 1, 2004, a Section 106 Programmatic Agreement (PA) between the Advisory Council, FHWA, State Historic Preservation Officer (SHPO), and Caltrans went into effect for Caltrans projects, both state and local, with FHWA involvement. The PA implements the Advisory Council’s regulations, 36 CFR 800, streamlining the Section 106 process and delegating certain responsibilities to Caltrans. The FHWA’s responsibilities under the PA have been assigned to Caltrans as part of the Surface Transportation Project Delivery Pilot Program (23 CFR 773) (July 1, 2007).

Historic properties may also be covered under Section 4(f) of the U.S. Department of Transportation Act, which regulates the “use” of land from historic properties.

Historical resources are considered under the California Environmental Quality Act (CEQA), as well as California Public Resources Code (PRC) Section 5024.1, which established the California Register of Historical Resources. PRC 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 Caltrans to inventory state-owned structures in its rights-

of-way. Sections 5024(f) and 5024.5 require state agencies to provide notice to and consult with the State Historic Preservation Officer (SHPO) before altering, transferring, relocating, or demolishing state-owned historical resources that are listed on or are eligible for inclusion in the National Register or are registered or eligible for registration as California Historical Landmarks.

Affected Environment

A Historic Property Survey Report (HPSR) was completed on August 14, 2008. The Area of Potential Effect (APE) for this project includes the state highway right of way and additional areas needed for construction easements, soundwalls, new right of way areas required for the Nobel Drive Transit Station, Park and Ride lot, and the Governor Drive off ramp. The APE is included in the HPSR.

No potentially eligible National Register historic districts, historic landscapes, or other historic properties were identified within or partially within the project APE.

Environmental Consequences

Build Alternative

The Build Alternative will not impact any historical properties.

No Build Alternative

The No Build Alternative will not impact any historical properties.

Avoidance, Minimization, and/or Mitigation Measures

No archaeological or other architectural properties were identified within the undertaking's APE. The following measures are standard provisions for monitoring and protecting cultural resources.

If cultural materials are discovered during construction, all earth-moving activity within and around the immediate discovery area will be diverted until a qualified archaeologist can assess the nature and significance of the find.

If human remains are discovered, State Health and Safety Code Section 7050.5 states that further disturbances and activities should cease in any area or nearby area suspected to overlie remains, and the County Coroner contacted. Pursuant to Public Resources Code Section 5097.98, if the remains are thought to be Native American, the coroner will notify the Native American Heritage Commission (NAHC) who will then notify the Most Likely Descendent (MLD). At this time, the person who discovered the remains will contact a District Cultural Resource

Specialist, so that they may work with the MLD on the respectful treatment and disposition of the remains. Further provisions of PRC 5097.98 are to be followed as applicable.

PHYSICAL ENVIRONMENT

2.8 WATER QUALITY AND STORM WATER RUNOFF

Regulatory Setting

Section 401 of the Clean Water Act requires water quality certification from the State Water Resource Control Board (SWRCB) or a Regional Water Quality Control Board (RWQCB) when the project requires a Federal permit. Typically this means a Clean Water Act Section 404 permit to discharge dredge or fill into a water of the United States, or a permit from the Coast Guard to construct a bridge or causeway over a navigable water of the United States under the Rivers and Harbors Act.

Along with Clean Water Act Section 401, Section 402 establishes the National Pollutant Discharge Elimination System (NPDES) for the discharge of any pollutant into waters of the United States. The federal Environmental Protection Agency has delegated administration of the NPDES program to the SWRCB and the nine RWQCBs. To ensure compliance with Section 402, the SWRCB has developed and issued Caltrans an NPDES Statewide Storm Water Permit to regulate storm water and non-storm water discharges from Caltrans right-of-way, properties and facilities. This same permit also allows storm water and non-storm water discharges into waters of the State pursuant to the Porter-Cologne Water Quality Act.

Storm water discharges from the Caltrans construction activities disturbing one acre or more of soil are permitted under the Caltrans Statewide Storm Water NPDES permit. These discharges must also comply with the substantive provisions of the SWRCB's Statewide General Construction Permit. Non-Caltrans construction projects (encroachments) are permitted and regulated by the SWRCB's Statewide General Construction Permit. All construction projects exceeding one acre or more of disturbed soil require a Storm Water Pollution Prevention Plan (SWPPP) to be prepared and implemented during construction. The SWPPP, which identifies construction activities that may cause discharges of pollutants or waste into waters of the United States or waters of the State, as well as measures to control these pollutants, is prepared by the construction contractor and is subject to Caltrans review and approval.

The SWRCB and the RWQCBs have jurisdiction to enforce the Porter-Cologne Act to protect groundwater quality. Groundwater is not regulated by Federal law, but is regulated under the state's Porter-Cologne Act. Some projects may involve placement or replacement of on-site treatment systems (OWTS) such as leach fields or septic systems or propose implementation of infiltration or detention treatment systems which may pose a threat to groundwater quality.

Affected Environment

The water quality analysis is based upon the October 2009 Water Quality Report.

The climate in the project area is considered semi-arid. Precipitation records available from the National Weather Service indicate that the average rainfall at the Miramar Naval Station located 7.5 miles inland from the Pacific Coast (elevation of 476 ft) and to the east from the project alignment, is 11.3 inches per year. In addition nearly 90% of the annual precipitation occurs between the month of November and April.

The project is located in an area with average high temperatures ranging from 73.4° Fahrenheit (F) in winter and early spring to 84.2° F in summer. Average monthly low temperatures range from 44.6°F in December and January to 66.2°F in August.

The proposed project is within the Miramar Reservoir & Miramar Hydrologic Areas which are within the Peñasquitos Hydrologic Unit. The proposed project drains directly into San Clemente Canyon, Rose Canyon, and Carroll Canyon. San Clemente Canyon and Rose Canyon merge together approximately 4 miles east of I-805 south of the I-5/SR-52 interchange and drain south to Mission Bay. Carroll Canyon runs west under I-805 and joins Soledad Canyon, which runs north along I-805 before it merges with Peñasquitos Creek. Carroll Canyon feeds into the Los Peñasquitos Lagoon.

To protect the water quality goals of a water body, each water body has designated beneficial uses. Beneficial Uses, as defined in the San Diego RWQCB Basin Plan (Basin Plan), are the uses of water necessary for the survival or well-being of humans, plants and wildlife. These uses promote the tangible and intangible economic, social and environmental goals of mankind. Beneficial Uses for the receiving water bodies are listed in the Project's Water Quality Report.

To maintain the beneficial uses of the surface water bodies, the federal Clean Water Act (CWA) requires States to identify and make a list of surface water bodies that are polluted, referred to as the "Clean Water Act Section 303(d) List of Water Quality Limited Segments".

None of the water bodies receiving direct runoff from the project are 303 (d) impaired. However, Carroll Canyon Creek discharges into Soledad Canyon Channel, which is 303 (d) impaired for sediment toxicity. The Channel is within the City of San Diego jurisdiction and parallels Sorrento Valley Road on the west side of the freeway in the northern limits of the project. Although the Channel is outside Caltrans right of way, it does receive runoff from the northern limits of the project through Carroll Canyon Creek. The Channel merges with Los Penasquitos Creek before entering the Lagoon. Los Penasquitos Creek is impaired for phosphate and total dissolved solids and the Lagoon is impaired for sedimentation/siltation. In addition, Mission Bay at the mouth of Rose Canyon Creek (approximately 3 miles south of SR-52/I-805 Interchange) is 303(d) impaired for eutrophic and lead.

Under section 303(d) of the CWA, States must also prioritize the water bodies on the list and develop Total Maximum Daily Loads (TMDLs). A TMDL is a quantitative assessment of water quality problems, contributing sources, and load reductions or control actions needed to restore and protect bodies of water. None of the receiving water bodies that collect runoff directly from the project area (i.e. San Clemente Canyon, Rose Canyon and Carroll Canyon) have TMDLs requirements in place at this point.

However, a TMDL is underway for the Los Peñasquitos Lagoon under Investigation Order R9-2006-0076 (TMDLs for Impaired Lagoons, Adjacent Beaches and Agua Hedionda Creek) issued by the San Diego RWQCB. Los Penasquitos Lagoon is the ultimate receiving water body from the northern limits of the project. Caltrans has been actively involved with the other dischargers in developing the TMDL. Any future TMDL requirements will be implemented by the project during the design phase as appropriate.

Environmental Consequences

Build Alternative

The project is anticipated to generate approximately 253 acres of disturbed soil areas during the construction phase. If disturbed slopes are not stabilized, sediment has the potential to travel to adjacent waterways. Potential sources of pollutants during the construction phase could be generated from construction materials as well as construction activities. Examples of pollutants generated from construction materials include: vehicle fluids, asphaltic emulsions from paving activities, joint and curing compounds, concrete curing compounds, solvents and thinners, paint, sandblasting material, landscaping materials, treated lumber, PCC rubble and general litter. Examples of construction activities that have the potential to contribute pollutants include

clearing and grubbing, grading operations, soil import operations, sandblasting, landscaping and utility excavation.

The proposed project will result in a 38.1 acre increase in impervious areas, thus having the potential to increase the velocity of runoff. This increase in paved areas could also potentially cause erosion, scour and have an impact on downstream channel stability if the effects of the increased runoff are not evaluated and taken into consideration during the hydraulic design.

Potential sources of pollutants found in highway runoff include sediment from natural erosion; nutrients (nitrogen and phosphorus) from tree leaves, mineralized organic matter in soil, fertilizers runoff, nitrite from automobile exhausts, atmospheric deposition, emulsifiers and surfactants; pesticides; metals (dissolved and particulate) from combustion products of fossil fuels, wearing of break pads and corrosion.

No-Build Alternative

Selection of the No-Build Alternative will result in no construction or additional operational water quality impacts.

Avoidance, Minimization and/or Mitigation Measures

Best Management Practices (BMP) will be implemented to address potential water quality impacts during the planning and design, construction, and operational (maintenance) stages.

The State Water Resources Control Board adopted Order No. 2009-0009–DWQ, NPDES No. CAS000002 NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities on September 2, 2009 with an effective date of July 1, 2010. The permit covers construction activities that result in land disturbance of equal or greater than one acre or construction activities that result in land surface disturbance of less than one acre if the construction activity is part of a common plan of development.

The new Construction General Permit is a risk-based permit that establishes three levels of environmental risk possible for a construction site. The Risk Level (RL) is calculated in two parts: 1) Project Sediment Risk, and 2) Receiving Water Risk. The RL determination quantifies sediment and receiving water characteristics and uses these results to determine the project's overall RL. Highly erodible soils, in higher rainfall areas, on steep slopes increase the 'sediment risk'. Monitoring and reporting requirements increase as the RL goes from 1 to 3. The risk level will be determined for every construction contract individually during the design phase.

Caltrans stormwater program complies with the substantive provisions of the Construction General Permit on projects. The permit requirements are implemented during the design phase through the water pollution control plans and project's specifications. During the construction phase, the requirements will be met through the implementation of the Stormwater Pollution Prevention Plans (SWPPPs) prepared for each project under the construction phase of the project and compliance with the project's specifications.

Short-term potential impacts to water quality during the construction phase are prevented/minimized with Construction Site BMPs while the long-term potential impacts during the facility operation and maintenance are prevented/minimized through the implementation of Design Pollution Prevention BMPs, Treatment BMPs and Maintenance BMPs.

Maintenance BMPs

Caltrans maintenance performs various activities on different facilities throughout the state to ensure safe and usable conditions for the public. Most of these activities are performed by small crews with minimal soil disturbance.

The objective of implementing maintenance BMPs is to provide preventative measures to ensure that maintenance activities are conducted in a manner that reduces the amount of pollutants discharged to surface waters via Caltrans storm water drainage systems.

Maintenance BMPs will be on-going for the life of the facility in accordance with the Storm Water Quality Handbook, Maintenance Staff Guide (Guide). The Guide provides detailed instructions on how to apply the approved storm water Maintenance BMPs to maintain facility operations and highway activities.

Design Pollution Prevention BMPs

Design Pollution Prevention (DPP) BMPs are standard technology-based, non-treatment controls selected to reduce pollutant discharges to the maximum extent practicable. DPP BMPs have the following design objectives: Prevent downstream erosion, stabilize disturbed soil areas and maximize vegetated surfaces consistent with Caltrans policies.

The selection of the specific BMPs is an iterative process that begins at the planning stages and gets refined during the design phase. Since Caltrans is committed to prevent or minimize impacts to water quality, the project will preserve the existing vegetation outside the work areas, stabilize slopes with vegetative cover after the completion of construction and keep the total paved area to a practical minimum. The project will also upgrade the drainage systems where necessary to handle the additional runoff, add additional drainage systems as necessary and

use flared end section or rock slope protection at culvert outlets where appropriate. BMPs that may be implemented are found in Table 8.

Table 8: Potential DPP BMPs to be used in the project

Consideration of Downstream Effects Related to Potentially Increased Flow
Peak flow Attenuation Basin
Preservation of Existing Vegetation
Concentrated Flow Conveyance Systems
Ditches, Berms, Dikes and Swales
Overside Drains
Flared Culvert End Sections
Outlet Protection/Velocity Dissipation Devices
Slope/Surface Protection Systems
Vegetated Surfaces
Hard Surfaces

Construction BMPs

It will be necessary to use a combination of temporary erosion and sediment control BMPs to address both storm water and non-storm water discharges during construction. Caltrans will implement various construction site BMPs, as appropriate, during construction to reduce the potential for short-term impacts. These temporary control practices are consistent with the BMPs and control practices required under the State of California NPDES General Construction Permit for Storm Water Discharges Associated with Construction Activity (Water Quality Order 99-08-DWQ), and are intended to achieve compliance with the requirements of the aforementioned Permit. The selected BMPs are directed at reducing pollutants in storm water discharges and eliminating non-storm water discharges. The BMPs to be implemented will cover the categories in the table below. Examples of construction BMPs that will be implemented for this project include temporary fiber rolls, temporary erosion control, temporary concrete washouts, temporary construction entrances, street sweeping, temporary check dams and temporary drainage inlet protection.

Table 9: Construction BMP Categories

Construction BMP Categories	
Temporary Soil Stabilization	Waste Management and Materials Pollution Control
Temporary Sediment Control	Non-Storm Water Management
Wind Erosion Control	Tracking Control

Treatment BMPs

Treatment BMPs must be considered for this project as required under the SWMP to avoid or minimize the potential long term impacts from any Caltrans facilities or activities. The approved treatment BMPs listed below are considered to be technically and fiscally feasible. Caltrans experience has found these BMPs to be constructible, maintainable, and effective at removing pollutants to the maximum extent practicable. Approved treatment BMPs are Biofiltration Systems, Infiltration Devices, Detention Devices, Traction Sand Traps, Dry Weather Flow Diversion, Gross Solid Removal Devices (GSRDs), Media Filters, Multi Chamber Treatment Train, and Wet Basins.

A preliminary review of the project area has been completed and potential locations and types of treatment BMPs have been assessed for feasibility (based on such factors as climate, water volume, soil conditions, physical limitations, other environmental considerations, etc.). Project Features Maps, Figures 3A-3D, show the locations of treatment BMPs. When the proposed project proceeds to the design phase, the locations of these treatment BMPs will be further evaluated to determine feasibility in relation to right-of-way limitations, environmental constraints or hydraulic capacity. In addition, in areas where treatment BMPs cannot be incorporated due to above mentioned reasons, vegetation will be maximized and every effort will be made to ensure the successful establishment of landscaping and erosion control throughout the project limits. The project will also consider any future treatment BMPs that might be approved by Caltrans from the ongoing research and monitoring program. The District Erosion Control Specialist, in coordination with the project Biologist and Landscape Architect will determine the appropriate planting/seeding mix to ensure that proposed vegetation is consistent with the vegetation within the corridor and any specific requirements by local entities such as the Multiple Species Conservation Program (MSCP) or others.

Biofiltration swales are vegetated channels that receive directed flow and convey storm water. While biofiltration strips are vegetated sections of land over which storm water flows as overland sheet flow. Pollutants are removed by filtration through the grass, sedimentation, adsorption to soil particles, and infiltration through the soil. Swales and strips are mainly effective at removing debris and solid particles, although some dissolved constituents are removed by adsorption into the soil.

An infiltration basin is a treatment device designed to remove pollutants from surface discharges by capturing the Water Quality Volume (WQV), temporarily storing it and infiltrating it directly to the soil rather than discharging it to receiving water.

A detention device is a permanent treatment BMP designed to reduce sediment and particulate loading in runoff by temporarily detaining the runoff to allow sediments and particles to settle out before it's discharged into a receiving water body. Detention devices remove litter; total suspended solids and pollutants that are attached to the settled particulate matter.

2.9 GEOLOGY/SOILS/SEISMIC/TOPOGRAPHY

Regulatory Setting

For geologic and topographic features, the key federal law is the Historic Sites Act of 1935, which establishes a national registry of natural landmarks and protects “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. Caltrans Office of Earthquake Engineering is responsible for assessing the seismic hazard for Caltrans 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.

Affected Environment

A preliminary geotechnical report was completed March of 2008 and is incorporated by reference.

Site Geology

From State Route 52 (SR-52) north to the southern slope of Carroll Canyon, the I-805 freeway passes through mesas and cuts in the Linda Vista Formation. Within this interval, Scripps Formation and Stadium Conglomerate underlie lower areas of the native topography. Within Rose Canyon, Carroll Canyon, and Los Peñasquitos Canyon, some freeway facilities are underlain by alluvial soils. From Carroll Canyon north to the I-5 junction, Bay Point Formation and Ardath Shale mostly underlie the freeway. Localized locations of colluvium and alluvium occur as subgrade to the freeway embankment.

With the exception of the Ardath Shale Formation and alluvium, all native geologic units that underlie the alignment of this project are highly competent. However, only a relatively minor section of the project alignment may be impacted by the presence of Ardath Shale Formation.

Topography and Drainage

The section of I-805 from SR-52 to the I-5 and I-805 Interchange generally parallels the Pacific Coast, and is a series of uplifted wave cut terraces called mesas. East to west trending river valleys, canyons, and arroyos deeply dissect these mesas. Mesa elevations are typically about 330ft or less above Mean Sea Level (MSL) while stream and arroyo elevations decrease from the east to the west direction, and at their limits they are just above MSL.

Natural drainages occur mainly through the canyons and arroyos. Runoff water and drainage water in developed areas flows toward, or is channeled to, these topographic features that carry it westward to the Pacific coast.

Water

Outside of storm events, surface water is not typically present along the project alignment. A slight year round base flow, punctuated by storm discharge, occurs within the streambeds at Rose Canyon, Carroll Canyon, and Los Peñasquitos Canyon.

Groundwater

Seepage water, springs, ephemeral streams, and perched water conditions could be encountered within the project limits. These hydrogeologic phenomena are most likely to occur at the toe of slopes and embankments, and at the contact between permeable units (sandstone) and impermeable (shale) units. In addition, they are likely to occur at the bottoms of canyons and arroyos that cut into the mesas.

Soil Survey Mapping

For this project the Soil Survey of the San Diego Area, California, prepared by the U.S. Department of Agriculture (USDA), Soil Conservation Service (1973) was utilized. Although the survey focuses primarily on agricultural issues, the report includes estimated soil properties, which are important in engineering and land use planning.

The review of the Soil Survey report indicates that there are ten different soil units identified within the project area. Along the project alignment, the majority of mesas are classified as having soils characteristic of the Redding and Redding-Olivenhian series (associations). These series are comprised of well-drained cobbly and gravelly loams that have gravelly and cobbly clay subsoil over a surficial hardpan. The floors of the valleys that cut into the previously referenced mesas have soils characteristic of the Diablo-Linne and Las Flores-Huerhuero series. These series are comprised of well to moderately drained clays, clay loams and loamy fine sands that have a subsoil of sandy clay or clay.

Environmental Consequences

Build Alternative

Ground Motion

No known Holocene fault exists within the project area. However, several secondary faults related to the active Rose Canyon Fault Zone have been mapped along the project alignment. These faults (the Torrey Pines, Salk, and a few more unnamed faults) are currently believed to be pre-Holocene, though no direct evidence supports this fact.

The nearest known active fault is the Rose Canyon Fault Zone believed to be capable of producing an earthquake with a Maximum Credible Magnitude of 7.0 on the Richter scale. It is located about 3.42 miles south and west from the project site. The potentially active La Nacion Fault is located about 11.2 miles southeast from the southern end of the project limits, and it is considered capable of producing an earthquake with a Maximum Credible Magnitude of 6.75 on the Richter scale. In addition, the Elsinore Fault, about 25.5 miles northeast of the project limits, is considered capable of producing an earthquake with a Maximum Credible Magnitude of 7.5 on the Richter scale.

Ground Surface Rupture

Surface ground rupture is considered unlikely within the project limits. Active and potentially active faults are not known to cross the project alignment. The project site is not located within the State of California (Alquist-Priolo) Earthquake Fault Zone. Therefore, the potential for surface ground rupture within the project limits during a seismic event is considered low.

Liquefaction

Liquefaction, the conversion of soil to a liquid, can be caused by strong vibratory motion due to earthquakes. Both research and historical data indicate that loose granular soils that are saturated by the presence of a relatively shallow groundwater table are most susceptible to liquefaction and dynamic settlement. Liquefaction is generally known to occur in saturated or near-saturated cohesionless materials at depth shallower than about 100ft. Dynamic settlement, however, can occur in both dry and wet sands at greater depths.

The Rose Canyon area has a very low potential for soil liquefaction. However, the potential for soil liquefaction appears to be high in the Carroll Canyon area. Further analysis of liquefaction potential will be required and special design considerations may be needed to mitigate liquefaction. Such analysis and consideration will be appropriately conducted during the design phase of project development.

No-Build Alternative

The No-Build alternative will not result in any new infrastructure that will be subject to the soils, geology, seismic conditions or topography of the area.

Avoidance, Minimization and/or Mitigation Measures

Trained personnel should be present during project construction to observe all cuts, foundation subgrade, and embankment subgrade to assure that the provisions set forth in the documents are appropriately enforced. If unanticipated conditions are encountered, the geotechnical personnel should make recommendations to the Resident Engineer who will in turn direct the contractor. Instrumentation for measuring settlement or slope distress is likely to be included in final geotechnical recommendations. A program of periodic surveying for ground movement should be included in project construction where the potential for ground movement and failure exists.

All grading and roadway work will be performed in accordance with the Caltrans Standard Plans and Specifications. Final recommendations and Special Provisions should be based on the findings of subsurface exploration, testing, and analysis as presented in final Geotechnical Design Reports and Foundation Reports.

BMPs proposed in the Water Quality Section (Section 2.8), will stabilize and reduce erosion during construction.

2.10 PALEONTOLOGY

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 a part of federally authorized or funded projects. (e.g., Antiquities Act of 1906 [16 USC 431-433], Federal-Aid Highway Act of 1935 [20 USC 78]). Under California law, paleontological resources are protected by the California Environmental Quality Act, the California Code of Regulations, Title 14, Division 3, Chapter 1, Sections 4307 and 4309, and Public Resources Code Section 5097.5.

Affected Environment

A Paleontological Identification Report (PIR), November 2008, was prepared for this project and is incorporated by reference. This PIR provides an assessment of the paleontological resource potential within the study area defined as a one-mile radius from the project boundaries.

Paleontological resources, as defined here, are fossils and the geographic, geologic, phylogenetic, and taphonomic information associated with them. Fossils, as defined here are the remains and/or traces of prehistoric plant and animal life.

The Coastal Plain Region is an area characterized by interbedded marine and non-marine sedimentary rock units deposited over the last 75 million years. Many of the level surfaces in the coastal area, including most of the mesa tops and coastal benches are characteristic features of the Coastal Plains Region. These mesas are interrupted by canyons and other erosional features. In the segment of I-805 under consideration, the major canyons are San Clemente Canyon paralleling SR-52, Rose Canyon, and Carroll Canyon. Six geologic formations with potential for significant paleontological resources – the Bay Point Formation, Linda Vista Formation, Stadium Conglomerate, Friars Formation, Scripps Formation, and Ardath Shale – are located within and adjacent to the project corridor.

The Bay Point Formation is mapped as probable colluvial deposits on the inner curve of Carroll Canyon where it passes under I-805. When mapped it represented sediments of both marine and non-marine origin. The marine sediments of the formation in its restricted sense represent an open sandy beach deposit; its invertebrate fauna shows it to have been a warmer environment than today. The sediments adjacent to I-805 appear to be colluvial. If still present, the colluvial deposits are beneath on- and off ramps west of I-805 at Mira Mesa Boulevard.

The Linda Vista Formation is characterized as several meters of iron-red, moderately indurated, dirty sand and pebble-conglomerate. It lies on the Linda Vista Terrace, a wave-cut surface extending from Oceanside to northern Baja California. The Linda Vista Formation is mapped from the southern end of the study area northward to Carroll Canyon.

The Stadium Conglomerate is poorly cemented in general. The basal one meter of the formation is better indurated. The Stadium Conglomerate is chiefly nonmarine but contains some marine beds. It can directly overlie either the Friars Formation or the Scripps Formation. The Stadium Conglomerate is mapped as being on southwest and southeast sides of the SR-52 intersection, possible thin deposits to northwest and southwest of the Governor Drive intersection, to the northeast and southeast of the Governor Drive intersection, and to the southeast of the Nobel Drive intersection. There is no mapping along I-805 north of Nobel Drive.

The Friars Formation is chiefly nonmarine sandstone, but also includes lagoonal sandstone and claystone. The sandstone is typically massive, yellowish gray, medium grained, and poorly

indurated with subangular to subrounded grains. The Friars Formation outcrops from the southern end of the study area to 1200 ft north of SR-52.

The Scripps Formation study is sandstone with moderately well-defined bedding that locally contains interbeds of conglomerate and sandy siltstone. Within the study area, it consists of 183.8 ft of pale yellowish-brown, medium-grained sandstone and occasional cobble-conglomerate interbeds. The Scripps Formation is exposed intermittently from the southern wall of San Clemente Canyon to the southern wall of Carroll Canyon.

Ardath Shale consists of uniform, weakly fissile olive-gray silty shale. The upper part contains thin beds of medium-grained sandstone, similar to thicker ones in the overlying Scripps Formation, and concretionary beds with molluscan fossils. Ardath Shale occurs only on the south wall of Carroll Canyon and along the east side of I-805 from Mira Mesa Boulevard northward. A fragment of a lucinid bivalve was seen along the east side of I-805. External and internal molds of the bivalve *Nuculana rosa* were observed along the southbound off ramp at that interchange.

Environmental Consequences

Build Alternative

Earth moving activities associated with construction are the typical mode of impacts to significant paleontological resources. It has been concluded that improvements proposed for the Interstate 805 North Corridor project are situated within paleontologically sensitive areas and therefore have the potential to impact paleontological resources along most of the right-of-way.

Impacts to paleontological resources are rated in accordance with the sensitivity ratings of the rock units impacted. Below is a summary of the criteria for these ratings.

High sensitivity

Direct impacts to high sensitivity rock units (Ardath Shale, Scripps Formation, Friars Formation, Stadium Conglomerate, and Lindavista Formation).

Low sensitivity

Direct impacts to low sensitivity rock units (colluvium mapped as Bay Point Formation).

Zero sensitivity

Direct impacts to zero sensitivity rock units (artificial fill).

The planned project improvements will result in impacts to geologic units that have been assigned high (Ardath Shale, Scripps Formation, Friars Formation, Stadium Conglomerate, and Linda Vista Formation) and low paleontological resource sensitivities.

No-Build Alternative

The No-Build will not impact any paleontological resources.

Avoidance, Minimization and/or Mitigation Measures

It is recommended that a Paleontological Mitigation Plan (PMP) be implemented in order to reduce project related impacts to paleontological resources. The plan will include the following:

1. A qualified paleontologist will be at the pre-construction meeting to consult with the grading and excavation contractors concerning excavation schedules, paleontological field techniques, and safety issues. A qualified paleontologist is defined as an individual with a M.S. or Ph.D. degree in paleontology or geology who is familiar with paleontological procedures and techniques, who is knowledgeable in the geology and paleontology of San Diego County, and who has worked as a paleontological mitigation project supervisor in the county for at least one year.
2. Grading plans will be provided to the paleontologist at least one week prior to the initiation of earth-moving activities.
3. A paleontological monitor will be on-site on a full-time basis during the original cutting of previously undisturbed deposits of high or moderate paleontological resource potential, and on-site on a part-time basis during the original cutting of previously undisturbed deposits of low paleontological resource potential (sedimentary deposits of younger alluvium), to inspect exposures for contained fossils. A paleontological monitor is defined as an individual who has experience in the collection and salvage of fossil materials. The paleontological monitor will work under the direction of a qualified paleontologist. As grading progresses, the qualified paleontologist and paleontological monitor will have the authority to reduce the scope of the monitoring program to an appropriate level if it is determined that the potential for impact to paleontological resources is lower than anticipated.
4. When fossils are discovered, the paleontologist (or paleontological monitor) will recover them. In most cases, this fossil salvage can be completed in a short period of time. If necessary, the paleontologist (or paleontological monitor) will be allowed to briefly redirect, divert, or halt grading. However, some fossil specimens (such as a complete large mammal skeleton) may require an extended salvage period. In these instances, the paleontologist (or

paleontological monitor) will be allowed to redirect, divert, or halt grading to allow recovery of fossil remains in a timely manner. Because of the potential for the recovery of small fossil remains, such as isolated mammal teeth, it may be necessary to set up a screen-washing operation on the site.

5. During the monitoring and recovery phases of the PMP, the qualified paleontologist and/or the paleontological monitor will also routinely collect stratigraphic data (e.g., lithology, vertical thickness, lateral extent of strata, nature of upper and lower contacts, and taphonomic character of exposed strata.) Collection of such data is critical for providing a stratigraphic context for any recovered fossils.

6. Fossil remains collected during monitoring and salvage will be cleaned (removal of extraneous enclosing sedimentary rock material), repaired (consolidation of fragile fossils and gluing together of broken pieces), sorted (separating fossils of the different species), and cataloged (scientific identification of species, assignment of inventory tracking numbers, and recording of these numbers in a computerized collection database) as part of the mitigation program.

7. Prepared fossils, along with copies of all pertinent field notes, photos, and maps, will be deposited (as a donation) in an accredited scientific institution with permanent paleontological collections, such as the San Diego Natural History Museum. Donation of the fossils will be accompanied by financial support for preparation, curation, and initial specimen storage, if this work has not already been completed.

8. A final summary report will be completed. It will outline the results of the mitigation program. This report will include discussion of the methods used, stratigraphic section(s) exposed and documented, fossils collected, and significance of recovered fossils.

2.11 HAZARDOUS WASTE/MATERIALS

Regulatory Setting

Hazardous materials and hazardous wastes are regulated by many state and federal laws. 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 of 1976 (RCRA) and the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA). 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
- Clean Air Act
- Safe Drinking Water Act
- Occupational Safety and Health Act (OSHA)
- Atomic Energy Act
- Toxic Substances Control Act (TSCA)
- 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 Resource Conservation and Recovery Act 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.

Affected Environment

A June 2008 Initial Site Assessment (ISA) was performed to assess the potential for hazardous waste within the project limits, a January 2009 Aerially Deposited Lead (ADL) Study Report, and a June 2009 Limited Asbestos Survey Report, were prepared in support of this project.

Environmental Consequences

Build Alternative

Lead is known to be present along the I-805 corridor as a result of vehicular exhaust emissions prior to the elimination of lead from fuels in the mid-1980s. The lead impacted soil is found in exposed soil in the median and shoulders of the main traveled way to a depth of approximately 2ft and a distance of approximately 20ft from the edge of pavement. Results of investigation for ADL at the site indicated that soil does not contain hazardous concentrations of ADL.

The ISA determined that potential hazardous waste issues/materials of concern may include lead in yellow paint striping, and treated wood waste. Groundwater plumes containing hazardous waste have been identified near the project limits. These plumes are outside of both the temporary and permanent impact areas of the proposed project and will not be impacted.

Asbestos containing materials (ACMs) have been found in the proposed project at the following locations:

- Guardrail shims, located beneath the guardrail posts of each of the five surveyed bridge structures.
- Transite drain pipes located on the underside of the northbound side of the Governor Drive undercrossing.
- 1/8in asbestos sheet packing located between the vertical abutments and wing walls of the Governor Drive overcrossing.
- Drain pipe coating, located in drain pipes on the underside of Mira Mesa Boulevard overcrossing.

No-Build Alternative

The No-Build alternative will not impact any hazardous waste/materials.

Avoidance, Minimization and/or Mitigation Measures

A Lead Compliance Plan will be prepared prior to initiation of construction for activities such as soil excavation, and lead paint removal to manage potential health and safety hazards to workers and the public.

Any treated wood from guard rail posts or sign post removed on the project will need to be disposed of at a Regional Water Quality Control Board approved landfill facility.

Any demolition or renovation activities that could disturb the above noted building materials that contain asbestos will be performed by properly trained and certified personnel, and in accordance with all Federal, State, and local regulations.

2.12 AIR QUALITY

Regulatory Setting

The Clean Air Act as amended in 1990 is the federal law that governs air quality. Its counterpart in California is the California Clean Air Act 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 six criteria pollutants that have been linked to potential health concerns; the criteria pollutants are: carbon monoxide (CO), nitrogen dioxide (NO₂), ozone (O₃), particulate matter (PM), lead (Pb), and sulfur dioxide (SO₂).

Under the 1990 Clean Air Act Amendments, the U.S. Department of Transportation cannot fund, authorize, or approve Federal actions to support programs or projects that are not first found to conform to State Implementation Plan for achieving the goals of the Clean Air Act requirements. Conformity with the Clean Air Act takes place on two levels—first, at the regional level and second, at the project level. The proposed project must conform at both levels to be approved.

Regional level conformity in California is concerned with how well the region is meeting the standards set for carbon monoxide (CO), nitrogen dioxide (NO₂), ozone (O₃), and particulate matter (PM). California is in attainment for the other criteria pollutants. At the regional level, Regional Transportation Plans (RTP) are developed that include all of the transportation projects planned for a region over a period of years, usually at least 20. An air quality model is run, based on the projects in the RTP, to determine whether or not the implementation of those projects will conform to emission budgets or other tests showing that attainment requirements of the Clean Air Act are met. If the conformity analysis is successful, the regional planning organization for San Diego County, SANDAG and the appropriate federal agencies (Federal Highway Administration), make the determination that the RTP is in conformity with the State Implementation Plan for achieving the goals of the Clean Air Act. Otherwise, the projects in the RTP must be modified until conformity is attained. If the design and scope of the 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.

Conformity at the project-level also requires “hot spot” analysis if an area is “nonattainment” or “maintenance” for carbon monoxide (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. “Hot spot” analysis is essentially the same, for technical purposes, as CO or particulate matter analysis performed for NEPA 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 and severity of violations. If a known CO or particulate matter violation is located in the project vicinity, the project must include measures to reduce or eliminate the existing violation(s) as well.

Affected Environment

This section is based on the Final Air Quality Technical Study prepared for I-805 Managed Lanes North Project dated July 23, 2009.

Meteorology/Climate

Consistent with the typical weather of coastal southern California, the City of San Diego enjoys a Mediterranean and semi-arid climate. The prevailing winds and climate are driven by the Pacific Ocean, which results in warm, dry summers and mild winters. The nearest meteorological station to the proposed project is located at Miramar Naval Air Station just east of the project site. The annual average high temperature at Miramar is 72°F and the average low temperature is 53°F (NWS,2009). Temperatures of 32°F or below have rarely occurred at this station, but temperatures of 90°F or above, are more frequent. During the fall, Santa Ana winds can last for several days, transporting hot, dry air from the inland deserts. These are strong, dry, easterly winds accompanied by high temperatures (greater than 90°F) and very low relative humidity (often below 20%).

San Diego receives most of its annual rainfall from November to March when the semi-permanent Pacific High moves southerly over the Pacific Ocean. The average annual precipitation at Miramar Naval Air Station is about 11in. (NWS, 2009).

Local winds are driven by temperature differentials between the land and nearby Pacific Ocean, creating a sea- and land-breeze circulation. Light to moderate wind speeds from the northwest through southwest are typical.

During springtime, a local marine layer forms at night and can remain through the morning, causing considerable foginess generally near the coast, but can stretch as far inland as the project area. This fog typically dissipates during the late morning, and the afternoons are generally clear. Fog can also occur during the fall and winter months, lasting well into the day.

Environmental Consequences

Regional Air Quality Conformity

The proposed project is included in SANDAG's 2030 San Diego Regional Transportation Plan: Pathways for the Future (2007 update) and 2008 Regional Transportation Improvement Program (2008 RTIP). The project is identified in the 2030 RTP on page A-5 and A-10, Revenue Constrained Plan Tables A.1 and A.2 respectively, and in the 2008 RTIP on page 38, as MPO ID: CAL78B; Title: I-805 HOV/Managed Lanes - North, with the following description: On I-805 from the I-805 /SR 52 to Sorrento Valley, on SR 52 at the I-805/SR 52 separation preliminary engineering for future construction of managed lanes. Amendment No. 25 to the SANDAG 2008 RTIP modified the proposed project to capacity increasing, matching the description in the 2030 RTP, and was approved by FHWA on August 24, 2010.

A conformity determination for SANDAG's new 2008 RTIP and conformity redetermination for SANDAG's 2030 RTP was made by USDOT on November 17, 2008 (USDOT 2008). The design concept and scope of the proposed project is consistent with the project description in the 2030 RTP, the 2008 RTIP, and the assumptions in the SANDAG regional emissions analysis. Therefore, the project conforms to the State Implementation Plan (SIP) and no adverse air quality impact will occur as a result of the project implementation.

Project Level Conformity

The state and federal ambient air quality standards (AAQS) relevant to the proposed project are summarized in Table 10.

The proposed project site is located in the San Diego Air Basin (SDAB). The attainment status of the SDAB relative to the federal and state criteria pollutants is presented in Table 11. An area is designated in attainment when it is in compliance with the NAAQS and/or California Ambient Air Quality Standards (CAAQS). At the time of designation, if the available data does not support a designation of attainment or non-attainment, the area is designated as unclassifiable.

Table 10: Applicable Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards ¹	Federal Standards ²	
		Concentration ³	Primary ^{3,4}	Secondary ^{3,5}
Ozone (O3)	1-Hour	0.09 ppm (180 µg/m ³)		Same as Primary Standard
	8-Hour	0.070 ppm (137 µg/m ³)	0.075 ppm (147 µg/m ³)	
Respirable Particulate Matter (PM10)	24-Hour	50 µg/m ³	150 µg/m ³	Same as Primary Standard
	Annual Arithmetic Mean	20 µg/m ³		
Fine Particulate Matter (PM2.5)	24-Hour	No Separate State Standard	35 µg/m ³	Same as Primary Standard
	Annual Arithmetic Mean	12 µg/m ³	15.0 µg/m ³	
Carbon Monoxide (CO)	8-Hour	9.0 ppm (10 mg/m ³)	9 ppm (10 mg/m ³)	None
	1-Hour	20 ppm (23 mg/m ³)	35 ppm (40 mg/m ³)	
Nitrogen Dioxide (NO2)	Annual Arithmetic Mean	0.030 ppm (57 µg/m ³)	0.053 ppm (100 µg/m ³)	Same as Primary Standard
	1-Hour	0.18 ppm (339 µg/m ³)		
Sulfur Dioxide (SO2)	Annual Arithmetic Mean		0.030 ppm (80 µg/m ³)	
	24-Hour	0.04 ppm (105 µg/m ³)	0.14 ppm (365 µg/m ³)	
	3-Hour			0.5 ppm (1300 µg/m ³)
	1-Hour	0.25 ppm (655 µg/m ³)		
Lead (Pb)⁶	30-Day Average	1.5 µg/m ³		
	Calendar Quarter		1.5 µg/m ³	Same as Primary Standard
	Rolling 3-Month Average		0.15 µg/m ³	
Hydrogen Sulfide (H2S)	1-Hour	0.03 ppm (42 µg/m ³)	No Federal Standards	
Sulfates (SO4)	24-Hour	25 µg/m ³		
Visibility Reducing Particles	8-Hour	In sufficient amount to produce an extinction coefficient of 0.23 per kilometer due to particles when the relative humidity is less than 70%.		
Vinyl Chloride⁶	24-Hour	0.01 ppm (26 µg/m ³)		

Source: EPA-NAAQS (<http://www.epa.gov/air/criteria.html>); CARB-CAAQS (<http://www.arb.ca.gov/research/aaqs/aaqs2.pdf>).
Nov. 17 2008.

µg/m³ = micrograms per cubic meter.

mg/m³ = milligrams per cubic meter.

ppm = parts per million.

1 - California standards for ozone, carbon monoxide (except Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, suspended particulate matter—PM₁₀, PM_{2.5}, and visibility-reducing particles— are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

2 - National standards (other than ozone, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration in a year, averaged over 3 years, is equal to or less than the standard. For PM₁₀, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m³ is equal to or less than one. For PM_{2.5}, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over 3 years, are equal to or less than the standard. Contact EPA for further clarification and current federal policies.

3 - Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based on a reference temperature of 25°C and a reference pressure of 760 Torr/centimeter. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 Torr/centimeter; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

4 - National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

5 - National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant

6 - California ARB has identified lead and vinyl chloride as “toxic air contaminants” with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

Table 11: SDAB Attainment Status of all Federal and State Criteria Pollutants

Pollutant	Federal Designation	State Designation
Ozone (1-hr)	No federal standard	Nonattainment
Ozone (8-hr)	Nonattainment	Nonattainment
Carbon Monoxide	Maintenance	Attainment
PM 10	Unclassifiable	Nonattainment
PM 2.5	Attainment	Nonattainment
Nitrogen Dioxide	Attainment	Attainment
Sulfur Dioxide	Attainment	Attainment
Lead	Attainment	Attainment
Sulfates	No federal standard	Attainment
Hydrogen Sulfide	No federal standard	Unclassifiable
Visibility-Reducing Particles	No federal standard	Unclassifiable

The proposed project site is located in the SDAB, which currently meets the federal air quality standards for all of the criteria air pollutants, except ozone (O₃). The SDAB has been designated as a “Basic” non-attainment area for the 8-hour O₃ standard. The SDAB is designated as a federal maintenance area for CO following its re-designation from non-attainment to a CO attainment area. Table 12 shows the pollutants for which the area has been classified as a federal non-attainment or maintenance and the number of violations within the past three years.

Table 12: Federal Nonattainment and Attainment/Maintenance Pollutants in the SDAB

Pollutant	Federal Attainment Status	Exceedances in the Last 3 Years
O3 – 8-hour	Nonattainment, Basic	38 in 2006, 27 in 2007, and 35 in 2008
CO	Maintenance	None

Source: Air Quality Data, California Air Resource Board (CARB), 2006, 2007 and 2008.

Note: ARB indicates that exceedances are not necessarily violations.

Some locations are considered more sensitive to adverse effects from air pollution than others. These locations are commonly termed sensitive receptors and they include hospitals, schools, day care centers, nursing homes, and parks/playgrounds. Sensitive receptors in proximity to localized CO sources, toxic air contaminants, or odors are of particular concern. Sensitive receptors closest to the proposed project site are presented in Table 13.

Table 13: Sensitive Receptors Closest to the Proposed Project Site

Type of Receptor	Name	Distance from Proposed Project (ft)
Park	Nobel Athletic Area, Nobel Drive and Shoreline Drive	1,370 ft from Nobel Drive South Bound On Ramp
	University Gardens Park, Governor Drive and Gullstrand Street	1,350 ft from Governor Drive South Bound On/Off Ramp
Day Care Center	Lighthouse Early Childhood Center, 5055 Governor Drive	980 ft from Governor Drive South Bound On/Off Ramp
School	Webster University, 6333 Greenwich Avenue	Adjacent to Governor Drive/I-805 Interchange, Southwest Corner (approximately 100 ft from road edge)

The SDAPCD operates a network of ambient air monitoring stations throughout San Diego County. The purpose of the monitoring stations is to measure ambient concentrations of the pollutants and determine whether the ambient air quality meets the CAAQS and/or NAAQS.

The nearest ambient monitoring station to the project site that measures CO is the San Diego-Union Street Station in downtown San Diego. This station measures CO only. The monitoring station located downtown at 1100 Beardsley Street is a little further from the project site, and generally measured lower maximum ambient CO concentrations in the past few years than the Union Street monitoring station. Air quality monitoring data from 2004 to 2008 at the Union Street monitoring station show that the federal and state 1-hour and 8-hour CO standards were not exceeded in the past five years. The SDAB has been classified as a maintenance area for the NAAQS for CO, and classified as an attainment area for the CAAQS for CO.

The nearest ambient monitoring station to the project site that measures both PM10 and PM2.5 is the Kearny Mesa Station located at 5555 Overland Avenue. Air quality monitoring data from

2004 to 2008 at the Kearny Mesa station show that the state annual PM10 standard was exceeded in the past five years, while the state and federal 24-hr and federal annual standards were not exceeded. The federal and state 24-hour and annual PM2.5 standards were not exceeded in the past five years. The SDAB has been classified as an attainment area for the NAAQS for PM2.5, unclassifiable for the NAAQS for PM10 and classified as a nonattainment area for the CAAQS for both PM10 and PM2.5.

CO

For the CO hotspot analysis, the procedure outlined in the Transportation Project-Level Carbon Monoxide Protocol, 1997 (CO Protocol) (ITS UC Davis, 1997) was used to perform a microscale air quality modeling using EMFAC2007 and CALINE4 (Caltrans, 1989). EMFAC2007 (CARB, 2007) was used to calculate the CO emission factors required for modeling. CALINE4 included in the CL4 software package was used to predict the maximum 1-hr average CO concentrations at selected intersections in the proposed Project limits.

The composite CO emission factors were calculated for the years 2020 and 2030 for SDAB. The EMFAC2007 SDAB default data were used for most variables including model years, vehicle classes, inspection and maintenance (I/M) program schedule, control technology, vehicle population and odometer accrual rates, vehicle miles traveled (VMT) and vehicle trips, and profiles of Reid Vapor Pressure (RVP), temperature, humidity, speed fractions and idle times.

The ambient temperature used in EMFAC modeling was the lowest mean minimum temperature over a representative period of at least three years, adjusted by +5 °F for both the morning and evening peak hours as recommended by the CO protocol. The temperature was determined to be 50.0°F (NWS, 2009).

The average free flow speeds for the selected links were obtained from the project traffic study. These speeds were then used to determine the average cruise speed based on the arterial classifications. The links' average approach and departure speeds were also determined based on traffic volume, average cruise speed and percentage of red time.

The 8-hour maximum CO concentration was calculated by applying a persistence factor of 0.7 to the predicted maximum 1-hr average CO concentrations obtained from each modeling run. The background concentrations were then added to the predicted concentrations to calculate the modeled maximum concentrations which were then compared to the CAAQS and NAAQS,

in order to determine if the proposed project has significant or less-than-significant air quality impacts.

Table 14: 2020 No-Build and Build 1-hr Average CO Hotspot Modeling Results

Area	Predicted Maximum 1-hr Average CO Concentration (ppm)			Predicted Maximum 1-hr Average CO Concentration Plus Background (ppm) ¹		Percent of the Standard ²	
	2020 No-Build	2020 Build	Change %	2020 No-Build	2020 Build	2020 No-Build	2020 Build
La Jolla Village Drive and I-805 South Bound On/Off Ramp	1.2	1.2	0.00	12.00	12.00	60.00	60.00
Sorrento Valley Road and I-805 South Bound Off Ramp	1.0	1.0	0.00	11.80	11.80	59.00	59.00
Vista Sorrento Parkway and I-805 North Bound On/Off Ramp	0.8	0.8	0.00	11.60	11.60	58.00	58.00

Table 15: 2020 No-Build and Build 8-hr Average CO Hotspot Modeling Results

Area	Predicted Maximum 8-hr Average CO Concentration (ppm) ¹			Predicted Maximum 8-hr Average CO Concentration Plus Background (ppm) ²		Percent of the Standard ³	
	2020 No-Build	2020 Build	Change %	2020 No-Build	2020 Build	2020 No-Build	2020 Build
La Jolla Village Drive and I-805 South Bound On/Off Ramp	0.84	0.84	0.00	6.04	6.04	67.11	67.11
Sorrento Valley Road and I-805 South Bound Off Ramp	0.70	0.70	0.00	5.90	5.90	65.56	65.56
Vista Sorrento Parkway and I-805 North Bound On/Off Ramp	0.56	0.56	0.00	5.76	5.76	64.00	64.00

Notes:

1 Apply a persistence factor of 0.7 to the predicted maximum 1-hr average CO concentration.

2 Background Concentration = 5.2 ppm (highest ambient CO concentration for the past 5 years).

3 Most Stringent 8-hr Average CO Standard = 9.0 ppm (CAAQS and NAAQS).

Table 16: 2030 No-Build and Build 1-hr Average CO Hotspot Modeling Result

Area	Predicted Maximum 1-hr Average CO Concentration (ppm)			Predicted Maximum 1-hr Average CO Concentration Plus Background (ppm) ¹		Percent of the Standard ²	
	2030 No-Build	2030 Build	Change %	2030 No-Build	2030 Build	2030 No-Build	2030 Build
La Jolla Village Drive and I-805 South Bound On/Off Ramp	0.8	0.8	0.00	11.60	11.60	58.00	58.00
Sorrento Valley Road and I-805 South Bound Off Ramp	0.7	0.8	14.29	11.50	11.60	57.50	58.00
Vista Sorrento Parkway and I-805 North Bound On/Off Ramp	0.5	0.5	0.00	11.30	11.30	56.50	56.50

Notes:

1 Background Concentration = 10.8 ppm (highest ambient CO concentration for the past 5 years).

2 Most Stringent 1-hr Average CO Standard = 20 ppm (CAAQS).

Table 17: 2030 No-Build and Build 8-hr Average CO Hotspot Modeling Results

Area	Predicted Maximum 8-hr Average CO Concentration (ppm) ¹			Predicted Maximum 8-hr Average CO Concentration Plus Background (ppm) ²		Percent of the Standard ³	
	2030 No-Build	2030 Build	Change %	2030 No-Build	2030 Build	2030 No-Build	2030 Build
La Jolla Village Drive and I-805 South Bound On/Off Ramp	0.56	0.56	0.00	5.76	5.76	64.00	64.00
Sorrento Valley Road and I-805 South Bound Off Ramp	0.49	0.56	14.29	5.69	5.76	63.22	64.00
Vista Sorrento Parkway and I-805 North Bound On/Off Ramp	0.35	0.35	0.00	5.55	5.55	61.67	61.67

Notes:

1 Apply a persistence factor of 0.7 to the predicted maximum 1-hr average CO concentration.

2 Background Concentration = 5.2 ppm (highest ambient CO concentration for the past 5 years).

3 Most Stringent 8-hr Average CO Standard = 9.0 ppm (CAAQS and NAAQS).

A comparison of the Build and No-Build scenarios for both 2020 and 2030, shows that during the interim year (2020), the impact of the proposed Project is the same as that of the No-Build scenario for all the selected intersections. For the future year (2030), the impact of the proposed Project is the same as that of the No-Build scenario for La Jolla Village Drive/I-805 southbound

on/off ramp intersections and the Vista Sorrento Parkway/I-805 northbound on/off ramp. The impact of the proposed project is 14% greater than that of the no-build scenario for the Sorrento Valley Road/I-805 southbound off ramp intersection.

The results of the quantitative CO hotspot analysis show that the proposed project will not adversely impact the local air quality.

PM10 and PM2.5

On March 10, 2006, the USEPA published a final rule that establishes the transportation conformity criteria and procedures for determining which transportation projects must be analyzed from local air quality impacts in PM2.5 and PM10 nonattainment and maintenance areas. Based on that rule, the USEPA and FHWA published Transportation Conformity Guidance for Qualitative Hot-spot Analysis in PM2.5 and PM10 Nonattainment and Maintenance Areas (PM guidance, FHWA 2006). While the SDAB is not a federally designated PM2.5 and PM10 nonattainment or maintenance area, it is designated as a State nonattainment area for both pollutants. In order to meet State requirements, the proposed project is assessed using the procedure outlined in the PM Guidance.

The PM guidance document describes a qualitative hot spot analysis method that does not involve dispersion modeling. This qualitative PM2.5 and PM10 hot spot analysis method involves a more streamlined review of local factors such as local monitoring data near a proposed project location.

The PM2.5 and PM10 hot spot analysis method in the March 2006 Guidance involves two steps: determining whether or not a project is a "project of concern" and, if it is a "project of concern" preparation of a detailed qualitative analysis of the project.

The PM Guidance defines the following types of projects as projects of air quality concern:

- New or expanded highway project that have a significant number of or significant increase in diesel vehicles.
- Projects affecting intersections that are Level-of-Service (LOS) D, E, or F with a significant number of diesel vehicles, or those that will change to LOS D,E, or F, because of increased traffic volumes from a significant number of diesel vehicles related to the project.
- New bus and rail terminals, and transfer points, that have a significant number of diesel vehicles congregating at a single location.

- Expanded bus and rail terminals, and transfer points, that significantly increase the number of diesel vehicles congregating at a single location.
- Projects in, or affecting locations, areas, or categories of sites that are identified in the PM_{2.5} applicable implementation plan or implementation plan submission, as appropriate, as sites of violation or possible violation.

A significant volume for a new highway or expressway is defined as an annual average daily traffic (AADT) volume of 125,000 or more, and a significant number of diesel vehicles are defined as 8% or more of that total AADT or more than 10,000 truck AADT. An increase in diesel truck traffic is normally considered to be approximately 10%.

The proposed improvements to the I-805 Managed Lanes North Project will increase capacity. The existing 2009 AADT volume is 331,560. The design year (2030) AADT volumes without the project is 343,500 vehicles. However, the existing diesel fuel truck percentage within the project limits is 7.1% of AADT, which is below the threshold of 8%. The proposed project will not result in an increase in the ratio of trucks in the volumes, estimated horizon year (2030) truck AADT will remain at 7.1%.

The proposed project is located in an attainment area for Federal PM₁₀ and PM_{2.5} standards, and in a nonattainment area of State PM₁₀ and PM_{2.5} standards. Based on screening using U.S. EPA PM Guidance, the proposed project is not a Project of Air Quality Concern because it does not meet the criteria due to relatively low total/truck AADT, truck percentage, and increase in truck volumes comparing the Build and No Build Alternatives. The proposed project is improving traffic operations by smoothing traffic flow. The proposed project is therefore in conformance for Federal PM₁₀ and PM_{2.5} standards and is unlikely to increase the frequency or severity of any existing exceedances regarding the non-attainment of state PM₁₀ and PM_{2.5} standards.

The nearest ambient monitoring station to the project site that measures both PM₁₀ and PM_{2.5} is the Kearny Mesa Station located at 5555 Overland Avenue, which is approximately 2.5 miles from the SR-52/I-805 Interchange. The maximum 24-hour and annual mean ambient concentrations of PM₁₀ and PM_{2.5} for the past five years at the Kearny Mesa station are presented in Table 18 and the PM₁₀ and PM_{2.5} trends are plotted in Tables 19-20. Air quality monitoring data from 2004 to 2008 at the Kearny Mesa station shows that the states annual PM₁₀ standard was exceeded in the past five years, while the state and federal 24-hr and federal annual standards were not exceeded. There is no federal standard for the annual PM₁₀

concentration. The state annual and federal 24-hour and annual PM_{2.5} standards were not exceeded in the past five years. There is no state standard for the 24-hour PM_{2.5} concentration. The SDAB has been classified as an attainment area for the NAAQS for PM_{2.5}, unclassifiable for the NAAQS for PM₁₀ and classified as a nonattainment area for the CAAQS for both PM₁₀ and PM_{2.5}.

Table 18: PM₁₀ and PM_{2.5} Background Concentrations (µg/m³)

Pollutant	Averaging Time	2004	2005	2006	2007	2008	CAAQS	NAAQS	Any Year Above (Yes/No)
PM ₁₀	24-hour	44	44	42	44	41	50	150	N
	Annual	25	22	22	22	24	20	---	Y
PM _{2.5}	24-hour	29	29	26	31	27	---	35	N
	Annual	11	10	11	10	11	12	15	N

Notes: PM₁₀ and PM_{2.5} Monitoring site address: 5555 Overland Avenue, San Diego, CA 92123 (approximately 2.5 miles south east of the SR-52/I-805 Interchange).

Source: SDAPCD Air Quality Data website (<http://www.sdapcd.org/air/reports/smog.pdf>) and EPA Air Data (<http://www.epa.gov/air/data/index.html>).

Table 19: PM₁₀ Trend for the Kearny Mesa Monitoring Station

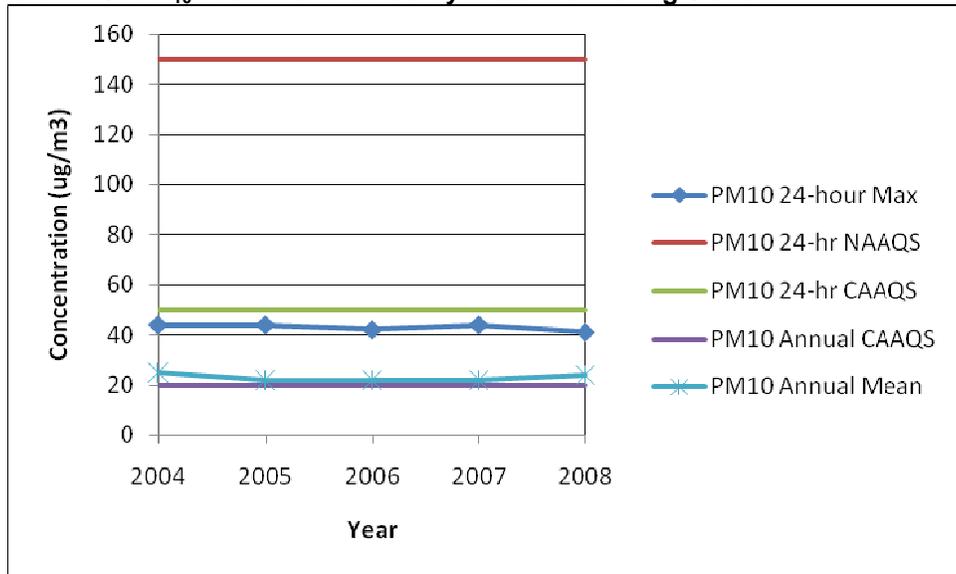
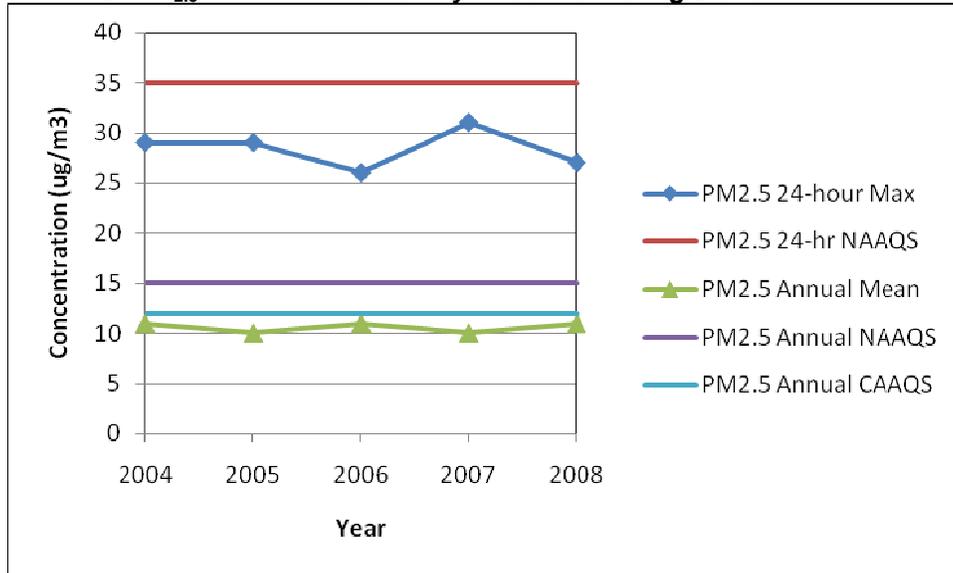


Table 20: PM_{2.5} Trend for the Kearny Mesa Monitoring Station



The proposed project is located in an attainment area for federal PM₁₀ and PM_{2.5} standards, and in a nonattainment area for state PM₁₀ and PM_{2.5} standards. Based on screening using USEPA PM Guidance, the proposed project is not a project of air quality concern because it does not meet the criteria due to relatively low total/truck AADT, truck percentage, and increase in truck volumes comparing the Build and No-Build Alternatives. The proposed project is improving traffic operations by smoothing traffic flow. The proposed project is therefore in conformance for federal PM₁₀ and PM_{2.5} standards and is unlikely to increase the frequency or severity of any existing exceedance regarding the nonattainment of state PM₁₀ and PM_{2.5} standards.

Naturally Occurring Asbestos (NOA)

According to the California Department of Conservation, Division of Mines and Geology report on naturally-occurring asbestos areas (CDC, 2000), San Diego County, and therefore the proposed project site, is not likely to contain naturally-occurring asbestos.

Mobile Source Air Toxics (MSAT)

For the MSAT analysis, the FHWA's Interim Guidance on Air Toxic Analysis for NEPA Documents (MSAT Guidance) (USDOT 2006) was used. The proposed project will add new or create significant capacity to I-805 North with annual average daily traffic (AADT) greater than 140,000. Furthermore, the proposed project is located in proximity to populated areas and sensitive receptors. Consequently, as required by the MSAT guidance, a quantitative MSAT analysis is required.

There are no established regulatory concentration targets for the six priority MSATs. Therefore, the impacts of these MSATs were assessed through a quantitative alternative analysis in which MSAT emissions are compared among proposed project scenarios for build-out in 2020 and 2030, no build 2020 and 2030 and the existing conditions (2006) to determine if meaningful differences in the levels of MSAT emissions exist. Appropriate mitigation measures should be identified and considered if meaningful differences exist.

Six segments of the I-805 North corridor were determined and selected for the analyses. The segment boundaries do not change with the different scenarios. Each segment runs from the middle of each existing interchange to the next interchange and consists of all main lanes, connectors, and HOV lanes, included within the segment for each scenario. Northbound and southbound lanes are included together in each segment. The discrete traffic data for each link contained within a segment are summed up to obtain daily peak and off peak totals for that segment.

CT-EMFAC is a California specific transportation project-level analysis tool, designed to model criteria pollutants, Mobile Source Air Toxics (MSATs) and carbon dioxide using the latest version of the California Mobile Source Emission Inventory and Emission Factors model, EMFAC2007.

MSAT Analysis

Traffic activity data has been utilized in performing the MSAT analysis. Traffic activity data has been supplemented by available Caltrans data inventory systems for the base year values and also by Caltrans forecast modeling of the corridor for future year values. Emission factors for the six MSATs have been obtained for the San Diego Air Basin portion of San Diego County using CT-EMFAC 2007. Results of the MSAT analysis are tabulated in Tables 21-26. The analysis was refined to determine MSAT emission rates by segments of the I-805 Managed Lanes North Project. The changes in the MSAT emissions projected among the proposed alternatives over the years are illustrated in Appendix D of the AQ technical report. These tables show emission rates for the combined northbound and southbound traffic for each MSAT along the I-805 from north to south, by segment.

Discussion of MSAT Results

The analysis indicates that a significant decrease in MSAT emissions can be expected for the proposed alternative from the base year (2006) levels through future year levels. This decrease is prevalent throughout the highest-priority MSATs for the analyzed alternative. This decrease is also consistent with the aforementioned EPA's study that projects a significant reduction in on-

highway emissions of benzene, formaldehyde, 1, 3-butadiene, and acetaldehyde between 2000 and 2020. Based on the analysis for this project reductions in MSAT levels expected by 2030 for the Build scenario when compared to the No-Build scenario are: 13.5% for DPM, 11.1% for benzene, 14.0% for 1,3-butadiene, 10.9% for acetaldehyde, 7.7% for acrolein, and 13.8% for formaldehyde. These projected reductions are achieved, while total VMTs for the Build Alternative increase by approximately 5.7% in 2030 when compared to the No-Build Alternative.

Table 21: Sorrento Valley to Mira Mesa MSAT Analysis Results

MSAT	Emissions (kg/day)					% Change					
	2006	2020NB	2020B	2030NB	2030B	2020B / 2020NB	2030B / 2030NB	2020NB / 2006	2020B / 2006	2030NB / 2006	2030B / 2006
Diesel PM	6.00	3.49	3.36	2.94	3.01	-3.72	2.38	-41.83	-44.00	-51.00	-49.83
Formaldehyde	1.89	0.66	0.64	0.57	0.59	-3.03	3.51	-65.12	-66.17	-69.87	-68.82
Butadiene	0.44	0.16	0.15	0.14	0.14	-6.25	0.00	-63.64	-65.91	-68.18	-68.18
Benzene	2.09	0.80	0.77	0.70	0.72	-3.75	2.86	-61.72	-63.16	-66.51	-65.55
Acrolein	0.10	0.04	0.04	0.03	0.03	0.00	0.00	-60.00	-60.00	-70.00	-70.00
Acetaldehyde	0.59	0.19	0.18	0.16	0.16	-5.26	0.00	-67.80	-69.49	-72.88	-72.88
VMT (mile/day)	242926.47	279513.26	268558.75	307286.50	313896.79	-3.92	2.15	15.06	10.55	26.49	29.21

Table 22: Mira Mesa to Miramar MSAT Analysis Results

MSAT	Emissions (kg/day)					% Change					
	2006	2020NB	2020B	2030NB	2030B	2020B / 2020NB	2030B / 2030NB	2020NB / 2006	2020B / 2006	2030NB / 2006	2030B / 2006
Diesel PM	4.96	2.73	2.90	2.05	2.51	6.23	22.44	-44.96	-41.53	-58.67	-49.40
Formaldehyde	1.56	0.52	0.56	0.39	0.49	7.69	25.64	-66.67	-64.10	-75.00	-68.59
Butadiene	0.36	0.12	0.13	0.10	0.12	8.33	20.00	-66.67	-63.89	-72.22	-66.67
Benzene	1.72	0.63	0.66	0.50	0.60	4.76	20.00	-63.37	-61.63	-70.93	-65.12
Acrolein	0.08	0.03	0.03	0.02	0.03	0.00	50.00	-62.50	-62.50	-75.00	-62.50
Acetaldehyde	0.49	0.15	0.16	0.11	0.13	6.67	18.18	-69.39	-67.35	-77.55	-73.47
VMT (mile/day)	198251.85	230140.48	229349.20	247953.52	264899.63	-0.34	6.83	16.08	15.69	25.07	33.62

Table 23: Miramar to Nobel MSAT Analysis Results

MSAT	Emissions (kg/day)					% Change					
	2006	2020NB	2020B	2030NB	2030B	2020B / 2020NB	2030B / 2030NB	2020NB / 2006	2020B / 2006	2030NB / 2006	2030B / 2006
Diesel PM	1.84	0.98	1.14	0.76	0.98	16.33	28.95	-46.74	-38.04	-58.70	-46.74
Formaldehyde	0.59	0.18	0.22	0.14	0.19	22.22	35.71	-69.49	-62.71	-76.27	-67.80
Butadiene	0.14	0.04	0.05	0.03	0.05	25.00	66.67	-71.43	-64.29	-78.57	-64.29
Benzene	0.65	0.23	0.26	0.18	0.23	13.04	27.78	-64.62	-60.00	-72.31	-64.62
Acrolein	0.03	0.01	0.01	0.01	0.01	0.00	0.00	-66.67	-66.67	-66.67	-66.67
Acetaldehyde	0.18	0.05	0.06	0.04	0.05	20.00	25.00	-72.22	-66.67	-77.78	-72.22
VMT (mile/day)	77601.13	89876.43	90393.80	96427.27	104707.85	0.58	8.59	15.82	16.49	24.26	34.93

Table 24: Nobel to Governor MSAT Analysis Results

MSAT	Emissions (kg/day)					% Change					
	2006	2020NB	2020B	2030NB	2030B	2020B / 2020NB	2030B / 2030NB	2020NB / 2006	2020B / 2006	2030NB / 2006	2030B / 2006
Diesel PM	4.88	2.45	2.70	1.91	2.35	10.20	23.04	-49.80	-44.67	-60.86	-51.84
Formaldehyde	1.61	0.44	0.50	0.34	0.43	13.64	26.47	-72.67	-68.94	-78.88	-73.29
Butadiene	0.37	0.11	0.12	0.08	0.10	9.09	25.00	-70.27	-67.57	-78.38	-72.97
Benzene	1.84	0.56	0.61	0.45	0.54	8.93	20.00	-69.57	-66.85	-75.54	-70.65
Acrolein	0.09	0.03	0.03	0.02	0.02	0.00	0.00	-66.67	-66.67	-77.78	-77.78
Acetaldehyde	0.50	0.13	0.14	0.10	0.12	7.69	20.00	-74.00	-72.00	-80.00	-76.00
VMT (mile/day)	220642.21	246169.59	249527.25	260944.11	289137.02	1.36	10.80	11.57	13.09	18.27	31.04

Table 25: Governor to SR-52 MSAT Analysis Results

MSAT	Emissions (kg/day)					% Change					
	2006	2020NB	2020B	2030NB	2030B	2020B / 2020NB	2030B / 2030NB	2020NB / 2006	2020B / 2006	2030NB / 2006	2030B / 2006
Diesel PM	3.76	1.88	2.02	1.47	1.70	7.45	15.65	-50.00	-46.28	-60.90	-54.79
Formaldehyde	1.24	0.37	0.40	0.28	0.31	8.11	10.71	-70.16	-67.74	-77.42	-75.00
Butadiene	0.29	0.09	0.09	0.07	0.08	0.00	14.29	-68.97	-68.97	-75.86	-72.41
Benzene	1.42	0.47	0.50	0.37	0.40	6.38	8.11	-66.90	-64.79	-73.94	-71.83
Acrolein	0.07	0.02	0.02	0.02	0.02	0.00	0.00	-71.43	-71.43	-71.43	-71.43
Acetaldehyde	0.38	0.10	0.11	0.08	0.09	10.00	12.50	-73.68	-71.05	-78.95	-76.32
VMT (mile/day)	169787.21	189053.94	191247.63	199826.84	213019.44	1.16	6.60	11.35	12.64	17.69	25.46

Table 26: SR-52 to Clairemont Mesa MSAT Analysis Results

MSAT	Emissions (kg/day)					% Change					
	2006	2020NB	2020B	2030NB	2030B	2020B / 2020NB	2030B / 2030NB	2020NB / 2006	2020B / 2006	2030NB / 2006	2030B / 2006
Diesel PM	4.67	2.24	2.31	1.47	1.70	3.12	15.65	-52.03	-50.54	-68.52	-63.60
Formaldehyde	1.55	0.45	0.46	0.28	0.31	2.22	10.71	-70.97	-70.32	-81.94	-80.00
Butadiene	0.36	0.11	0.11	0.07	0.08	0.00	14.29	-69.44	-69.44	-80.56	-77.78
Benzene	1.75	0.59	0.59	0.37	0.40	0.00	8.11	-66.29	-66.29	-78.86	-77.14
Acrolein	0.08	0.03	0.03	0.02	0.02	0.00	0.00	-62.50	-62.50	-75.00	-75.00
Acetaldehyde	0.48	0.13	0.13	0.08	0.09	0.00	12.50	-72.92	-72.92	-83.33	-81.25
VMT (mile/day)	197234.46	217239.84	214415.58	234044.77	237779.08	-1.30	1.60	10.14	8.71	18.66	20.56

Although the No Build Alternative is expected to accommodate less traffic, its MSAT emissions are expected to be greater than those of the “Build” Alternative in both 2020 and 2030. The greater MSAT emissions projected for the “No Build” Alternative, despite less traffic, are attributable to the congested traffic conditions and breakdown of travel speeds during peak periods.

In conclusion, MSAT will not adversely impact air quality in the vicinity of the proposed project site since no meaningful emission increase will occur. In contrary, the proposed project will highly reduce MSAT emissions when compared to the base year (2006) levels.

Summary of Existing Credible Scientific Evidence Relevant to Evaluating Impacts of MSATs

Research into the health impacts of MSATs is ongoing. For different emission types, there are a variety of studies that show that some either are statistically associated with adverse health outcomes through epidemiological studies (frequently based on emissions levels found in occupational settings) or that animals demonstrate adverse health outcomes when exposed to large doses.

Exposure to toxics has been a focus of a number of EPA efforts. Most notably, the agency conducted the National Air Toxics Assessment (NATA) in 1996 to evaluate modeled estimates of human exposure applicable to the county level. While not intended for use as a measure of or benchmark for local exposure, the modeled estimates in the NATA database best illustrate the levels of various toxics when aggregated to a national or State level.

The EPA is in the process of assessing the risks of various kinds of exposures to these pollutants. The EPA Integrated Risk Information System (IRIS) is a database of human health effects that may result from exposure to various substances found in the environment. The IRIS database is located at <http://www.epa.gov/iris>. The following toxicity information for the six prioritized MSATs was taken from the IRIS database Weight of Evidence Characterization summaries. This information is taken verbatim from EPA's IRIS database and represents the Agency's most current evaluations of the potential hazards and toxicology of these chemicals or mixtures.

- Benzene is characterized as a known human carcinogen.
- The potential carcinogenicity of acrolein cannot be determined because the existing data are inadequate for an assessment of human carcinogenic potential for either the oral or inhalation route of exposure.
- Formaldehyde is a probable human carcinogen, based on limited evidence in humans, and sufficient evidence in animals.
- 1,3-butadiene is characterized as carcinogenic to humans by inhalation.
- Acetaldehyde is a probable human carcinogen based on increased incidence of nasal tumors in male and female rats and laryngeal tumors in male and female hamsters after inhalation exposure.
- Diesel exhaust (DE) is likely to be carcinogenic to humans by inhalation from environmental exposures. Diesel exhaust as reviewed in this document is the combination of diesel particulate matter and diesel exhaust organic gases.
- Diesel exhaust also represents chronic respiratory effects, possibly the primary non-cancer hazard from MSATs. Prolonged exposures may impair pulmonary function and could produce symptoms, such as cough, phlegm, and chronic bronchitis. Exposure relationships have not been developed from these studies.

There have been other studies that address MSAT health impacts in proximity to roadways. The Health Effects Institute, a non-profit organization funded by EPA, FHWA, and industry, has undertaken a major series of studies to research near-roadway MSAT hot spots, the health implications of the entire mix of mobile source pollutants, and other topics. The final summary of the series is not expected for several years.

Some recent studies have reported that proximity to roadways is related to adverse health outcomes - particularly respiratory problems (South Coast Air Quality Management District, Multiple Air Toxic Exposure Study-II (2000); Highway Health Hazards, The Sierra Club (2004) summarizing 24 Studies on the relationship between health and air quality); NEPA's Uncertainty in the Federal Legal Scheme Controlling Air Pollution from Motor Vehicles, Environmental Law Institute, 35 ELR 10273 (2005) with health studies cited therein).

Much of this research is not specific to MSATs, instead it surveys the full spectrum of both criteria and other pollutants.

Regardless of the alternative chosen, emissions will likely be lower than present levels in the design year as a result of EPA's national control programs that are projected to reduce MSAT emissions by 57 to 87% between 2000 and 2020. Local conditions may differ from these national projections in terms of fleet mix and turnover, VMT growth rates, and local control measures. However, the magnitude of the EPA-projected reductions is so great (even after accounting for VMT growth) that MSAT emissions in the study area are likely to be lower in the future in nearly all cases.

Because of the uncertainties outlined above, a quantitative assessment of the effects of air toxic emissions impacts on human health cannot be made at the project level. While available tools do allow us to reasonably predict relative emissions changes between alternatives for larger projects, the amount of MSAT emissions from each of the project alternatives and MSAT concentrations or exposures created by each of the project alternatives cannot be predicted with enough accuracy to be useful in estimating health impacts. (As noted above, the current emissions model is not capable of serving as a meaningful emissions analysis tool for smaller projects.) Therefore, the relevance of the unavailable or incomplete information is that it is not possible to make a determination of whether any of the alternatives will have "significant adverse impacts on the human environment."

Caltrans has provided a quantitative analysis of MSAT relative to the various alternatives and has acknowledged that some alternatives may result in increased exposure to MSAT emissions in certain locations, although the concentrations and duration of exposures are uncertain; because of this uncertainty, the health effects from these emissions cannot be estimated.

Construction Impacts

The construction phase of the proposed project may include demolition of existing structures and surfaces, and construction of new structures and surfaces that may be sources of fugitive emissions of particulate matter/dust as well emissions of criteria pollutants from construction equipment. Detail quantitative construction phase analysis is not required in this study since the construction phase will last less than five (5) years. However, potential fugitive dust emission sources from construction activities may include:

- Site preparation (excavation, drilling, blasting)
- Handling and transfer systems of building material (bulldozing, stockpiling, truck loading),
- Wind erosion from exposed debris piles and exposed area,
- Vehicular travel on unpaved area,
- Mud and dirt carry-out onto paved surfaces,
- Storage piles, and
- Fabrication processes.

Although particulate/dust emissions from these sources typically occur over short periods of time, they may have a substantial temporary impact on local air quality, especially during dry conditions and/or high wind speed events. Therefore their impact needs to be minimized.

Environmental Consequences

During construction, short-term degradation of air quality may occur due to the release of particulate emissions (airborne dust) generated by excavation, grading, hauling, and various other activities. Emissions from construction equipment also are anticipated and will include CO, nitrogen oxides (NO_x), volatile organic compounds (VOCs), directly-emitted particulate matter (PM₁₀ and PM_{2.5}), and toxic air contaminants such as diesel exhaust particulate matter. Ozone is a regional pollutant that is derived from NO_x and VOCs in the presence of sunlight and heat.

Site preparation and roadway construction will involve clearing, cut-and-fill activities, grading, removing or improving existing roadways, and paving roadway surfaces. Construction-related effects on air quality from most highway projects will be greatest during the site preparation phase because most engine emissions are associated with the excavation, handling, and transport of soils to and from the site. If not properly controlled, these activities will temporarily generate PM₁₀, PM_{2.5}, and small amounts of CO, SO₂, NO_x, and VOCs. Sources of fugitive dust will include disturbed soils at the construction site and trucks carrying uncovered loads of

soils. Unless properly controlled, vehicles leaving the site will deposit mud on local streets, which could be an additional source of airborne dust after it dries. PM10 emissions will vary from day to day, depending on the nature and magnitude of construction activity and local weather conditions. PM10 emissions will depend on soil moisture, silt content of soil, wind speed, and the amount of equipment operating. Larger dust particles will settle near the source, while fine particles will be dispersed over greater distances from the construction site.

Construction activities for large development projects are estimated by the Environmental Protection Agency (EPA) to add 1.2 tons of fugitive dust per acre of soil disturbed per month of activity. If water or other soil stabilizers are used to control dust, the emissions can be reduced by up to 50%. Caltrans' Standard Specifications (Section 10) pertaining to dust minimization requirements requires use of water or dust palliative compounds and will reduce potential fugitive dust emissions during construction.

In addition to dust-related PM10 emissions, heavy trucks and construction equipment powered by gasoline and diesel engines will generate CO, SO₂, NO_x, VOCs and some soot particulate (PM10 and PM2.5) in exhaust emissions. If construction activities were to increase traffic congestion in the area, CO and other emissions from traffic will increase slightly while those vehicles are delayed. These emissions will be temporary and limited to the immediate area surrounding the construction site.

SO₂ is generated by oxidation during combustion of organic sulfur compounds contained in diesel fuel. Off-road diesel fuel meeting Federal Standards can contain up to 5,000 parts per million (ppm) of sulfur, whereas on-road diesel is restricted to less than 15 ppm of sulfur. However, under California law and Air Resources Board regulations, off-road diesel fuel used in California must meet the same sulfur and other standards as on-road diesel fuel, so SO₂-related issues due to diesel exhaust will be minimal. Some phases of construction, particularly asphalt paving, will result in short-term odors in the immediate area of each paving site(s). Such odors will be quickly dispersed below detectable thresholds as distance from the site(s) increases.

Avoidance, Minimization and/or Mitigation Measures

It is recommended that the following measures be incorporated into the construction phase of the project proposed project to minimize the emission of fugitive dust, PM10, and PM2.5:

- Minimize land disturbance.
- Use watering trucks to minimize dust; watering should be sufficient to confine dust plumes to the project work areas.

- Suspend grading and earth moving when wind gusts exceed 25 miles per hour unless the soil is wet enough to prevent dust plumes.
- Cover all trucks hauling dirt when traveling at speeds greater than 15 miles per hour.
- Stabilize the surface of dirt piles if not removed within 2 days.
- Limit vehicular paths on unpaved surfaces and stabilize any temporary roads.
- Minimize unnecessary vehicular and machinery activities.
- Sweep paved streets at least once per day where there is evidence of dirt that has been carried on to the roadway.
- Revegetate disturbed land, including vehicular paths created during construction to avoid future off-road vehicular activities.
- Remove unused material.

It is also recommended that the following measures be incorporated into the construction phase of the proposed project to minimize exposure to diesel particulate emissions: locate construction equipment and truck staging and maintenance areas as far as feasible and nominally downwind of schools, active recreation areas, and other areas of high population density.

2.13 NOISE

Regulatory Setting

The National Environmental Policy Act (NEPA) of 1969 and the California Environmental Quality Act (CEQA) provide the broad basis for analyzing and abating highway traffic noise effects. The intent of these laws is to promote the general welfare and to foster a healthy environment. The requirements for noise analysis and consideration of noise abatement and/or mitigation, however, differ between NEPA and CEQA.

California Environmental Quality Act

CEQA requires a strictly baseline versus build analysis to assess whether a proposed project will have a noise impact. If a proposed project is determined to have a significant noise impact under CEQA, then CEQA dictates that mitigation measures must be incorporated into the project unless such measures are not feasible.

National Environmental Policy Act and 23 CFR 772

For highway transportation projects with FHWA (and Caltrans, as assigned) 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 will occur. The NAC differ depending on the type of land use under analysis. For example, the NAC for residences (67 dBA) is lower than the NAC for commercial areas (72 dBA).

The following table lists the noise abatement criteria for use in the NEPA-23 CFR 772 analysis.

Table 27: Noise Abatement Criteria

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

Table 28 lists the noise levels of common activities to enable readers to compare the actual and predicted highway noise-levels discussed in this section with common activities.

Table 28: Common Noise Levels

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
Jet Fly-over at 300m (1000 ft)	110	Rock Band
Gas Lawn Mower at 1 m (3 ft)	100	
Diesel Truck at 15 m (50 ft), at 80 km (50 mph)	90	Food Blender at 1 m (3 ft)
Noisy Urban Area, Daytime	80	Garbage Disposal at 1 m (3 ft)
Gas Lawn Mower, 30 m (100 ft)	70	Vacuum Cleaner at 3 m (10 ft)
Commercial Area		Normal Speech at 1 m (3 ft)
Heavy Traffic at 90 m (300 ft)	60	Large Business Office
Quiet Urban Daytime	50	Dishwasher Next Room
Quiet Urban Nighttime	40	Theater, Large Conference Room (Background)
Quiet Suburban Nighttime		Library
Quiet Rural Nighttime	30	Bedroom at Night, Concert Hall (Background)
	20	Broadcast/Recording Studio
	10	
Lowest Threshold of Human Hearing	0	Lowest Threshold of Human Hearing

In accordance with the Caltrans' Traffic Noise Analysis Protocol for New Highway Construction and Reconstruction Projects, August 2006, a noise impact occurs when the future noise level with the project results in a substantial increase in noise level (defined as a 12 dBA or more increase) or when the future noise level with the project approaches or exceeds the NAC. Approaching the NAC is defined as coming within 1 dBA of the NAC.

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

The Caltrans' Traffic Noise Analysis Protocol sets forth the criteria for determining when an abatement measure is reasonable and feasible. Feasibility of noise abatement is basically an engineering concern. A minimum 5 dBA reduction in the future noise level must be achieved for an abatement measure to be considered feasible. Other considerations include topography, access requirements, other noise sources and safety considerations. The reasonableness

determination is basically a cost-benefit analysis. Factors used in determining whether a proposed noise abatement measure is reasonable include: residents acceptance, the absolute noise level, build versus existing noise, environmental impacts of abatement, public and local agencies input, newly constructed development versus development pre-dating 1978 and the cost per benefited residence.

Affected Environment

A Noise Study Report (NSR) dated May 2008 and addendum dated March 2009, were prepared for this project and incorporated by reference. The report assesses the projects potential noise impacts by evaluating the impacts the project will have on noise receptors within the project area. A Preliminary Noise Abatement Decision Report (NADR) dated March 2009, was prepared and presents the preliminary noise abatement decision as required by the Caltrans' Traffic Noise Analysis Protocol. Project Features Figures 3A-3D show the locations of Noise Receptor Sites and proposed noise wall/berm locations.

Existing land uses as discussed in Section 2.1.1 that are adjacent to the project include commercial, business, industrial, multi and single-family residences, and recreational. MCAS Miramar is also located adjacent to the project. Noise due to aircraft overflight activity from MCAS Miramar is of short duration and is not included in the analysis. Sensitive receptors in the project area are residential and recreational facilities.

Noise sensitive land uses within the project area are identified by area name, general location and land uses in Table 29.

Table 29: Identified Noise Sensitive Areas

Area	Location	Land Uses Present	Number of Units Represented
1	West of I-805 South of SR-52 to south project limit.	Residential (single family homes built between 1963 and 1964).	21 SFR
2	West of I-805 Between SR-52 and Governor Dr.	Residential (single family homes built between 1984 and 1985) and commercial office buildings.	11 SFR 4 COM
3	I-805 Between Governor Dr. and Nobel Dr.	Residential (single family homes built in 1970), commercial offices West of I-805. Commercial (Miramar Wholesale Nursery), East of I-805	38 SFR 2 COM
4	West of I-805 Between Nobel Dr. and La Jolla Village Dr.	Residential (Condominiums currently under construction or recently completed) and commercial office buildings and light industrial (Bio Gen Campus)	4 MFR 1 COM
5	West of I-805 Between Carroll Canyon Rd. and La Jolla Village Dr.	Commercial office buildings and light Industrial	5 COM
6	East of I-805 Between La Jolla Village Dr. and Carroll Canyon Rd.	Industrial and water treatment plant.	1 COM
7	West of I-805 Between north project limit. and Carroll Canyon Rd.	Commercial office buildings and light industrial	2 COM
8	East of I-805 Between Carroll Canyon Rd. and north project limit.	Commercial office buildings and light industrial	2 COM

SFR = Single Family Residence(s), MFR = Multi-family residence(s), COM = Commercial/Industrial Building(s)

Environmental Consequences

Long and short-term noise measurements were conducted throughout the project area in order to characterize the general existing noise environment and to provide a basis for the noise model.

Some of the short-term noise measurements used for model validation were excluded because they contained contributions from non-traffic noise sources such as short-duration aircraft events, and construction equipment.

Build Alternative

The project location was divided into 8 areas for noise analysis (Figure 17). For the Build Alternative, Area 1, 2, and 3 contains residential and commercial facilities and has receiver location noise levels that approach or exceed the Noise Abatement Criteria (NAC) for a total of 47 impacted single-family residences. The residential and commercial receiver locations in Area

4 do not exceed the NAC. The commercial and industrial receiver locations in Areas 5, 6, 7, and 8 do not approach or exceed the NAC. Noise measurements are summarized in Table 30.

Table 30: Noise Impact Analysis Summary

Area	Receiver	Address	Existing	No Build	Build	Noise Impact Requiring Abatement Consideration	Predicted Noise Level with Abatement (dBA)					
							6ft	8ft	10ft	12ft	14ft	16 ft
1	1-01	5419 Northridge	66	66	66	Yes	57	55	54	54	53	53
	1-02	5332 Northridge	55	55	56	No	50	50	50	50	50	50
	ST01 / 1-03M	5439 Northridge	66	66	67	Yes	60	58	57	56	56	55
	1-04	5459 Northridge	66	66	66	Yes	60	59	58	57	56	55
	1-05C	5384 Palmyra	66	66	67	Yes	57	56	55	55	55	54
	1-06	5429 Limerick	60	60	60	No	-	-	-	-	-	-
	ST02 / 1-07	5507 Limerick	60	60	60	No	-	-	-	-	-	-
	1-08	5567 Limerick	61	61	61	No	-	-	-	-	-	-
	1-09	5619 Limerick	59	59	58	No	-	-	-	-	-	-
	1-10	5643 Limerick	60	60	59	No	-	-	-	-	-	-
2	2-01C	6105 Wolfstar	68	70	68	Yes	60	58	56	55	54	54
	2-02	6111 Wolfstar	68	68	68	Yes	60	59	57	57	56	55
	ST03 / 2-03M	6117 Wolfstar	68	68	69	Yes	63	63	62	62	32	31
	2-04C	6123 Wolfstar	67	67	67	Yes	66	63	59	57	56	55
	2-05	6135 Wolfstar	49	50	47	No	-	-	-	-	-	-
	2-06	6147 Wolfstar	46	47	44	No	-	-	-	-	-	-
	2-07	6153 Wolfstar	59	59	60	No	-	-	-	-	-	-
	2-08	6161 Wolfstar	54	54	53	No	-	-	-	-	-	-
	2-09	6200 Greenwich	60	60	62	No	-	-	-	-	-	-
	2-10	6256 Greenwich	66	66	67	No	-	-	-	-	-	-
	ST04 / 2-11	6165 Greenwich	67	67	69	No	-	-	-	-	-	-
	2-12	6363 Greenwich	62	62	62	No	-	-	-	-	-	-
3	3-C1	5190 Governor	53	53	52	No	-	-	-	-	-	-
	3-C2	5400 Governor	67	67	69	No	-	-	-	-	-	-
	3-01	7091 Enders	64	64	64	No	64	64	64	64	63	63
	3-03	7107 Enders	63	63	65	No	65	65	65	65	65	64
	3-03	7111 Enders	65	65	67	Yes	67	67	67	67	66	66
	3-04C	7115 Enders	67	68	70	Yes	70	69	69	69	69	68
	3-05	7125 Enders	64	64	72	Yes	66	63	61	59	58	57
	3-06	7131 Enders	63	63	72	Yes	67	65	63	62	61	60
	3-07	7169 Enders	63	63	71	Yes	68	66	64	63	62	61
	3-08	7217 Steinbeck	63	63	73	Yes	68	66	64	63	62	61
	3-09	7225 Steinbeck	64	64	74	Yes	68	66	64	63	62	61
	3-10	7241 Steinbeck	64	64	76	Yes	70	67	65	63	62	61
	3-11	7215 Enders	63	63	67	Yes	67	65	63	61	60	60
	ST05 / 3-12MC	7257 Steinbeck	65	65	77	Yes	71	68	67	65	64	63
	3-13C	7273 Steinbeck	67	67	78	Yes	73	71	69	67	66	65
	3-14	7291 Steinbeck	66	66	76	Yes	71	70	68	67	66	65
	3-15	7315 Steinbeck	65	65	74	Yes	69	68	67	66	65	64
	3-16	7335 Steinbeck	63	63	71	Yes	68	66	65	64	63	62
	3-17	7415 Bovet	62	62	69	Yes	67	66	64	63	62	61
	3-18	7445 Bovet	63	64	71	Yes	69	68	66	65	64	63
ST06 / 3-19M	7465 Bovet	63	63	71	Yes	67	66	65	64	63	63	
3-20	7476 Bovet	61	62	70	Yes	66	65	64	63	62	62	
3-21	7456 Bovet	58	59	61	Yes	61	61	60	59	59	58	
4	ST07 / 4-01	5200 Research	68	68	68	No	-	-	-	-	-	-
	ST08 / 4-02	9085 Judicial	59	60	60	No	-	-	-	-	-	-
	4-03	9135 Judicial	61	61	61	No	-	-	-	-	-	-
	4-04	9135 Judicial	63	64	64	No	-	-	-	-	-	-
	4-05	9135 Judicial	63	63	63	No	-	-	-	-	-	-
5	5-01	Under Construction	65	65	66	No	-	-	-	-	-	-
	50-2	4767 Nexus Center	47	46	46	No	-	-	-	-	-	-
	5-03	4895 Eastgate Mall	65	65	66	No	-	-	-	-	-	-
	5-04	4790 Eastgate Mall	45	45	45	No	-	-	-	-	-	-
	ST09 / 5-05	4840 Eastgate Mall	70	71	72	No	-	-	-	-	-	-
6	6-01	4949 Eastgate Mall	63	63	64	No	-	-	-	-	-	-
7	7-01	10345 Sorrento Valley Rd.	65	65	66	No	-	-	-	-	-	-
	7-02	10435 Sorrento Valley Rd.	58	58	57	No	-	-	-	-	-	-
8	8-01	4955 Directors	65	65	64	No	-	-	-	-	-	-
	8-02	4921 Directors	49	49	49	No	-	-	-	-	-	-
	8-03	10251 Vista Sorrento Pkwy.	62	62	63	No	-	-	-	-	-	-

C - Critical Receiver.
M- Measurement

No Build Alternative

Under the No Build some noise receivers experience an increase from 1-2 decibels, this increase is not perceptible by the human ear. The No Build will not result in perceptible traffic noise levels for residential, commercial, or recreational uses along the I-805 project corridor.

Avoidance, Minimization and/or Mitigation Measures

A Noise Abatement Decision Report (NADR), dated September 2010, was prepared for this project and is incorporated by reference. The report documents the decision of the overall feasibility and reasonableness of providing abatement measures.

Feasibility refers to the minimum noise reduction performance of 5 decibels or more for proposed noise abatement when built to engineered standards (safety, height, highway and local access considerations, topography, etc.). The determination of the reasonableness of noise abatement is more subjective than the determination of feasibility. The overall reasonableness of noise abatement is determined by many factors including: cost, absolute noise levels, existing versus design-year noise levels, achievable noise reduction, date of development along the highway, and abatement benefits. A final decision is determined after environmental impacts and public input are considered.

The preliminary reasonableness determination is made by calculating an allowance that is considered to be a reasonable amount of money per benefited residence to spend on abatement. This reasonable allowance is then compared to the engineer's cost estimate of the abatement. If the engineer's cost estimate is less than the allowance, the preliminary determination is that the abatement is reasonable. If the cost estimate is greater than the allowance, the preliminary determination is that abatement is not reasonable.

Area 1:

Soundwall S1258 (Figure 3-A) will be 6 ft in height and approximately 604 ft in length. It will be located along the southbound side of the I-805 between stations 1258+00 and 1263+00 (receiver sites 1-01 to 1-05). The wall will provide feasible reduction for 10 single-family residences. Private construction easements will be purchased to construct S1258. The reasonable cost allowance is \$480,000 for the 10 residences. The estimated construction cost with all easements is \$416,055, which is below the reasonable allowance and is considered reasonable.

Soundwall S1258 is feasible and reasonable and construction is recommended.

Area 2:

Soundwall S1286 will be 6 ft in height and approximately 353 ft in length. It will be located along the southbound side of the I-805 between stations 1284+00 and 1287+00. The wall will provide feasible reduction for 4 single-family residences. The reasonable cost allowance is \$144,000 for the 4 residences. The estimated construction cost without easements is \$145,367, which is 1% above the reasonable allowance. When only temporary construction easements are included, which are estimated to cost \$190,167, the estimated cost exceeds the reasonable allowance by 32%.

Soundwall S1286 is feasible but not reasonable due to the estimated construction cost being higher than the total cost allowance. Construction of noise barrier S1286 is not recommended. Soundwall S1288 will be 8-10 ft in height and approximately 150 ft in length. It will be located along the southbound side of the I-805 between stations 1289+00 and 1290+00. The wall will provide feasible reduction for 2 single-family residences located in Area 2 of the noise study. The reasonable cost allowance is \$72,000 for the 2 residences. The estimated construction cost without easements is \$84,562, which is 17% above the reasonable allowance. When only temporary construction easements are included, which are estimated to cost \$98,912, the estimated cost exceeds the reasonable allowance by 37%.

Area 3:

Two noise abatement alternatives are proposed at the Governor Drive southbound off ramp are discussed below. Noise abatement at this location will be selected during the design phase based on the support from the local community.

1. Soundwall/Berm Combination S1322 (Figure 3-B) will be located on an embankment along the southbound side of the I-805 between stations 1321+70 and 1341+50 (receiver sites 3-01 to 3-21). S1322 will consist of 3 sections and will extend for approximately 1,980 ft. The first section will consist of a soundwall approximately 978 ft in length. The second section will consist of a soundwall constructed on top of a berm and will be approximately 402 ft in length. The third section will consist of a full berm of approximately 600 ft in length. S1322 will also fill in an existing ditch and grade onto private property. The height of the soundwall/berm will vary between 8-12 ft. S1322 will provide feasible noise reduction for 31 single-family residences. The reasonable cost allowance is \$1,860,000 for the 31 residences. The estimated construction cost without easements is \$1,051,517. The total cost with all easements is \$1,169,817, and is below the reasonable allowance.

Noise barrier S1322 is considered feasible and reasonable and construction is recommended.

2. Soundwall/Berm Combination S1322 (Figure 3-B) will be located on an embankment along the southbound side of the I-805 between stations 1321+70 and 1341+50 (receiver sites 3-01 to 3-21). S1322 will consist of 2 sections and will extend for approximately 1,920 ft. The first section will consist of a soundwall (trench footing) approximately 850 ft in length. The second section will consist of a soundwall (spread footing) constructed on top of a berm and will be approximately 1070ft in length. The proposed berm/wall combination noise barrier will be constructed within state right-of-way. The existing drainage ditch will be reconstructed. The height of the barrier will vary between 8 to 12 feet. The noise barrier will benefit 31 single-family residential units and is considered feasible. Private construction easements will be acquired in order to construct S1322. The reasonable cost allowance is \$1,860,000 for the 31 residences. The estimated construction cost without easements is \$1,160,557. The total cost with all easements is \$1,279,557 and is below the reasonable allowance.

Noise barrier S1322 is considered feasible and reasonable and construction is recommended.

Based on the studies completed to date, Caltrans intends to incorporate noise abatement in the form of barriers/berms at receiver sites 1-01 to 1-05, and 3-01 to 3-21, with respective lengths and average heights of 604ft long/6ft high, 1980ft long or 1920ft long/12ft high. Calculations based on preliminary design data indicate that the barriers/berms will reduce noise levels by 5 dBA for 41 residences at a cost of \$1,279,973. If during final design conditions have substantially changed, noise abatement may not be necessary. The final decision of the noise abatement will be made upon completion of the project design and the public involvement processes.

Construction Noise

During construction of the project, noise from construction activities may intermittently dominate the noise environment in the immediate area of construction. Construction noise is regulated by Caltrans Standard Specifications, Sound Control Requirements. These requirements state that noise levels generated during construction should comply with applicable local, state, and federal regulations and that all equipment should be fitted with adequate mufflers according to the manufacturers' specifications.

Table 31 summarizes noise levels produced by construction equipment commonly used on roadway construction projects. Equipment involved in construction is expected to generate noise levels ranging from 74 to 85 dBA at a distance of 50ft. Noise produced by construction equipment will be reduced over distance at a rate of about 6 dBA per doubling of distance. No adverse noise impacts from construction are anticipated because construction will be conducted in accordance with Caltrans Standard Specifications and will be short-term, intermittent, and

dominated by local traffic noise. Implementing the following measures will minimize temporary construction noise impacts:

All equipment should have sound-control devices no less effective than those provided on the original equipment. No equipment should have an unmuffled exhaust.

As directed by the Caltrans resident engineer, the contractor should implement appropriate additional noise abatement measures including, but not limited to, changing the location of stationary construction equipment, turning off idling equipment, rescheduling construction activity, notifying adjacent residents in advance of construction work, or installing acoustic barriers around stationary construction noise sources.

Table 31: Construction Equipment Noise

Equipment	Maximum Noise Level (dBA at 50 feet)
Scrapers	89
Bulldozers	85
Heavy Trucks	88
Backhoe	80
Pneumatic Tools	85
Concrete Pump	82

Source: Federal Transit Administration 1995.

BIOLOGICAL ENVIRONMENT

This section was developed from the information contained in the March 2009 Natural Environmental Study (NES).

2.14 NATURAL COMMUNITIES

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

Habitat areas that have been designated as critical habitat under the Federal Endangered Species Act are discussed below in the Threatened and Endangered Species Section 2.18. Wetlands and other waters are also discussed below in Section 2.15.

Affected Environment

The biological study area is roughly defined as areas within 1,000 ft from the existing I-805 ROW. Within this area there are three major drainages: San Clemente Creek (and associated tributaries), Rose Creek (and associated tributaries), and Soledad Creek (and associated tributaries). Large parcels of designated Multiple Species Conservation Program (MSCP) Multiple Habitat Planning Area (MHPA) lands exist along all of the above mentioned drainages. The MHPA delineates core biological resource areas and corridors targeted for conservation.

Habitat communities found within the study area include non-native grassland, chaparral communities, coastal sage scrub, coast live oak woodland, native grasslands, mulefat scrub, southern willow scrub, riparian woodland, San Diego mesa hardpan vernal pools, disturbed habitat, developed areas, recently graded/bare ground, and ornamental landscaping. These are shown in Figure 18-A to 18-C.

Recently Graded/Bare Ground

Bare ground comprises land that is devoid of vegetation or built structures associated with development, and often contains heavily compacted soils that do not allow for quick re-sprouting of successional plant species. The total estimated acreage of bare ground in the study area is approximately 44.4 acres.

Developed

Developed areas include roads, built structures, and associated infrastructure. The total estimated acreage of developed areas within the project study area is approximately 574.7 acres.

Ornamental

Ornamental vegetation consists of landscape plantings typically associated with development such as buildings and roads. Pepper trees (*Schinus* spp.), oleander (*Nerium oleander*), eucalyptus (*Eucalyptus* spp.), and ice plant (*Carpobrotus* sp.) are the common ornamental species within the project study area. The total estimated acreage of ornamental vegetation within the project study area is approximately 117.7 acres.

Disturbed Habitat

Disturbed habitat typically develops on lands with heavily compacted soils following intense disturbance such as grading. This land type is typically dominated by non-native, broad-leaf herbaceous species within including Russian thistle (*Salsola tragus*), mustards (*Brassica* spp., *Hirschfeldia incana*), fennel (*Foeniculum vulgare*), horseweed (*Conyza canadensis*), thistles

(*Centaurea* spp., *Carduus* spp., *Silybum* spp.), and occasionally with a subdominant percent cover of non-native grasses. The total estimated acreage of disturbed habitat within the project study area is approximately 169.4 acres.

Non-native Grassland

Non-native grassland is characterized by a dense to sparse cover of annual grasses exceeding 50% vegetative cover, often with native and non-native annual forbs. This habitat is a disturbance-related community most often found in old fields or large openings in native scrub habitats. Typical grasses within the project study area include wild oat (*Avena fatua*), soft chess (*Bromus hordeaceus*), foxtail chess (*Bromus madritensis* ssp. *rubens*), ripgut grass (*Bromus diandrus*), and fescue (*Vulpia myuros* var. *hirsuta*). The total estimated acreage of this vegetation type within the project study area is approximately 35.4 acres.

Chaparral

Chaparral is a widely distributed and diverse vegetation type throughout California on dry slopes and ridges at low and medium elevations where it occupies thin, rocky, or heavy soils. It is typically composed of broad-leaved, evergreen sclerophyllous shrubs (e.g., bearing stiff, leathery leaves). Species of the following genera are characteristic in chaparral associations: *Adenostoma*, *Arctostaphylos*, *Ceanothus*, *Cercocarpus*, *Heteromeles*, *Rhamnus*, *Rhus*, and shrubby *Quercus*.

Chamise chaparral and southern mixed chaparral were identified within the project area. Chamise chaparral is often a monotypic stand of habitat dominated by chamise (*Adenostoma fasciculatum*). Southern mixed chaparral is composed of a wider variety of species including scrub oak (*Quercus dumosa*), chamise, lilac (*Ceanothus* spp.), and poison oak (*Toxicodendron diversilobum*). Disturbed chaparral is generally characterized by highly reduced and fragmented shrub cover, sometimes supporting a high percentage of non-native species. Disturbed chamise chaparral and disturbed southern mixed chaparral can also be found in the project study area. The total estimated acreages of all types of chaparral and disturbed chaparral found within the project study area are approximately 182.1 and 23.6 acres, respectively.

Coastal Sage Scrub

Diegan Coastal Sage Scrub is a wide-spread type of coastal sage scrub ranging from coastal Los Angeles County into northern Baja California. It is dominated by low, soft-woody subshrubs (typically 3 ft high). Stem- and leaf-succulents are also often present, but are usually subdominant species. The habitat is typically on low moisture-availability sites: west- and south-facing dry slopes or steep slopes with clay-rich soils that are slow to release stored water.

The dominant shrub cover of this vegetative community in the study area consists of a variable mix of California sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum* var. *fasciculatum*), laurel sumac (*Malosma laurina*), San Diego sunflower (*Viguiera laciniata*), deerweed (*Lotus scoparius* var. *scoparius*), bush mallow (*Malacothamnus fasciculatus*), California sunflower (*Encelia californica*), and peak rushrose (*Helianthemum scoparium*). The total estimated acreage of coastal sage scrub in the study area is approximately 67.0 acres.

Disturbed coastal sage scrub has similar dominant species; however, the cover is generally more sparse with more weedy species intermixed. Disturbed coastal sage scrub onsite is dominated by California sagebrush and California buckwheat with nonnative grasses, fennel, and filaree (*Erodium* spp.).

Broom Baccharis

Broom baccharis (*Baccharis sarothroides*) scrub generally forms a sparse to moderately dense monotypic stand in sandy soils usually associated with other vegetation types and is found in several locations within the project study area. The total estimated acreage of broom baccharis is approximately 4.8 acres.

Coastal Sage Scrub-Chaparral

Coastal sage scrub-chaparral total vegetative cover includes roughly equal amounts of both scrub and chaparral species. Plant species detected within the project study area included chamise, California sagebrush, California buckwheat, lilac, black sage (*Salvia mellifera*), laurel sumac, lemonade berry (*Rhus integrifolia*), and chaparral candle (*Hesperoyucca whipplei*). The total estimated acreage of this habitat within the project study area is 7.6 acres.

Coast Live Oak Woodland

Coast live oak woodland is characterized by an open to locally dense evergreen plant community dominated by coast live oak trees (*Quercus agrifolia*), which can reach from 30 to over 80 ft in height. Oaks are typically found in well drained, north-facing slopes and in more protected, shaded ravines. The total estimated acreage of coast live oak woodland within the project study area is 8.9 acres.

Native Grassland

Native grassland generally occurs on fine-textured clay soils that are moist or wet in winter, but very dry in summer. Shrubs are infrequent. The degree of habitat quality in native grasslands varies greatly depending on the history of grazing, cultivation, or other disturbance factors.

Native grassland is typically dominated by the perennial bunchgrasses, purple needlegrass (*Nassella pulchra*), or foothill needlegrass (*Nassella lepida*). Indicator species observed in the

study area include blue-eyed grass (*Sisyrinchium bellum*), splendid mariposa lily, and clarkia (*Clarkia* sp.). The total estimated acreage of this habitat type within the project study area is approximately 2.7 acres.

In addition to native grasslands, there are several patches of disturbed native grassland within the project study area. Disturbed native grassland has more open patches and non-native grasses mixed in with the native species. The estimated total acreage of disturbed native grasslands in the project study area is approximately 14.4 acres.

Riparian Scrub

Riparian scrub describes a combination of two riparian vegetation types: mulefat scrub and southern willow scrub. These two vegetation types have restricted distribution in southern California and are considered vegetated wetlands by the California Department of Fish and Game (CDFG). Southern willow scrub is found on loose, sandy, or fine gravelly alluvium deposited near stream channels during floods, and most stands are too dense to allow much understory to develop. Typical willow species include black willow (*Salix gooddingii*), arroyo willow (*Salix lasiolepis*), and sandbar willow (*Salix exigua*). Mulefat scrub is generally a monotypic stand of mulefat (*Baccharis salicifolia*). The total acreage of riparian scrub and disturbed riparian scrub is approximately 22.5 and 2.4 acres, respectively.

Riparian Woodland

Riparian woodland is a tall, open, broadleaf, winter-deciduous streamside woodland dominated by sycamore (*Platanus racemosa*). These stands seldom form a completely closed canopy and may appear as trees scattered in a thicket of shrub species. This vegetation type is found in rocky streambeds subject to seasonally high-intensity flooding. Other common species include coast live oak, Mexican elderberry (*Sambucus mexicana*), and poison oak. This vegetation type is considered a vegetated wetland by CDFG.

San Diego Mesa Hardpan Vernal Pool

Vernal pools are a low, mesic, herbaceous community dominated by annual herbs and grasses. Many special status plant species have a potential to occur in these pools including San Diego button-celery (*Eryngium aristulatum* var. *parishii*), little mousetail (*Myosurus minimus* ssp. *apus*), prostrate navarretia (*Navarretia fossalis*), Orcutt's brodiaea (*Brodiaea orcuttii*), California adder's tongue-fern (*Ophioglossum lusitanicum* ssp. *californicum*), and San Diego mesa mint (*Pogogyne abramsii*). San Diego mesa hardpan vernal pools were formerly extensive on the mesas and flat marine terraces of San Diego, most of the pools have been largely eliminated by agricultural land uses, military facilities, and urban development. It has been estimated that more than 90 percent of the original vernal pool habitat within the San Diego region has been

eliminated. The total estimated acreage of vernal pools within the study area is approximately 0.3 acres and is found mainly north and south of Nobel Drive on both sides of the I-805.

Disturbed pool areas consisting of habitats including road ruts and other man-made depressions that retain water and have some vernal pool species are also found within the study area. These “rut” pools are not considered San Diego Mesa Hardpan vernal pools. The total estimated acreage of disturbed “rut” pools within the project study area is approximately 0.2 acres.

Freshwater Marsh

Freshwater marsh is dominated by perennial, emergent monocots that are 4 to 6 ft tall. This vegetation community occurs in wetlands that are permanently flooded by standing fresh water. Within the Project study area, monotypic stands of bulrushes (*Scirpus* spp.) or cattails (*Typha* spp.) characterize this habitat. Freshwater marshes are considered vegetated wetlands by the CDFG. There is approximately 0.1 acre of freshwater marsh and 0.1 acre of disturbed freshwater marsh in the project study area.

Unvegetated Channel

Unvegetated drainage channels are scoured from flows and support little or no vegetation. Most are channels that carry ephemeral flow during storm events. There is an estimated 4.4 acres of unvegetated channels in the project study area.

Open Water

Open water occurs in a few areas within the study area. Typically, only the edges of open water support emergent vegetation such as cattails and bulrush. Open water occurs along the three main drainages in the study area. There is an estimated total area of 0.1 acre of open water within the project study area.

Wildlife Corridors

Wildlife corridors connect large patches of natural open space that allow for the movement of wildlife. Regional wildlife corridors in the project study area include all of the major drainages and bridges and larger culverts that facilitate east-west movement under the existing freeway, including Rose Canyon and San Clemente Canyon. Localized wildlife movement in the project study area may be facilitated by the smaller culverts and drainages that connect one area of open space to another, such as those near the MHPA conservation area at Nobel Drive.

Environmental Consequences

Build Alternative

Permanent impacts to biological resources for I-805 project are those within the boundary of the cut and fill slopes, retaining walls, and/or paved areas. Although the cut and fill slopes will be revegetated; the construction, grading, and eventually revegetation of these large areas is expected to take a long enough period of time to qualify as a permanent impact to biological resources. Bridge and overpass impacts were calculated to include the area of entire structure, since column locations are not known at this time. Areas required for equipment access and staging to complete construction that fall outside of the permanent impact footprint will be considered temporary construction impacts. Acreage of permanent and temporary impacts resulting from the proposed project is provided in Table 32

The DAR at Nobel was redesigned between the draft and final environmental documents to avoid impacts to conserved land, vernal pools, and portions of the MHPA. Therefore, impact acreages have changed for many of the habitat types. Acreage of impacts to MHPA areas has also been calculated.

Table 32: Potential Natural Communities Impacts

Habitat Type	Permanent Impacts (acres)	Temporary Impacts (acres)
Recently Graded/Degraded Bare Ground	3.9	5.1
Developed	119.8	36.2
Disturbed Habitat	37.1	19.4
Ornamental	32.3	42.3
Non-native Grassland	0.2	1.0
Chamise Chaparral	0.8	2.3
Southern Mixed Chaparral	6.2	3.5
Disturbed Chamise Chaparral	0.8	0.0
Disturbed Southern Mixed Chaparral	1.2	1.3
Coastal Sage Scrub-Chaparral	1.5	3.3
Broom Baccharis Scrub	0.3	0.3
Coastal Sage Scrub	8.9	6.7
Disturbed Coastal Sage Scrub	10.9	8.7
Coast Live Oak Woodland	<0.1	0.3
Oak *	0.1	<0.1
Sycamore *	0.0	0.1
Native Grassland	0.1	0.6
Disturbed Native Grassland	0.4	<0.1
Southern Willow Scrub	0.8	0.6
Disturbed Southern Willow Scrub	0.1	0.3
Riparian Woodland	0.4	0.2
Unvegetated Channel	0.1	0.2
Total	226.0	132.4

*Individual trees that are not part of a larger community.

Figures 18-A to 18-C are the corresponding Natural Community maps. The special status natural communities that will be impacted by the proposed Project are:

Non-native grassland

Permanent impacts will occur to approximately 0.2 acres of non-native grassland just north of SR-52 on the east side of I-805. Temporary impacts will occur to 1.0 acre of non-native grassland adjacent to the permanent impacts as well as to a small amount along SR-52.

Chaparral communities

Permanent impacts to approximately 7.0 acres of chaparral communities, including chamise and southern mixed chaparral will occur. An additional 2.0 acres of disturbed chaparral communities including disturbed chamise chaparral and disturbed southern mixed chaparral will be permanently impacted. Temporary impacts to approximately 5.8 acres of chaparral communities and 1.3 acres of disturbed chaparral communities will also occur.

Coastal sage scrub communities

Approximately 8.9 acres of permanent impacts and 6.7 acres of temporary impacts will occur to coastal sage scrub. Most of the coastal sage scrub that will be impacted is already fragmented and surrounded by development or non-native vegetation. An additional 10.9 acres of permanent impacts and 8.7 acres of temporary impacts will occur to disturbed coastal sage scrub.

Approximately 1.5 acres of coastal sage scrub-chaparral will be permanently impacted with the implementation of the project. These impacts will occur along the northeast side of the I-805/SR-52 interchange, and north and south of Eastgate Mall Road on the west side of I-805. In addition, approximately 3.3 acres of coastal sage scrub-chaparral will be temporarily impacted adjacent to these permanent impacts.

Permanent impacts to approximately 0.3 acres, and temporary impacts to 0.3 acres of broom baccharis scrub will occur and is located southwest of the Miramar Road/I-805 intersection.

Coast live oak woodland

Less than 0.1 acre of permanent impacts to coast live oak woodland will occur. Approximately 0.3 acre of coast live oak woodland will be temporarily impacted south of

Mira Mesa Blvd on the west side of I-805. Efforts will be made during the final design of the Project to avoid the larger oak trees.

Native grassland

Approximately 0.1 acre of native grassland and 0.4 acre of disturbed native grassland will be permanently impacted. These impacts are located south of Nobel Drive on the west side of I-805 and south of Mira Mesa Blvd on the west side of I-805. An additional 0.6 acres of native grassland and less than 0.1 acres of disturbed native grassland will be temporarily impacted by the project.

Riparian scrub

Approximately 0.8 acre of southern willow scrub, located south of the I-805/SR-52 interchange, and south of Mira Mesa Blvd, and an additional 0.1 acre of disturbed willow scrub, found south of Nobel Drive, will be permanently impacted. Approximately 0.5 acres of southern willow scrub and 0.3 acre of disturbed southern willow scrub will be temporarily impacted. No mulefat scrub will be impacted by project construction.

Riparian woodland

Approximately 0.4 acre of riparian woodland will be permanently impacted, and approximately 0.4 acre of riparian woodland will be temporarily impacted in Carroll Canyon south of Mira Mesa Blvd, on the east side of I-805.

San Diego Mesa Hardpan Vernal Pool

No direct permanent or temporary impacts to San Diego mesa hardpan vernal pools are expected to occur. The DAR at Nobel was redesigned to avoid the vernal pool complex and conserved areas, and eliminate potential indirect impacts to the vernal pool watersheds.

Potential indirect impacts to vernal pools include, damming of pools, drainage into pools from broken irrigation lines, drainage alteration, exotic plant invasion, dust, run-off, lighting, unauthorized human and domestic animal access to the pools, and loss of surrounding upland areas. Because the integrity of the upland areas will influence the hydrology of the vernal pool and the likelihood of maintaining some characteristic vernal pool species, it is important that the surrounding watershed areas and upland terrain, as well as the pools themselves, be considered in conservation efforts. As the amount of upland or wetland habitat associated with vernal pools at a site is degraded or destroyed, the viability of the pools and the species they support can be impaired due to

disruption of hydrology, decreased nesting habitat available for pollinators, decreased habitat for amphibians, and decreased attractiveness to waterfowl that may disperse vernal pool plants and invertebrates.

Two man-made disturbed road-road rut pools that retain water and support endangered San Diego fairy shrimp, but are not considered San Diego mesa hardpan vernal pools occur within the permanent impact footprint. These “rut” pools are located south of Nobel Drive on the west side of I-805, and south of Mira Mesa Blvd near Soledad Creek. The road-road rut pool near Soledad Creek will be impacted by the Carroll Canyon Road Extension prior to this project and formal consultation with USFWS for that project has been completed. The road road rut pool at Nobel that will be impacted is approximately 263 square feet in area.

No Build Alternative

The No Build Alternative will not have permanent or temporary impacts to any natural communities within the project limits.

MHPA

Areas designated as MHPA will be permanently impacted at the Nobel DAR location. The DAR was redesigned to reduce the impacts to MHPA and the conserved area at the southwestern end of the original DAR location. The final design will impact 1.99 acres of MHPA and none of the City of San Diego Conserved Area. Impacts to sensitive habitats within the MHPA will be to chamise chaparral, southern mixed chaparral, coastal sage scrub, and native grassland. The revised design provides more buffer around the vernal pools with approximately 100 feet+ between the closest vernal pool and the DAR. There will also be a small temporary impact (0.3 acres) to the MHPA at Carroll Canyon for the temporary access road. Impacts to the MHPA will be mitigated at Del Mar Mesa (Zamudio) Mitigation Site.

Wildlife Corridors

The three main east/west wildlife corridors in the project area are under the I-805 bridges over San Clemente Canyon, Rose Canyon and Soledad/Carroll Canyon. All three of these bridges are between 40 and 100 feet in height, with no obstruction to deer, small mammals, or large predators such as bobcat, coyote, and mountain lion. Widening of these bridges will not impact the corridors in the long term. False work will occur around the column locations and high near the existing bridge deck, so

construction impacts to the corridors are expected to be minimal. Night work under the bridges is anticipated to be limited. Lighting for night work will be focused on the work area and shielded from the corridors. Other small culverts that may be used by raccoon and other small mammals will be lengthened; however, other than during construction, the wildlife passage through these structures should be minimal. Wildlife fencing will be placed around all three bridges to direct wildlife to the crossings and away from the I-805.

Avoidance, Minimization, and/or Mitigation Measures

Where possible, permanent impacts to sensitive habitats will be minimized by construction of retaining walls and by minimizing grading behind the walls. The following measures will be implemented to minimize impacts to sensitive habitats and species.

- All native or sensitive habitats outside the permanent and temporary construction limits should be designated as Environmentally Sensitive Areas (ESAs) on project maps. ESAs should be temporarily fenced during construction with orange plastic snow fence. No personnel, equipment, or debris will be allowed within the ESAs.
- All native vegetation and non-native shrubs and trees within the impact areas will be removed outside of the bird breeding season (February 15 to September 15) to avoid impacts to nesting birds. Otherwise, a qualified biologist will thoroughly survey all vegetation prior to removal during the breeding season to ensure there are no nesting birds onsite. If nesting birds are identified onsite, vegetation removal will be delayed until the nest no longer supports eggs or chicks.
- A qualified biologist will attend both the pre-construction and construction phases to review grading plans, address protection of special status biological resources, and monitor ongoing work. The biologist should be familiar with the habitats, plants, and wildlife of the project area, and maintain communications with the resident engineer, to ensure that issues relating to biological resources are appropriately and lawfully managed.
- The DAR at Nobel will be fenced to limit access by people and domestic pets.
- Lighting at the Nobel DAR will be directed away from the native habitat and shielded to minimize light pollution.

- The DAR is designed to be at a lower elevation than the adjacent vernal pool habitat. All drainage from the DAR will be directed away from the vernal pools/MHPA.
- No invasive plants will be used within the DAR limits. Any nonnative, non-invasive plants will only be placed in small islands within the DAR and not directly adjacent to native habitat.
- Wildlife fencing will be placed around the three bridges to direct wildlife to the crossings under the bridges and away from I-805.
- Duff (top soil) from areas with coastal sage scrub, native grassland, and chaparral may be saved to aid in revegetating slopes with native species.
- All temporary impact areas will be revegetated and restored to pre-existing conditions. Plants salvaged from construction areas could be placed on created slopes or in an offsite mitigation area.
- Temporary impacts to wetland habitats will also be mitigated at a 1:1 ratio offsite.

Compensatory Mitigation

Proposed mitigation ratios for this project have been approved by the USFWS and are equal to or greater than the ratios required by the MSCP. Proposed mitigation for impacts to sensitive habitats are identified below (Tables 33 and 34).

Table 33: Mitigation for Impacts to Sensitive Upland Habitats

Upland Vegetation Community	Permanent (acres)	Ratio	Total (acres)
Broom Baccharis	0.35	2:1	0.7
Chamise Chaparral	0.80	1:1	0.8
Coast Live Oak Woodland	0.03	2:1	0.06
Coastal Sage Scrub	8.90	2:1	17.80
Coastal Sage Scrub/Chaparral	1.48	2:1	2.96
Disturbed Chamise Chaparral	0.76	1:1	0.76
Disturbed Coastal Sage Scrub	10.90	2:1	21.80
Disturbed Native Grassland	0.37	1:1	0.37
Disturbed Southern Mixed Chaparral	1.25	1:1	1.25
Native Grassland	0.08	2:1	0.16
Non-Native Grassland	0.15	0.5:1	0.08
Oak Tree	0.12	2:1	0.24
Southern Mixed Chaparral	6.17	2:1	12.34

Table 34: Mitigation for Impacts to Wetland Habitats

Wetland Community	Permanent (acres)	Ratio	Total Permanent Mitigation (acres)	Temporary * (acres)	Ratio	Total Mitigation (acres)
Disturbed Southern Willow Scrub	0.12	2:1	0.24	0.33	1:1	0.57
Riparian Woodland	0.41	3:1	1.23	0.16	1:1	1.39
Southern Willow Scrub	0.84	3:1	2.52	0.55	1:1	3.07
Unvegetated Channel	0.09	1:1	0.09	0.20	1:1	0.29
Sycamore				0.14	1:1	0.14
Total	1.46		4.08	1.38		5.46

*Mitigation for temporary impacts includes 1:1 onsite revegetation and 1:1 offsite compensation.

2.15 WETLANDS AND OTHER WATERS

Regulatory Setting

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 regulates the discharge of dredged or fill

material into waters of the United States, including wetlands. Waters of the United States include navigable waters, interstate waters, territorial seas and other waters that may be used in interstate or foreign commerce. To classify wetlands for the purposes of the Clean Water Act, a three-parameter approach is used that includes the presence of hydrophytic (water-loving) vegetation, wetland hydrology, and hydric soils (soils subject to saturation/inundation). All three parameters must be present, under normal circumstances, for an area to be designated as a jurisdictional wetland under the Clean Water Act.

Section 404 of the Clean Water Act 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 will be significantly degraded. The Section 404 permit program is run by the U.S. Army Corps of Engineers (ACOE) with oversight by the Environmental Protection Agency (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 the Federal Highway Administration, cannot undertake or provide assistance for new construction located in wetlands unless the head of the agency finds: 1) that there is no practicable alternative to the construction and 2) the proposed project includes all practicable measures to minimize harm.

At the state level, wetlands and waters are regulated primarily by the California Department of Fish and Game (CDFG) and the Regional Water Quality Control Board (RWQCB). In certain circumstances, the Coastal Commission may also be involved. Sections 1600-1607 of the Fish and Game Code require any agency that proposes a project that will substantially divert or obstruct the natural flow of or substantially change the bed or bank of a river, stream, or lake to notify CDFG before beginning construction. If CDFG determines that the project may substantially and adversely affect fish or wildlife resources, a Lake or Streambed Alteration Agreement will be required. CDFG jurisdictional limits are usually defined by the tops of the stream or lake banks, or the outer edge of riparian vegetation, whichever is wider. Wetlands under jurisdiction of the ACOE may or may not be included in the area covered by a Streambed Alteration Agreement obtained from the CDFG.

The Regional Water Quality Control Boards were established under the Porter-Cologne Water Quality Control Act to oversee water quality. The RWQCB also issues water

quality certifications in compliance with Section 401 of the Clean Water Act. Please see the Water Quality Section 2.8 for additional details.

Affected Environment

The jurisdictional areas that will be impacted by the proposed project are discussed below. Impact acreage calculations were completed by overlaying proposed construction plans with the jurisdictional delineation. Temporary and permanent impacts to U.S. Army Corps of Engineers (ACOE) jurisdictional wetlands/other waters of the U.S., and CDFG jurisdictional wetlands at each drainage are detailed in Table 33. Impacts to other waters of the U.S. are regulated by ACOE and RWQCB and include the area within the ordinary high water mark (OHWM). Impacts to lakes and streambeds are defined as the area within the full bank-to-bank distance of the waterway or drainage and any associated riparian vegetation are regulated by CDFG. A water quality certification under Section 401 of the Clean Water Act is required with every Section 404 permit. The vernal pools/road ruts are not ACOE jurisdictional habitats.

Environmental Consequences

Build Alternative

I-805 crosses 3 large creeks, the San Clemente Canyon Creek, Rose Canyon Creek, and Soledad Canyon Creek. Impacts associated with each drainage are listed in Table 35.

San Clemente Canyon Creek and Tributaries

Approximately 0.03 acre of permanent impacts and 0.01 acre of temporary impacts to ACOE jurisdictional wetlands/Other waters of the U.S. in San Clemente Canyon Creek will occur as a result of the proposed project. Permanent impacts to 0.22 acres and temporary impacts to 0.20 acre will occur to CDFG-jurisdictional wetlands. No interstate or intrastate wetlands that are not under ACOE or CDFG jurisdiction will be impacted in San Clemente Canyon.

Rose Canyon Creek and Tributaries

Permanent and temporary impacts will occur to ACOE jurisdictional waters of the U.S. and CDFG jurisdictional wetlands where Rose Canyon Creek flows under I-805. These impacts include a total of 0.07 acre of permanent, and 0.07 acre of temporary impacts to ACOE jurisdictional waters of the U.S.; and 0.24 acre of permanent, and 0.38 acre of temporary impacts to CDFG jurisdictional wetlands. No interstate or intrastate wetlands

that are not under ACOE or CDFG jurisdiction will be impacted by the proposed Project at Rose Canyon.

Permanent impacts to unnamed drainage 2 include less than 0.01 acre of ACOE jurisdictional waters of the U.S., and 0.16 acre of CDFG jurisdictional wetlands. Impacts to unnamed drainage 3 include 0.03 acre of permanent and 0.02 acre of temporary impacts to ACOE jurisdictional waters of the U.S. Approximately 0.05 acre of permanent and 0.18 acre of temporary impacts will occur to CDFG jurisdictional wetlands in Unnamed Drainage 3. A total of 0.01 acre of temporary impacts to ACOE wetlands and CDFG jurisdictional wetlands will occur at the small non-linear wetland identified as Unnamed Drainage 4.

Soledad Canyon Creek and Tributaries

Impacts to Soledad Canyon Creek include 0.17 acre of permanent impacts and 0.02 acre of temporary impacts to ACOE jurisdictional waters of the U.S. including wetlands. Approximately 0.50 acre of permanent and 0.19 acre of temporary impacts to CDFG jurisdictional wetlands will occur with project implementation. Less than 0.01 acres of permanent impact will occur to both ACOE and CDFG jurisdictional areas in Unnamed Drainage 7. Approximately 0.01 acre of temporary impacts to CDFG jurisdictional channel/wetlands will occur in the tributary at Unnamed Drainage 7.

Additional Minor Drainages

At Unnamed Drainage 5, less than 0.01 acres of permanent impacts and 0.01 acres of temporary impacts will occur to ACOE jurisdictional waters of the U.S. An additional 0.01 acres of temporary impacts to CDFG jurisdictional channel/wetlands will occur in the drainage.

Table 35: Potential Wetlands and Other Jurisdictional Areas Impacts

ACOE Jurisdictional Wetland/Waters		CDFG Channel/Wetlands		
Channel Location	Area (acres)	Area (acres)	Additional Cowardin (acres)	Total (acres)
Permanent Impacts				
San Clemente Canyon OWUS	0.02	0.04	0.15	0.19
San Clemente Canyon Wetland	0.01	0.03	0	0.03
Rose Canyon Creek	0.07	0.07	0.17	0.24
Soledad Canyon Creek	0.17	0.19	0.29	0.48
Soledad Canyon Creek Wetland	0.02	0.02	0	0.02
Unnamed Drainage 2	<0.01	0.01	0.15	0.16
Unnamed Drainage 3	0.03	0.02	0.03	0.05
Unnamed Drainage 5 Ditch in Uplands	<0.01	0.02	0	0.02
Unnamed Drainage 7	<0.01	<0.01	0	0
Total Permanent Other Waters of the US Impacts	0.29	--	--	--
Total Permanent Wetlands Impacts	0.03	0.40	0.79	1.19
Temporary Impacts				
San Clemente Canyon OWUS	0.01	0.01	0	0.01
San Clemente Canyon Wetland	0	0	0.19	0.19
Rose Canyon Creek (tributary)	0.07	0.08	0.04	0.12
Rose Canyon Creek	0.03	0.06	0.20	0.26
Soledad Canyon Creek	0.02	0.02	0.17	0.19
Unnamed Drainage 2	<0.01	<0.01	0	<0.01
Unnamed Drainage 3	0.02	0.05	0.13	0.18
Unnamed Drainage 4 Wetland	0.01	0.01	0	0.01
Unnamed Drainage 5	0.01	0.01	0	0.01
Unnamed Drainage 5- Ditch in Uplands	<0.01	<0.01	0	<0.01
Unnamed Drainage 7	<0.01	0.01	0	0.01
Total Temporary Other Waters of the US Impacts	0.17	--	--	--
Total Temporary Wetlands Impacts	0.01	0.25	0.73	0.98

No-Build Alternative

The No-Build Alternative will avoid impacts to jurisdictional waters of the U.S.

Avoidance, Minimization, and/or Mitigation Measures

Since the proposed project crosses San Clemente Canyon, Soledad Canyon and Rose Canyon wetland impacts could not be completely avoided. Impacts to jurisdictional wetlands and riparian habitats will be minimized to the greatest extent practicable.

The following are proposed measures to minimize the impacts to wetlands and other waters.

- Appropriate best management practices (BMPs) will be used to control erosion and sedimentation. No sediment or debris will be allowed to enter the vernal pools, creeks, rivers, or other drainages.
- Fill slopes and areas adjacent to wetlands and drainages will be revegetated with appropriate native upland and wetland non-invasive species. The revegetated areas will have temporary irrigation and be planted with native container plants and seeds selected by a biologist. There will be at least three years of plant establishment/maintenance on these slopes to control invasive weeds.
- Detention basins will be placed in many of the loop ramps, and bioswales will be placed on many of the slopes to treat runoff from the freeway.
- Fueling of construction equipment will only occur at a designated area located at a distance greater than 100 feet from drainages, and associated plant communities to preclude adverse water quality impacts. Fuel cans and fueling of tools will not be allowed within drainages.
- Permanent impacts to CDFG wetlands will be compensated at the ratios proposed in Table 34. Offsite by wetland creation mitigation will be completed at the Deer Canyon (Pardee) Mitigation Site in McGonigle Canyon. Permanent impacts to ACOE jurisdictional waters of the U.S. will be mitigated at a 3:1 ratio. Temporary impacts to wetlands will be offset at a proposed 2:1 ratio; 1:1 onsite restoration and 1:1 offsite creation. Temporary impacts to other waters of the U.S. or streambeds will be mitigated at a 1:1 ratio for onsite restoration. All ACOE mitigation will also be completed at Deer Canyon.

Wetlands Only Practicable Finding

Pursuant to Executive Order 11990, dated May 24, 1977, "Protection of Wetlands," which established a national policy "to avoid to the extent possible long- and short-term

adverse impacts associated with the destruction or modification of wetlands and to avoid direct or indirect support of new construction in wetlands wherever there is a practicable alternative," the following discussion has been prepared.

The Build Alternative will construct managed lanes which will require widening of the existing alignment, including the overcrossings of the canyons. The watersheds in the project area drain from east to west making it impossible for the proposed project to avoid crossing the wetlands.

As part of the Build Alternative, there are three bridges that span wetland areas and that will need to be widened. The bridge widening will be attached to the existing bridges and, therefore, must use the same structure components of the existing bridge. As a result, the bridge spans, columns and bent locations need to be in a parallel location to the existing bridge so they can act as one bridge. This is found to be the least existing wetland impact for a Build Alternative.

The avoidance, minimization, and/or mitigation measures are designed to minimize the impact the proposed project will have upon wetlands.

Based on the above considerations, it is determined that there is no practicable alternative to the proposed construction in wetlands and that the proposed action includes all practicable measures to minimize harm to wetlands that may result from such use.

2.16 PLANT SPECIES

Regulatory Setting

The U.S. Fish and Wildlife Service (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; these are species that are formally listed or proposed for listing as endangered or threatened under the Federal Endangered Species Act (FESA) and/or the California

Endangered Species Act (CESA). Please see the Threatened and Endangered Species section 2.18 in this document for detailed information regarding these species.

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

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

Affected Environment

Several CNPS listed species that will be impacted by the project are discussed below. Individual plant occurrences or populations with acreages under the minimum mapping unit of 0.1 acre are noted as a point location on Figures 19-A to 19-C. Plant populations with more than 50% coverage and span over 0.1 acre are shown on the figures as a polygon.

Environmental Consequences

Build Alternative

Locations of Palmer's sagewort (*Artemisia palmeri*) within the proposed project that will be both temporarily and permanently impacted exist mainly between Governor Drive and Rose Canyon. Two locations of wart-stemmed ceanothus (*Ceanothus verrocokus*) of less than 0.1 acre are located within the temporary project impact footprint north of SR-52 on the east side of I-805. Permanent impacts to Nuttall's scrub oak (*Quercus dumosa*) will occur south of Nobel Drive on the west side on the I-805, and temporary impacts will occur north of Rose Canyon on the east side of the I-805.

Table 36 lists the plant species within the project area that are CNPS listed species with their permanent and temporary impacts.

Table 36: Special Status Plant Species Impacts

Special Status Plant Species	Permanent Impacts	Temporary Impacts
<i>Artemisia palmeri</i> (CNPS List 4.2) Palmer's sagewort	6 individuals	7 individuals
<i>Artemisia palmeri</i> Palmer's sagewort	0.6 acre	0.7 acre
<i>Ceanothus verrocosus</i> (CNPS List 2.2) Wart-stemmed ceanothus	0	2 individuals
<i>Quercus dumosa</i> (CNPS List 1B.1) Nuttall's scrub oak	9 individuals	5 individuals
<i>Quercus dumosa</i> Nuttall's scrub oak	0.4 acre	0

No Build Alternative

No USFWS and CDFG regulated special status plant species will be affected by the No Build Alternative.

Avoidance, Minimization, and/or Mitigation Measures

Locations of special status plant species have been identified and avoided in the design of the proposed project to the maximum extent practicable. There may be opportunities to avoid impacting some of the special status plants during final project design and when determining temporary construction access. Where practicable, sensitive plant species may be salvaged and seeds collected for use in post-construction habitat restoration. Palmer's sagewort is commercially available in nurseries and could be included while revegetating the slopes of I-805. In addition, it commonly occurs in wetlands and over 900 one-gallon containers are proposed to be planted in the Deer Canyon Mitigation Site wetland.

Wart-stemmed ceanothus that cannot be avoided in temporary impact areas could be salvaged and placed in containers until construction is finished and will then be replanted onsite. Acorns may be collected from Nuttall's scrub oak populations to be impacted for growth in a nursery and replanting on the slopes of I-805. Salvage of some of the scrub oak is also possible; however, may or may not be feasible due to size and number of scrub oak. Chaparral will be mitigated through preservation at the Del Mar Mesa (Zamudio) Site. Del Mar Mesa (Zamudio) Mitigation site is part of contiguous habitat of vernal pools and chaparral that has a large component of scrub oak onsite.

2.17 ANIMAL SPECIES

Regulatory Setting

Many state and federal 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 state or federal Endangered Species Act. Species listed or proposed for listing as threatened or endangered are discussed in Section 2.18. All other special-status animal species are discussed here, including CDFG fully protected species and species of special concern, and USFWS or NOAA Fisheries candidate species.

Federal laws and regulations pertaining to wildlife include the following:

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

State laws and regulations pertaining to wildlife include the following:

- California Environmental Quality Act
- Sections 1600 – 1603 of the Fish and Game Code
- Section 4150 and 4152 of the Fish and Game Code

Affected Environment

Several sensitive wildlife species were identified in and around the project footprint. Impacts to these sensitive wildlife species are discussed below.

Western spadefoot toad (*Spea hammondi*) larvae and neonates were identified within the vernal pools and ponded areas southwest of the Nobel Drive/I-805 intersection during wet season vernal pool surveys that were conducted in 2006-2008.

The coast horned lizard (*Phrynosoma coronatum*) and orange-throated whiptail lizard (*Aspidoscelis hyperythra beldingi*) were detected within the project study area during field surveys. The red diamond rattlesnake (*Crotalus ruber*) is often found in chaparral, coastal sage scrub, along creek banks, and in rock outcrops or piles of debris. One

individual was identified in San Clemente Canyon. Impacts to Coastal sage scrub, grasslands, and chaparral communities have the potential to adversely affect these species. Two-striped garter snakes (*Thamnophis hammondi*) were observed in Rose Canyon. Impacts to aquatic habitats could affect this species.

One observation of Vaux's swift (*Chaetura vauxi*) was made within the permanent impact footprint south of Nobel Drive on the west side of I-805. This species is a spring and fall migrant that often winters in San Diego County and usually roosts in chimneys and other man-made structures. Impacts to this species from the proposed Project will be minimal.

Other avian species of concern were observed or have the potential to occur within the project study area and may be directly or indirectly affected by project impacts. These include raptor species such as Cooper's hawk (*Accipiter cooperii*) and white-tailed kite (*Elanus leucurus*). Riparian birds, including yellow warbler (*Dendroica petechia*) and yellow-breasted chat (*Icteria virens*), were also observed within the project study area and could be indirectly affected by noise and loss of suitable riparian habitats.

Environmental Consequences

Build Alternative

Sensitive wildlife species will be adversely affected by permanent impacts to grasslands, coastal sage scrub, chaparral, riparian, aquatic habitats, and nesting and foraging habitats. The reduction of available habitat will incrementally affect the more mobile species. Permanent impacts to one "rut" pool that supports the Western spadefoot toad will eliminate those individuals unless they are moved prior to construction. There is a potential for these impacts to indirectly affect animal species that exist within the I-805 project corridor. Construction noise may have a short term effect on species, with long term noise effects expected to be minimal. Edge effects and affects to movement corridors are anticipated to be minimal. Although bridges over the creek corridors will be widened, they are high enough above the habitat to have little affect after construction is completed.

No Build Alternative

The No Build alternative will not have any impacts to special status animal species.

Avoidance, Minimization, and/or Mitigation Measures

Locations of special status wildlife species and their habitat have been identified and avoided to the maximum extent practicable. Due to the length of the project, the special status habitats it transverses, and the special status species that occur along the corridor, there are extensive impacts that could not be avoided. Compensatory measures will be used to minimize the unavoidable impacts.

The following are proposed measures to minimize impacts to special status habitats and species during construction.

- All native or sensitive habitats outside the permanent and temporary construction limits will be designated as ESAs on project maps. ESAs should be temporarily fenced during construction with orange plastic snow fence. No personnel, equipment, or debris will be allowed within the ESAs.
- All native vegetation and non-native shrubs and trees within the impact areas will be removed outside of the breeding season (February 15 to August 31) to avoid impacts to nesting birds. Otherwise, a qualified biologist must thoroughly survey all vegetation prior to removal during the breeding season to ensure there are no nesting birds onsite. If nesting birds are identified onsite, vegetation removal will be delayed until the nest no longer supports eggs or chicks.
- A qualified biologist will be available for both the pre-construction and construction phases to review grading plans, address protection of special status biological resources, and monitor ongoing work. The biologist should be familiar with the habitats, plants, and wildlife of the project area, and maintain communications with the resident engineer, to ensure that issues relating to biological resources are appropriately and lawfully managed.
- Exclusion devices will be installed during construction on bridge drain holes and ledges during the non-breeding season (September 1 through February 15) to prevent swallows, swifts, and any other birds or bats from nesting on or within bridges to be demolished or expanded.
- All sensitive/native temporary impact areas will be revegetated and restored to pre-existing conditions. Fiber rolls to be used as BMPs will be made with biodegradable materials and no plastic mesh to protect wildlife.

- Permanent impacts to coastal sage scrub, coastal sage-chaparral, and broom baccharis will be offset by preservation offsite at the Del Mar Mesa (Zamudio) and Sage Hill Mitigation Sites. Permanent impacts to chamise chaparral and southern mixed chaparral will be mitigated at Del Mar Mesa Mitigation Site.
- Permanent and temporary impacts to “rut” pools and species will be offset at the 30-acre Del Mar Mesa Mitigation Site.
- Permanent and temporary impacts to wetland/riparian habitats and grassland will be offset offsite at Deer Canyon Mitigation Site (Pardee).
- Lighting used at night for construction will be shielded away from environmentally sensitive areas.

2.18 THREATENED AND ENDANGERED SPECIES

Regulatory Setting

The primary federal law protecting threatened and endangered species is the Federal Endangered Species Act (FESA): 16 United States Code (USC), Section 1531, et seq. See also 50 CFR Part 402. This act and subsequent amendments provide for the conservation of endangered and threatened species and the ecosystems upon which they depend. Under Section 7 of this act, federal agencies, such as the Federal Highway Administration, are required to consult with the 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 California Endangered Species Act (CESA), California Fish and Game Code, Section 2050, et seq. CESA emphasizes early consultation to avoid potential impacts to rare, endangered, and threatened species and to develop appropriate planning to offset project caused losses of listed species populations and their essential habitats. The CDFG is the agency

responsible for implementing CESA. Section 2081 of the Fish and Game Code prohibits "take" of any species determined to be an endangered species or a threatened species. Take is defined in Section 86 of the Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." CESA allows for take incidental to otherwise lawful development projects; for these actions an incidental take permit is issued by CDFG. For projects requiring a Biological Opinion under Section 7 of the FESA, CDFG may also authorize impacts to CESA species by issuing a Consistency Determination under Section 2080.1 of the Fish and Game Code.

Affected Environment

Several endangered wildlife species may be adversely affected by construction of the project, as well as one area of proposed designated critical habitat.

Two "rut" pools where endangered San Diego fairy shrimp (*Branchinecta sandiegonensis*) have been identified during dry season sampling in 2006 exist within the permanent impact footprint. San Diego fairy shrimp are listed as an endangered species. One pool is located south of Nobel Drive on the west side of I-805, and the other can be found south of Mira Mesa Blvd. Caltrans has already completed formal consultation with USFWS for impacts and mitigation under the Carroll Canyon Road extension project for the "rut" pool located south of Mira Mesa Blvd. The road rut pool and Nobel Drive is approximately 263 square feet.

Spreading navarretia (*Navarretia fossalis*) occurs within the study area southwest of the Nobel/I-805 interchange. The plant inhabits one of the fenced City owned vernal pools southwest of the Nobel DAR. Approximately 60 plants were observed in this vernal pool in 2010. This pool is over 220 feet southwest of the revised DAR footprint. These vernal pools will not be directly impacted and because they occur on land slightly higher than the DAR location, the watersheds should not be impacted. Final critical habitat for spreading navarretia has been identified on the entire mesa. Approximately 5.8 acres of critical habitat for spreading navarretia will be permanently impacted by construction of the DAR and interchange. However, only 2.96 acres of the 5.8 acres contains the primary constituent elements necessary to support spreading navarretia.

Quino checkerspot butterfly (*Euphydryas editha quino*) surveys were conducted by a permitted biologist. Quino checkerspot butterflies were not detected within the Project study area, impacts to this federally endangered listed species are not expected.

Coastal California gnatcatchers (*Polioptila californica californica*) are listed as a federally listed threatened species. Nineteen California gnatcatcher territories were identified within the study area for the Project. Breeding gnatcatchers in San Diego County have territory sizes ranging from approximately 2.5 acres to approximately 22 acres.

The least Bell's vireo (*Vireo bellii pusillus*) is listed as a state and federally listed endangered species. Two territories for the least Bell's vireo were identified within the project study area, one in Rose Canyon and one in Soledad Canyon. No individual vireo observations occur within the permanent or temporary impact areas of the project footprint.

Environmental Consequences

Build Alternative

The two "rut" pools that support San Diego fairy shrimp (SDFS) that will be impacted by the build alternative. Approximately 263 ft² of road rut pool occupied by SDFS will be additionally impacted by this project. Potential indirect impacts to SDFS include loss of suitable habitat, decreased attractiveness to waterfowl that may aid in cyst dispersal, and changes in hydrology and water quality. Indirect impacts to fairy shrimp are also likely where disturbance limits are adjacent to occupied habitat or the watershed of the "rut" pool. The revised footprint for the Nobel DAR provides more buffer between the pools and development. The closest vernal pool or road rut pool supporting sensitive species will be 100 feet from the DAR, indirect impacts are anticipated to be minimal.

One pair of California gnatcatchers was observed within the permanent impact footprint south of Nobel Drive on the west side of I-805. A large portion of the gnatcatchers pair territory will be permanently impacted by the DAR. A second pair was identified within the permanent impact footprint north of Governor Drive and east of I-805. In addition, two additional territories were identified immediately adjacent to the temporary impact footprint in the same canyon east of I-805 and north of Governor Drive. Additional observations of California gnatcatchers occurred within the temporary impact footprint in the southwest portion of the 52/805 interchange, and southwest of Rose Canyon. Portions of California gnatcatcher territories will likely be impacted at least temporarily by the project. Approximately 2.86 acres of coastal sage scrub occupied by California gnatcatchers will be temporarily impacted by this project.

Least Bell's vireo were detected within Rose and Soledad Canyons east of I-805. Both vireo males were detected outside of the permanent and temporary impact areas.

However, the territory at Rose Canyon was identified approximately 100 ft from the proposed construction access road and more than 300 ft from the remainder of the temporary construction work. There is a potential for adverse effects to least Bell's vireo due to increased construction noise. However, the loudest construction activities will be completed at least 300ft from the edge of the vireo territory and noise levels in the territories are not anticipated to be elevated above ambient. The proximity to the freeway and frequent trains passing this habitat result in average ambient noise levels above 60 dBA. The vireo in Soledad Canyon is over 400 ft from the closest access road and over 500 ft from the construction area. More recent protocol surveys for the Carroll Canyon Road Extension Project did not detect least Bell's vireo in this location. No impacts from construction noise are anticipated.

The only USFWS designated critical habitat (DCH) that falls within the project impact footprint is for spreading navarretia. Approximately 2.96 acres of DCH for spreading navarretia will be impacted by the proposed DAR. There is no DCH for the Least Bell's vireo, California gnatcatcher, or San Diego fairy shrimp will occur with project implementation.

No Build Alternative

The No Build alternative will not have any impacts on listed species or their critical habitat.

Avoidance, Minimization, and/or Mitigation Measures

Due to the length of the project, the special status habitats it transverses, and the special status species that occur along the corridor, there are impacts that could not be avoided. Compensatory measures will be used to offset the unavoidable impacts. Proposed mitigation ratios for impacts to habitats are listed in tables 33 and 34 in Section 2.14. Proposed locations for performing mitigation are listed below.

Coastal sage scrub, coastal sage-chaparral, and broom baccharis vegetation communities will be offset by preservation at the Sage Hill Mitigation site and Del Mar Mesa (Zamudio) Mitigation Site. Sage Hill is located near the Elfin Forest and is a pre-approved mitigation site for the project by both the USFWS and CDFG through SANDAGs Environmental Mitigation Program (EMP). Sage Hill is in a pre-approved mitigation area (PAMA) for the North County Multiple Species Conservation Program (NCMSCP) and is in a Core California Gnatcatcher Area.

Permanent impacts to chaparral communities, road rut pools, and a portion of the coastal sage scrub will be completed at the Del Mar Mesa (Zamudio) Mitigation Site. This is a 32.5 acre parcel purchased by Caltrans for mitigation. It is designated as MHPA habitat.

Permanent impacts to San Diego fairy shrimp will be offset on Del Mar Mesa (Zamudio) Mitigation Site recently purchased by Caltrans. Mitigation is proposed at a 2:1 creation and/or restoration and management ratio similar to what was required for the road rut pool in Sorrento Valley impacted by the Carroll Canyon Project. The 263 ft² of road rut pool impacted will be mitigated with 526 ft² of restored vernal pool. Impacts to critical habitat for spreading navarretia are also proposed at Del Mar Mesa (Zamudio). In addition, 526 ft² of vernal pool habitat will be restored in the conserved area remaining at Nobel. San Diego fairy shrimp cysts will be salvaged from the road rut pool to be impacted and placed in restored pools. All details concerning the locations and ratios will be developed through consultation with the appropriate resource agencies to determine the appropriate location and amount of mitigation. Conceptual plans will be completed and submitted to the agencies for review.

Wetland and grassland habitats will be mitigated at the Deer Canyon (Pardee) Mitigation Site in McGonigle Canyon south of SR 56. Southern willow scrub will be created immediately east of another riparian mitigation site. Native grassland will be created on the slope immediately north of the wetland creation area. Nonnative grassland will be preserved onsite. A mitigation plan will be submitted to all the resource agencies for review prior to construction. Construction on the Deer Canyon Site is proposed to begin in late 2011 or early 2012.

The following are proposed measures to minimize impacts to special status species during construction.

- All native or sensitive habitats outside the permanent and temporary construction limits should be designated as ESAs on project maps. ESAs should be temporarily fenced during construction with orange plastic snow fence. No personnel, equipment, or debris will be allowed within the ESAs.
- All native vegetation and non-native shrubs and trees within the impact areas will be removed outside of the upland bird breeding season (February 15 to August 31) to avoid impacts to nesting birds. Otherwise, a qualified biologist will

thoroughly survey all vegetation prior to removal during the breeding season to ensure there are no nesting birds onsite. If nesting birds are identified onsite, vegetation removal will be delayed until the nest no longer supports eggs or chicks.

- All pile driving near the creeks that support threatened and endangered bird species will be completed outside the wetland bird breeding season (March 15 to September 15) to avoid construction noise impacts to sensitive riparian-nesting bird species.
- All debris from the expansion of bridges will be contained so that it does not fall into rivers and creeks.
- A qualified biologist will be available for both the pre-construction and construction phases to review grading plans, address protection of special status biological resources, and monitor ongoing work. The biologist will be familiar with the habitats, plants, and wildlife of the project area, and maintain communications with the resident engineer, to ensure that issues relating to biological resources are appropriately and lawfully managed.
- Appropriate best management practices (BMPs) will be used to control erosion and sedimentation. No sediment or debris will be allowed to enter the vernal pools, creeks, rivers, or other drainages.
- Cut slopes will be revegetated with native upland habitats with similar composition to those within the project study area. Fill slopes and areas adjacent to wetlands and drainages will be revegetated with appropriate native upland and wetland non-invasive species. The revegetated areas will have temporary irrigation and be planted with native container plants and seeds selected by the biologist. There will be at least three years of plant establishment/maintenance on these slopes to control invasive weeds. Bioswales and detention basins will be planted with appropriate native species as determined by the biologist and storm water pollution prevention professional. Slopes adjacent to developed urban areas will be vegetated with native and drought tolerant non-invasive species selected by the biologist and landscape architect. Interchanges located in urban areas will be landscaped with native or ornamental non-invasive species.

- Temporary impacts to 2.86 acres of California gnatcatcher occupied coastal sage scrub will be mitigated at a 1:1 ratio at the Sage Hill mitigation site.
- Duff from areas with coastal sage scrub and chaparral may be saved to aid in revegetating slopes with native species.
- Salvaging of soil supporting San Diego fairy shrimp prior to grading is recommended where practicable.
- Lighting used at night for construction will be shielded away from ESAs.

2.19 INVASIVE SPECIES

Regulatory Setting

On February 3, 1999, President Clinton signed Executive Order 13112 requiring federal agencies to combat the introduction or spread of invasive species in the United States. The order defines invasive species as “any species, including its seeds, eggs, spores, or other biological material capable of propagating that species, that is not native to that ecosystem whose introduction does or is likely to cause economic or environmental harm or harm to human health.” Federal Highway Administration guidance issued August 10, 1999 directs the use of the state’s noxious weed list to define the invasive plants that must be considered as part of the NEPA analysis for a proposed project.

Affected Environment

The study area of the I-805 currently supports the following invasive species: tamarisk (*Tamarix* spp.), pampus grass (*Cortaderia* spp.), giant reed (*Arundo donax*), fennel (*Foeniculum vulgare*), and African fountain grass (*Penisetum setaceum*). The majority of these species are found both on the slopes of I-805 and in the wetland habitats.

Environmental Consequences

Build Alternative

Several of the invasive species currently found in the right of way could spread during construction activities. During construction, ground disturbance activities provide new areas for weeds to germinate.

No Build Alternative

The No Build alternative will not disturb any new ground; however, existing invasive species problems will likely become worse through time and species may spread.

Avoidance, Minimization, and/or Mitigation Measures

In compliance with the Executive Order on Invasive Species, E.O. 13112, and subsequent guidance from the Federal Highway Administration, the landscaping and erosion control included in the project will not use species listed as noxious weeds. In areas of particular sensitivity, extra precautions will be taken if invasive species are found in or adjacent to the construction areas. These include the inspection and cleaning of construction equipment and eradication strategies to be implemented should an invasion occur. Special care will be taken when transporting, use and disposing of soils with invasive weed seeds. All heavy equipment will be washed and cleaned of debris prior to entering a wetland area, to minimize spread of invasive weeds. Special care will be taken when transporting, use, and disposing of soils containing invasive weed seeds. Species listed by the California Invasive Plant Council (Cal IPC) will not be planted onsite.

2.20 Cumulative Impacts

Regulatory Setting

Cumulative impacts are those that result from past, present, and reasonably foreseeable future actions, combined with the potential impacts of this 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 the 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 the 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.

Affected Environment

The proposed project could have a cumulative effect on the following resources: San Diego fairy shrimp due to “rut” pool impacts, Riparian/Wetlands, Coastal sage scrub(CSS), and directly related to the loss of CSS the California gnatcatcher.

San Diego Fairy Shrimp

San Diego fairy shrimp (SDFS) are known to occur in most of the vernal pool complexes in coastal San Diego County. Many populations of SDFS have likely been exterminated or have experienced drastic declines due to the substantial loss of habitat in Southern California. The greatest recent losses of vernal pool habitat in San Diego County have occurred in Mira Mesa, Rancho Peñasquitos, and Kearny Mesa, which accounted for 73% of all the pools destroyed between 1979 and 1990.

The SDFS is especially vulnerable to alteration in hydrology; thus, the protection of watershed function is critical to its survival. SDFS are threatened by urban development, agricultural development, modified hydrology due to adjacent road construction, and illegal trash dumping. Unpredictable natural events such as drought or fire may exterminate the SDFS due to its fragmented and restricted range. They are also vulnerable to contaminants in runoff waters and watershed quality. Low levels of genetic variability may affect the species potential for long-term viability.

The resource study area (RSA) for SDFS is comprised of primarily coastal mesa areas located west of I-15, east of I-5 and north of I-8 and south of SR-56 including Kearny Mesa, Mira Mesa and Del Mar Mesa.

Riparian/Wetlands

Riparian wetlands areas may be the most important natural habitat in the western United States. Although comprising less than 1 percent of land area, riparian habitats support the most diverse and abundant wildlife communities. Yet they are disappearing at an alarming rate. In California, an estimated 95 percent of riparian habitat has disappeared during the last hundred years.

Riparian wetland areas or streambanks are found at the bottom of canyons and valleys throughout San Diego County, wherever a stream is present. Riparian communities are characterized by deciduous trees and shrubs requiring a close source of abundant water. They form dense understories in moist canyons and drainage areas, such as the thickets found along the San Diego, San Luis Rey, and Santa Margarita Rivers (major San Diego County Rivers). While small in total area, riparian areas are of special value to wildlife habitat. Over 135 species of California birds and 90 species of mammals, reptiles, and amphibians either completely depend upon these habitats or use them preferentially at some stage of their life history. Riparian habitats also provide riverbank protection, erosion control and improved water quality. In Southern California, only 3 to 5% of the pre-settlement riparian forest remains, the rest having been converted primarily to farming or urban uses.

The RSA for Riparian wetlands is located west of the I-15 to the coast, and between SR-52 and SR-56 and includes the watersheds of Los Penasquitos Lagoon, Carroll Canyon, Soledad Creek, Penasquitos Creek, Carmel Creek, and the San Diego Bay watersheds of San Clemente Canyon and Rose Canyon.

Coastal Sage Scrub/California Gnatcatcher

Habitat loss is the main threat to the California gnatcatcher whose distribution is mostly restricted to the CSS plant community. Coastal sage scrub habitat was developed rapidly from the 1940's to 1990's for agriculture, grazing, and urban areas, and is considered now one of the most endangered habitats in the U.S.

Coastal sage scrub is considered a sensitive habitat by the City and County of San Diego. The USFWS has estimated that coastal sage scrub habitat has been reduced by 70 to 90% of its historical extent, primarily due to historical agricultural land uses and urban expansion along the Southern California coastal plain. Additional evidence of the decline of this once common habitat is the growing number of declining plant and animal species that are associated with it.

The RSA for CSS is located west of I-15, east of I-5 and north of SR-52 and south of SR-56. Other current or proposed projects in the area include the I-5 North Coast project, Genesee/I-5 project, and the I-805 Carroll Canyon DAR.

Environmental Consequences

Build Alternative

The I-805 project will have an incremental contribution of up to approximately 1.42 acres of jurisdictional wetlands and other waters, 1.2 acres of wetland/riparian habitat loss, and 32.5 acres of native upland habitat loss. The project will also impact portions of two territories of California gnatcatcher and road rut pools supporting SDFS. The incremental impacts of the project are small; however, the entire project will result in a cumulatively considerable impact on natural communities, and special status species prior to mitigation. Mitigation measures discussed below will reduce project-specific and cumulative impacts to below a level of significance.

Table 37 references other projects located within the RSA's for Road rut pools/SDFS, Riparian wetlands, Coastal sage scrub, and California gnatcatcher.

Table 37: Projects Considered in Cumulative Impact Analysis

Project Name	Jurisdiction Location	Proposed Development	Road rut pools/ San Diego Fairy Shrimp	Riparian/ Wetlands	Coastal Sage Scrub	CA Gnatcatcher	Project Status
*Carroll Canyon Rd. Extension	I-805 (Carroll Canyon Road North to the I-5 HOV lanes)	DAR, HOV lanes, and BRT	1 road rut pool	0.18 acres	0.6 acres	Species not observed during surveys.	IS/EA approved
I-5/ Genesee Ave.	I-5 and Genesee Ave	Interchange Reconstruction	No impacts identified in RSA.	No impacts identified in RSA.	1 acre	1 pair impacted	IS/EA approved
I-5 North Coast	Del Mar Heights Rd to Vandergrift Boulevard/ Harbor Drive in Oceanside	HOV/ Managed Lanes/ Widening	No impacts identified in RSA.	4.4 acres	21.5 acres	14 territories impacted.	EIR/EIS in progress

* Within the vicinity of the proposed project

No Build Alternative

Under the No Build Alternative, no construction or grading activities will occur, and no associated cumulative impacts to biological resources will occur.

Avoidance, Minimization, and/or Mitigation Measures

Minimization measures for adverse and cumulatively considerable impacts to natural communities are located in Sections 2.14. Implementation of the measures in this

section will mitigate adverse effects of the project. Mitigation impacts to native upland communities will reduce the cumulative impacts to less than considerable.

All impacts occurring from other projects in the vicinity will be mitigated to below a level of significance.

2.21 Climate Change

Regulatory Setting

While climate change has been a concern since at least 1988, as evidenced by the establishment of the United Nations and World Meteorological Organization's Intergovernmental Panel on Climate Change (IPCC), the efforts devoted to greenhouse gas (GHG) emissions reduction and climate change research and policy have increased dramatically in recent years. These efforts are primarily concerned with the emissions of GHG related to human activity that include carbon dioxide (CO₂), methane, nitrous oxide, tetrafluoromethane, hexafluoroethane, sulfur hexafluoride, HFC-23 (fluoroform), HFC-134a (s, s, s, 2 –tetrafluoroethane), and HFC-152a (difluoroethane).

In 2002, with the passage of Assembly Bill 1493 (AB 1493), California launched an innovative and pro-active approach to dealing with GHG emissions and climate change at the state level. Assembly Bill 1493 requires the California Air Resources Board (CARB) to develop and implement regulations to reduce automobile and light truck GHG emissions. These stricter emissions standards were designed to apply to automobiles and light trucks beginning with the 2009-model year; however, in order to enact the standards California needed a waiver from the U.S. Environmental Protection Agency (EPA). The waiver was denied by EPA in December 2007. See *California v. Environmental Protection Agency*, 9th Cir. Jul. 25, 2008, No. 08-70011. However, on January 26, 2009, it was announced that EPA will reconsider their decision regarding the denial of California's waiver. On May 18, 2009, President Obama announced the enactment of a 35.5 mpg fuel economy standard for automobiles and light duty trucks which will take effect in 2012. On June 30, 2009 EPA granted California the waiver. California is expected to enforce its standards for 2009 to 2011 and then look to the federal government to implement equivalent standards for 2012 to 2016. The granting of the waiver will also allow California to implement even stronger standards in the future. The state is expected to start developing new standards for the post-2016 model years later this year.

On June 1, 2005, Governor Arnold Schwarzenegger signed Executive Order S-3-05. The goal of this Executive Order is to reduce California's GHG emissions to: 1) 2000 levels by 2010, 2) 1990 levels by the 2020 and 3) 80 percent below the 1990 levels by the year 2050. In 2006, this goal was further reinforced with the passage of Assembly Bill 32 (AB 32), the Global Warming Solutions Act of 2006. AB 32 sets the same overall GHG emissions reduction goals while further mandating that 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.

With Executive Order S-01-07, Governor Schwarzenegger set forth the low carbon fuel standard for California. Under this executive order, the carbon intensity of California's transportation fuels is to be reduced by at least 10 percent by 2020.

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. California, in conjunction with several environmental organizations and several other states, sued to force the U.S. Environmental Protection Agency (EPA) to regulate GHG as a pollutant under the Clean Air Act (*Massachusetts vs. Environmental Protection Agency et al.*, 549 U.S. 497 (2007)). The court ruled that GHG does fit within the Clean Air Act's definition of a pollutant, and that the EPA does have the authority to regulate GHG. Despite the Supreme Court ruling, there are no promulgated federal regulations to date limiting GHG emissions.

On December 7, 2009, the EPA Administrator signed two distinct findings regarding greenhouse gases under section 202(a) of the Clean Air Act:

- **Endangerment Finding:** The Administrator finds that the current and projected concentrations of the six key well-mixed greenhouse gases-- carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆)--in the atmosphere threaten the public health and welfare of current and future generations.

- Cause or Contribute Finding: The Administrator finds that the combined emissions of these well-mixed greenhouse gases from new motor vehicles and new motor vehicle engines contribute to the greenhouse gas pollution which threatens public health and welfare.

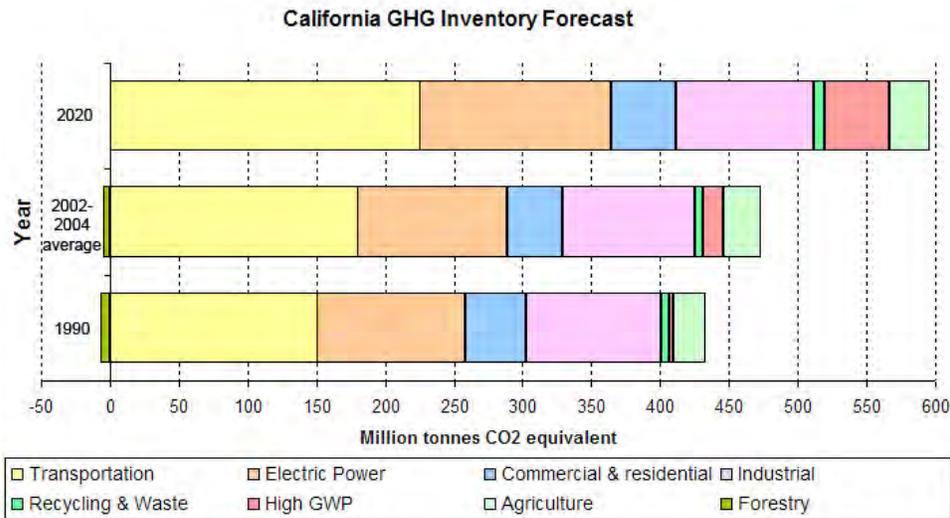
These findings do not themselves impose any requirements on industry or other entities. However, this action is a prerequisite to finalizing the EPA's proposed greenhouse gas emission standards for light-duty vehicles, which were jointly proposed by EPA and the Department of Transportation's National Highway Safety Administration on September 15, 2009. ¹

According to Recommendations by the Association of Environmental Professionals on How to Analyze GHG Emissions and Global Climate change in CEQA Documents (Hendrix and Wilson, 2007), an individual project does not generate enough GHG emissions to significantly influence global climate change. Rather, global climate change is a cumulative impact. This means that a project may participate in a potential impact through its incremental contribution combined with the contributions of all other sources of GHG. In assessing cumulative impacts, it must be determined if a project's incremental effect is "cumulatively considerable." See CEQA Guidelines sections 15064(i)(1) and 15130. To make this determination the incremental impacts of the project must be compared with the effects of past, current, and probable future projects. To gather sufficient information on a global scale of all past, current, and future projects in order to make this determination is a difficult if not impossible task.

As part of its supporting documentation for the Draft Scoping Plan, CARB recently released an updated version of the GHG inventory for California (June 26, 2008). Shown below is a graph from that update that shows the total GHG emissions for California for 1990, 2002-2004 average, and 2020 projected if no action is taken.

¹ <http://www.epa.gov/climatechange/endangerment.html>

Table 38: California Greenhouse Gas Inventory



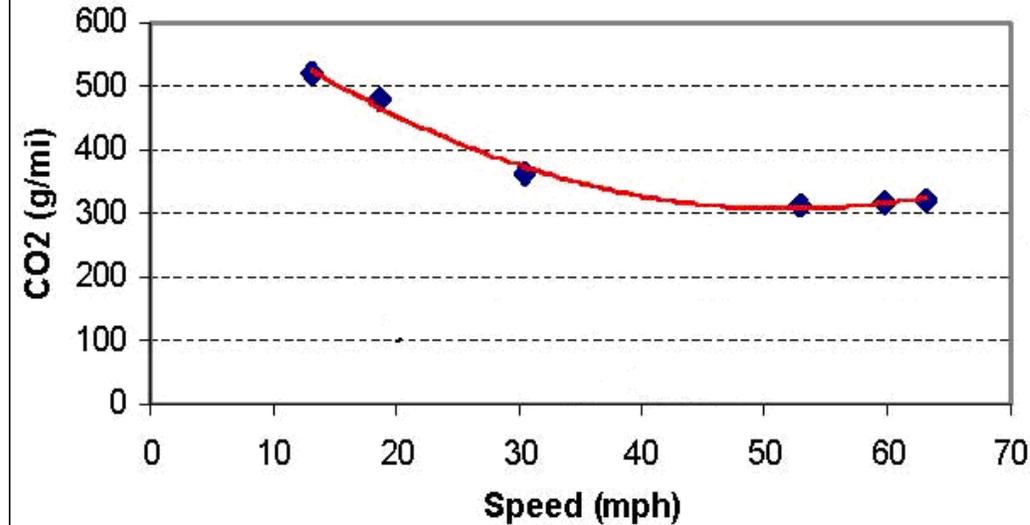
Taken from: <http://www.arb.ca.gov/cc/inventory/data/forecast.htm>

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% of California’s GHG emissions are from the burning of fossil fuels and 40% of all human made GHG emissions are from transportation (see Climate Action Program at Caltrans (December 2006), Caltrans has created and is implementing the Climate Action Program at Caltrans that was published in December 2006. This document can be found at: <http://www.dot.ca.gov/docs/ClimateReport.pdf>.

Project Analysis

One of the main strategies in 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 miles per hour) and speeds over 55 mph; the most severe emissions occur from 0-25 miles per hour (see Figure below). Relieving congestion by enhancing operations and improving travel times in high congestion travel corridors will lead to an overall reduction in GHG emissions.

Fleet CO2 Emissions vs. Speed (Highway)



Source: Center for Clean Air Policy— [http://www.ccap.org/Presentations/Winkelman%20TRB%202004%20\(1-13-04\).pdf](http://www.ccap.org/Presentations/Winkelman%20TRB%202004%20(1-13-04).pdf)

The purpose of the project is to improve the overall efficiency of the transportation network in the project area. Proposed transit/transportation facilities in the project area include a transit center/DAR at Nobel Drive, and the south facing portion of the Carroll Canyon DAR and the I-805 Managed Lanes facility. The Nobel Drive transit center will serve to increase access and transfer needs for existing local and express bus routes and will accommodate planned Bus Rapid Transit (BRT) services. Together with the I-805 Managed Lanes Facility, augmented transit service will be provided in the project vicinity. The managed lanes will improve corridor capacity for both HOV, and transit users.

The project itself however will not result in an increase in vehicular emissions within the air basin, as overall on-road vehicle trips will occur regardless of whether the project is constructed. Please see Section 2.5 for additional discussion of the traffic impacts. This proposed project is consistent with the 2030 RTP and the plans of the Metropolitan Transit System (MTS), San Diego County Transit, and North County Transit District (NCTD) in accommodating the High-Speed Bus Rapid Transit System.

Quantative Analysis

In order to determine regional GHG emissions, the SANDAG ‘Revenue Constrained’ Series 11 2020 and 2030 regional travel demand models were utilized for the land use and local street network assumptions for the Build and No Build scenarios. Regional fuel consumption and CO₂ emissions were modeled with and without the build scenario for each respective time horizon.

To estimate the potential beneficial or negative effect of the proposed project on San Diego regional GHG levels, the California Air Resources Board (CARB) EMFAC 2007 vehicle emissions model for the San Diego Air Basin was used to calculate carbon dioxide emissions for the San Diego metropolitan area with and without the proposed Project. The results of the regional fuel consumption and CO₂ emissions models are shown in Table 39.

Table 39: Average Difference in Regional CO₂ Emissions

Alternative	Model Year	Fuel Consumption (gal)	Efficiency Fuel Savings (gal/day)	Diesel Fuel Consumption	Efficiency Fuel Savings (gal/day)	Regional CO ₂ Annual Avg. Emissions (tons/day)	Efficiency CO ₂ Savings (tons/day)
No-Build	2020	4,806,950	-	586,050	-	53,070	-
Build	2020	4,805,580	1370	585,890	160	53,060	10
No-Build	2030	5,775,710	-	648,180	-	63,310	-
Build	2030	5,775,070	640	648,140	40	63,300	10

Note: EMFAC2007 model reporting limit=10 tons/day

Compared to the No Build Alternative, implementation of the Build Alternative is estimated to reduce the 2020 and 2030 CO₂ emissions in the San Diego region by up to 10 tons per day. These decreases will be due to the decreased congestion along the corridor and improved travel times along the corridor.

Construction Emissions

GHG emissions for transportation projects can be divided into those produced during construction and those produced during operations. Construction GHG emissions include emissions produced as a result of material processing, emissions produced by onsite construction equipment, and emissions arising from traffic delays due to construction. These emissions will be produced at different levels throughout the construction phase; their frequency and occurrence can be reduced through innovations

in plans and specifications and by implementing better traffic management during construction phases. In addition, with innovations such as longer pavement lives, improved traffic management plans, and changes in materials, the GHG emissions produced during construction can be mitigated to some degree by longer intervals between maintenance and rehabilitation events. Construction-related GHG emissions are expected to occur with the Project. These include emissions produced as a result of material processing, emissions produced by onsite construction equipment, and emissions arising from traffic delays due to construction. These emissions will be produced at different levels throughout the construction phase; their frequency and occurrence can be reduced through implementation of measures, such as idling restrictions, in the plans and specifications and by implementing better traffic management during construction phases.

CEQA Conclusion

While construction may result in a slight increase in GHG emissions during construction, it is anticipated that any increase in GHG emissions due to construction will be offset by the improvement in operational GHG emissions. While it is Caltrans determination that in the absence of further regulatory or scientific information related to GHG emissions and CEQA significance, it is too speculative to make a significance determination regarding the project's direct impact and its contribution on the cumulative scale to climate change, Caltrans is firmly committed to implementing measures to help reduce GHG emissions. These measures are outlined in the following section.

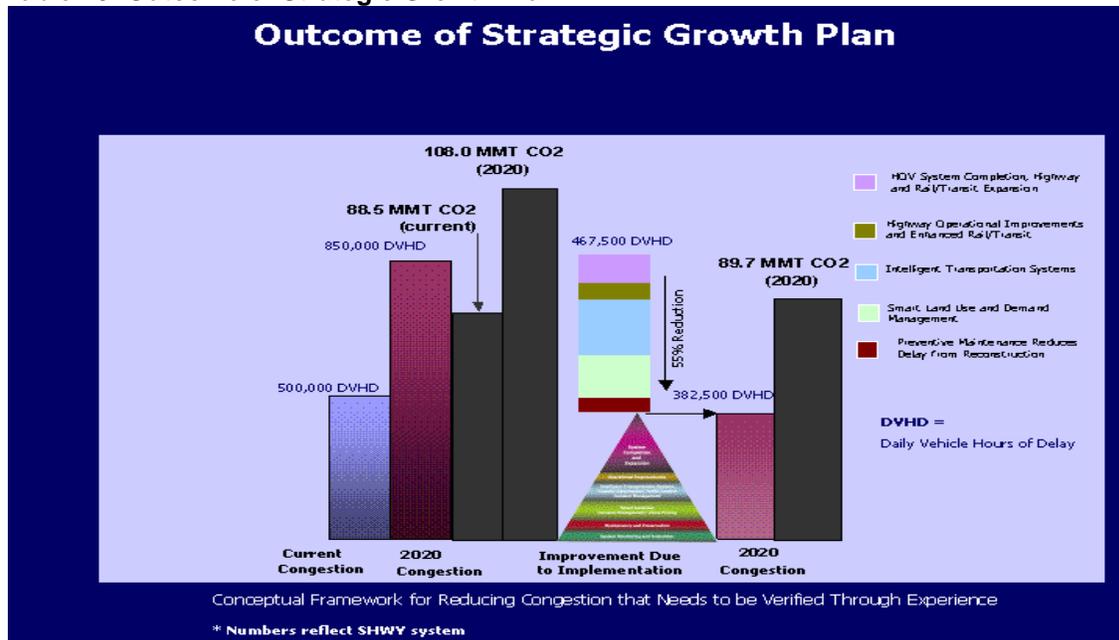
AB 32 Compliance

Caltrans continues to be actively involved on the Governor's Climate Action Team as California Air Resources Board works to implement AB 1493 and help achieve the targets set forth in AB 32. Many of the strategies Caltrans is using to help meet the targets in AB 32 come from the California Strategic Growth Plan, which is updated each year.

Governor Arnold Schwarzenegger's Strategic Growth Plan calls for a \$222 billion infrastructure improvement program to fortify the state's transportation system, education, housing, and waterways, including \$107 billion in transportation funding during the next decade. As shown on the figure below, the Strategic Growth Plan targets a significant decrease in traffic congestion below today's level and a corresponding

reduction in greenhouse gas emissions. The Strategic Growth Plan proposes to do this while accommodating growth in population and the economy. A suite of investment options has been created that combined together yield the promised reduction in congestion. The Strategic Growth Plan relies on a complete systems approach of a variety of strategies: system monitoring and evaluation, maintenance and preservation, smart land use and demand management, and operational improvements.

Table 40: Outcome of Strategic Growth Plan



As part of the Climate Action Program at Caltrans (December 2006, <http://www.dot.ca.gov/docs/ClimateReport.pdf>), Caltrans is supporting efforts to reduce vehicle miles traveled by planning and implementing smart land use strategies: 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, light and heavy-duty trucks; Caltrans is doing this by supporting on-going research efforts at universities, by supporting legislation efforts to increase fuel economy, and by its participation on the Climate Action Team. It is important to note, however, that the control of the fuel economy standards is held by the United States Environmental Protection Agency and California Air Resource Board. Lastly, the use of alternative fuels is also being considered; Caltrans is participating in funding for alternative fuel research at the University of California Davis.

Table 41 summarizes efforts that Caltrans is implementing in order to reduce greenhouse gas emissions. For more detailed information about each strategy, please see Climate Action Program at Caltrans (December 2006); it is available at <http://www.dot.ca.gov/docs/ClimateReport.pdf>.

Table 41: Climate Change Strategies

Strategy	Program	Partnership		Method/Process	Estimated CO2 Savings (MMT)	
		Lead	Agency		2010	2020
Smart Land Use	Intergovernmental Review (IGR)	Caltrans	Local Governments	Review and seek to mitigate development proposals	Not Estimated	Not Estimated
	Planning Grants	Caltrans	Local and regional agencies & other stakeholders	Competitive selection process	Not Estimated	Not Estimated
	Regional Plans and Blueprint Planning	Regional Agencies	Caltrans	Regional plans and application process	0.975	7.8
Operational Improvements & Intelligent Trans. System (ITS) Deployment	Strategic Growth Plan	Caltrans	Regions	State ITS; Congestion Management Plan	.007	2.17
Mainstream Energy & Greenhouse Gas into Plans and Projects	Office of Policy Analysis & Research; Division of Environmental Analysis	Interdepartmental effort		Policy establishment, guidelines, technical assistance	Not Estimated	Not Estimated
Educational & Information Program	Office of Policy Analysis & Research	Interdepartmental, CalEPA, CARB, CEC		Analytical report, data collection, publication, workshops, outreach	Not Estimated	Not Estimated
Fleet Greening & Fuel Diversification	Division of Equipment	Department of General Services		Fleet Replacement B20 B100	0.0045	0.0065 0.45 .0225
Non-vehicular Conservation Measures	Energy Conservation Program	Green Action Team		Energy Conservation Opportunities	0.117	.34
Portland Cement	Office of Rigid Pavement	Cement and Construction Industries		2.5 % limestone cement mix 25% fly ash cement mix	1.2 .36	3.6
Goods Movement	Office of Goods Movement	Cal EPA, CARB, BT&H, MPOs		Goods Movement Action Plan	Not Estimated	Not Estimated
Total					2.72	18.67

To the extent that it is applicable or feasible for the project and through coordination with the project development team, the following measures will also be included in the project to reduce the greenhouse gas emissions and potential climate change impacts from the project:

The proposed project will be designed to minimize removal of existing trees, especially mature trees.

Caltrans and the California Highway Patrol are working with regional agencies to implement Intelligent Transportation Systems (ITS) to help manage the efficiency of the existing highway system. ITS is commonly referred to as electronics, communications, or information processing used singly or in combination to improve the efficiency or safety of a surface transportation system.

In addition, Caltrans and SANDAG provide ridesharing services and park-and-ride facilities to help manage the growth in demand for highway capacity.

The following "green" practices and materials will be used in the project as part of highway planting and erosion control work:

- Compost and soil amendments derived from sewage sludge and green waste materials
- Fiber produced from recycled pulp such as newspaper, chipboard, cardboard
- Wood mulch made from green waste and/or clean manufactured wood or natural wood

The State of California maintains several websites, which provide public information on measures to improve renewable energy use, energy efficiency, water conservation and efficiency, land use and landscape maintenance, solid waste measures, and transportation alternatives.

Adaptation Strategies

“Adaptation strategies” refer to how Caltrans and others can plan for the effects of climate change on the state’s transportation infrastructure and strengthen or protect the facilities from damage. Climate change is expected to produce increased variability in precipitation, rising temperatures, rising sea levels, storm surges and intensity, and the frequency and intensity of wildfires. These changes may affect the transportation infrastructure in various ways, such as damaging roadbeds by longer periods of intense heat; increasing storm damage from flooding and erosion; and inundation from rising sea

levels. These effects will vary by location and may, in the most extreme cases, require that a facility be relocated or redesigned. There may also be economic and strategic ramifications as a result of these types of impacts to the transportation infrastructure.

Climate change adaption must also involve the natural environment as well. Efforts are underway on a statewide-level to develop strategies to cope with impacts to habitat and biodiversity through planning and conservation. The results of these efforts will help California agencies plan and implement mitigation strategies for programs and projects.

On November 14, 2008, Governor Schwarzenegger signed Executive Order S-13-08 which directed a number of state agencies to address California's vulnerability to sea level rise caused by climate change.

The California Resources Agency [now the Natural Resources Agency, (Resources Agency)], through the interagency Climate Action Team, was directed to coordinate with local, regional, state and federal public and private entities to develop a state Climate Adaptation Strategy. The Climate Adaptation Strategy will summarize the best known science on climate change impacts to California, assess California's vulnerability to the identified impacts and then outline solutions that can be implemented within and across state agencies to promote resiliency.

As part of its development of the Climate Adaptation Strategy, Resources Agency was directed to request the National Academy of Science to prepare a Sea Level Rise Assessment Report by December 2010 to advise how California should plan for future sea level rise. The report is to include:

- Relative sea level rise projections for California, taking into account coastal erosion rates, tidal impacts, El Niño and La Niña events, storm surge and land subsidence rates.
- The range of uncertainty in selected sea level rise projections.
- A synthesis of existing information on projected sea level rise impacts to state infrastructure (such as roads, public facilities and beaches), natural areas, and coastal and marine ecosystems.
- A discussion of future research needs regarding sea level rise for California.

Furthermore Executive Order S-13-08 directed the Business, Transportation, and Housing Agency to prepare a report to assess vulnerability of transportation systems to sea level affecting safety, maintenance and operational improvements of the system and economy of the state. Caltrans continues to work on assessing the transportation system vulnerability to climate change, including the effect of sea level rise.

Prior to the release of the final Sea Level Rise Assessment Report, all state agencies that are planning to construct projects in areas vulnerable to future sea level rise were directed to consider a range of sea level rise scenarios for the years 2050 and 2100 in order to assess project vulnerability and, to the extent feasible, reduce expected risks and increase resiliency to sea level rise. However, all projects that have filed a Notice of Preparation, and/or are programmed for construction funding the next five years (through 2013), or are routine maintenance projects as of the date of Executive Order S-13-08 may, are not required to, consider these planning guidelines. Sea level rise estimates should also be used in conjunction with information regarding local uplift and subsidence, coastal erosion rates, predicted higher high water levels, storm surge and storm wave data. (Executive Order S-13-08 allows some exceptions to this planning requirement.) The project is not in an area vulnerable to sea level rise.

Climate change adaptation for transportation infrastructure involves long-term planning and risk management to address vulnerabilities in the transportation system from increased precipitation and flooding; the increased frequency and intensity of storms and wildfires; rising temperatures; and rising sea levels. Caltrans is an active participant in the efforts being conducted as part of Governor's Schwarzenegger's Executive Order on Sea Level Rise and is mobilizing to be able to respond to the National Academy of Science report on Sea Level Rise Assessment which is due to be released by December 2010.

On August 3, 2009, Natural Resources Agency in cooperation and partnership with multiple state agencies, released the 2009 California Climate Adaptation Strategy Discussion Draft, which summarizes the best known science on climate change impacts in seven specific sectors and provides recommendations on how to manage against those threats. The release of the draft document set in motion a 45-day public comment period. Led by the California Natural Resources Agency, numerous other state agencies

were involved in the creation of discussion draft, including Environmental Protection; Business, Transportation and Housing; Health and Human Services; and the Department of Agriculture. The discussion draft focuses on sectors that include: Public Health; Biodiversity and Habitat; Ocean and Coastal Resources; Water Management; Agriculture; Forestry; and Transportation and Energy Infrastructure. The strategy is in direct response to Gov. Schwarzenegger's November 2008 Executive Order S-13-08 that specifically asked the Natural Resources Agency to identify how state agencies can respond to rising temperatures, changing precipitation patterns, sea level rise, and extreme natural events. As data continues to be developed and collected, the state's adaptation strategy will be updated to reflect current findings. A revised version of the report was posted on the Natural Resource Agency website on December 2, 2009; it can be viewed at: <http://www.energy.ca.gov/2009publications/CNRA-1000-2009-027/CNRA-1000-2009-027-F.PDF>.

Currently, Caltrans is working to assess which transportation facilities are at greatest risk from climate change effects. However, without statewide planning scenarios for relative sea level rise and other climate change impacts, Caltrans has not been able to determine what change, if any, may be made to its design standards for its transportation facilities. Once statewide planning scenarios become available, Caltrans will be able review its current design standards to determine what changes, if any, may be warranted in order to protect the transportation system from sea level rise.

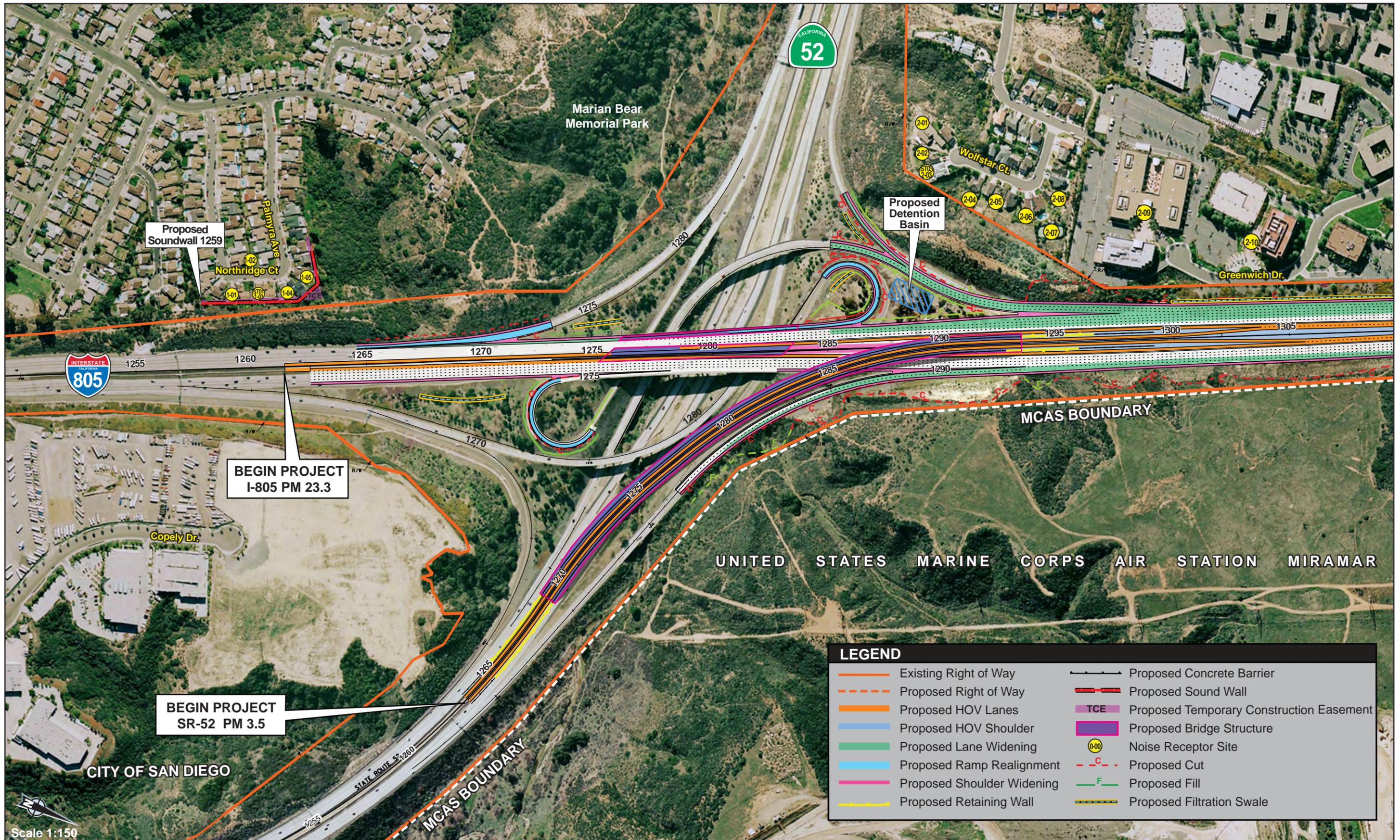


Figure 3A
Project Features Map

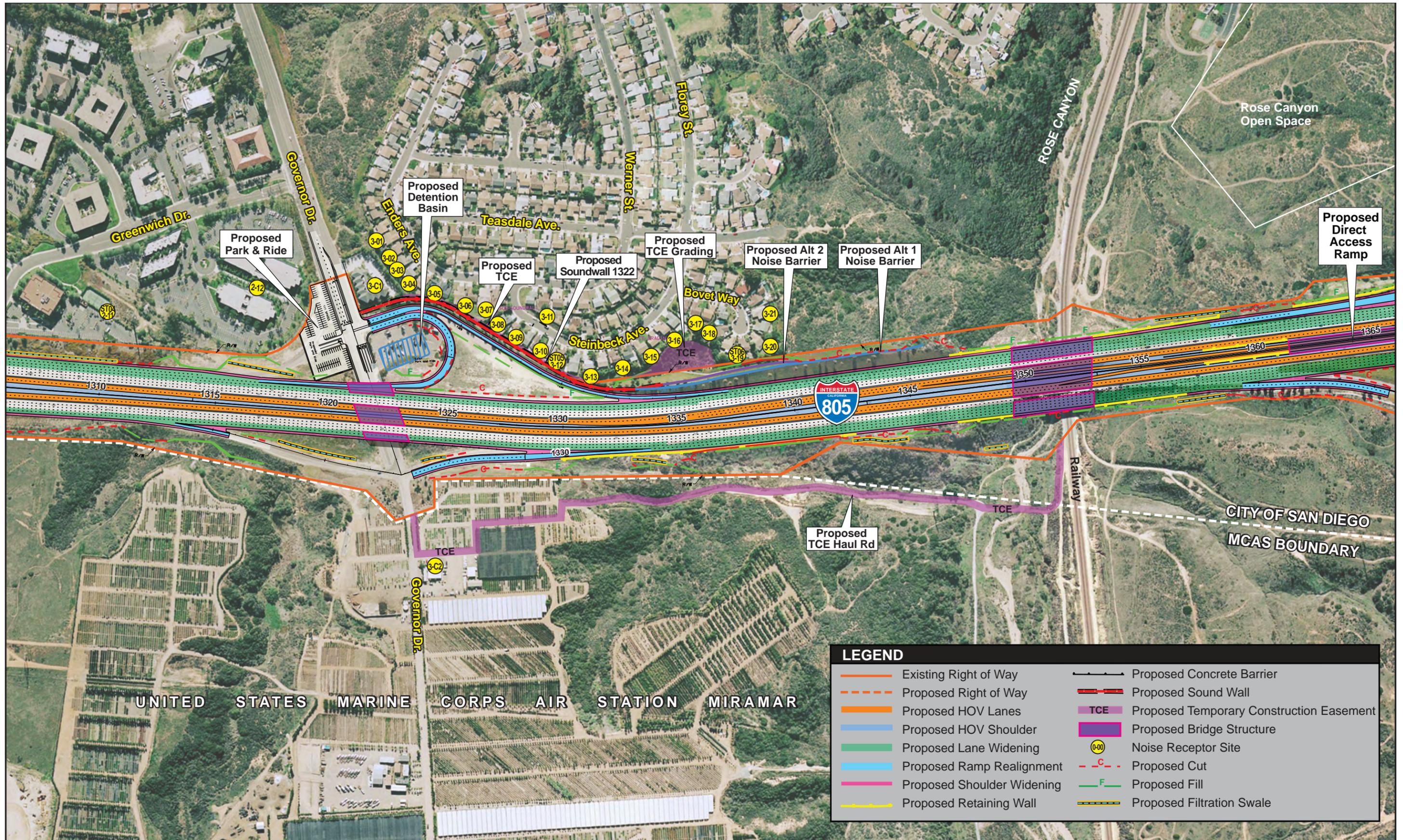


Figure 3B
Project Features Map

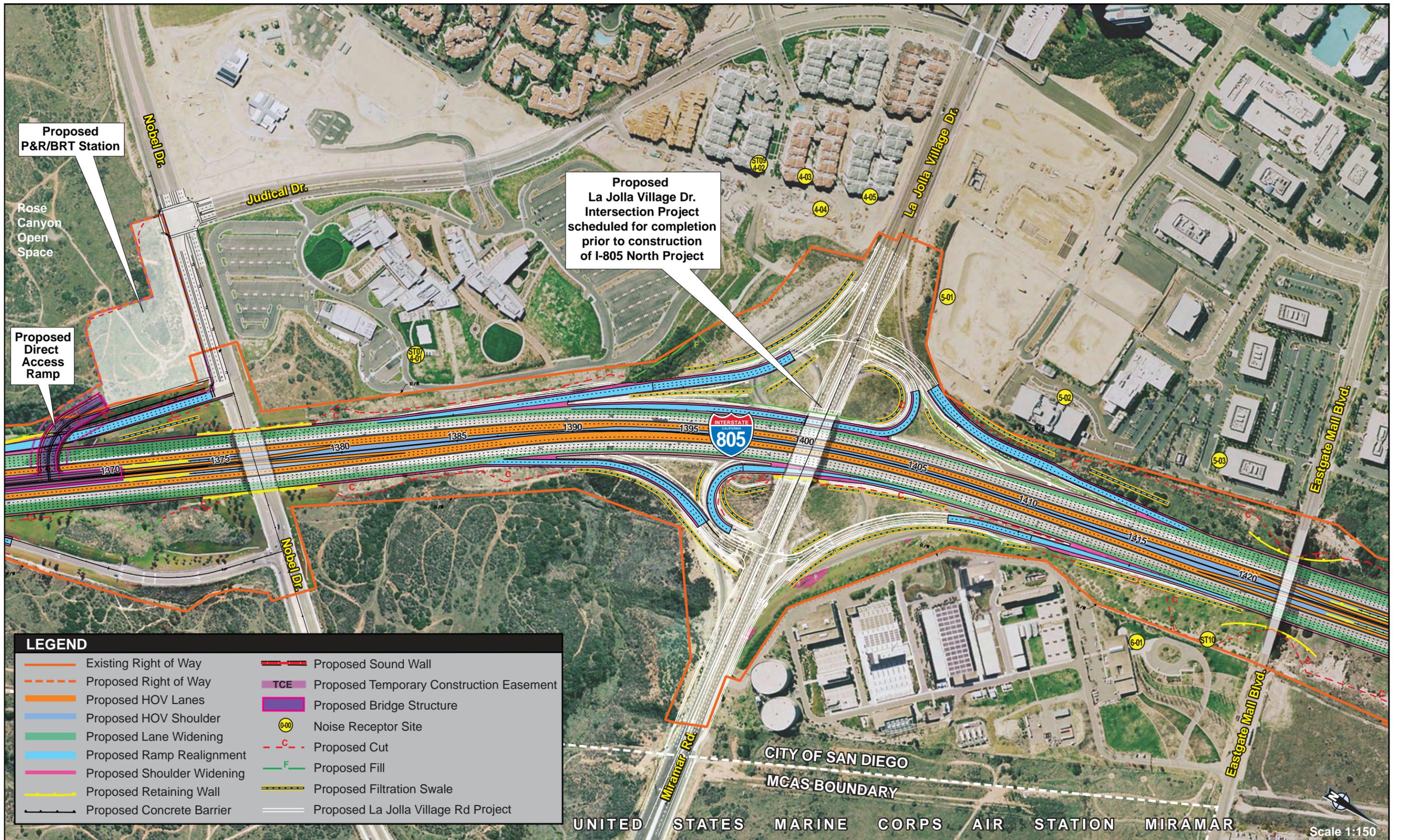


Figure 3C
Project Features Map

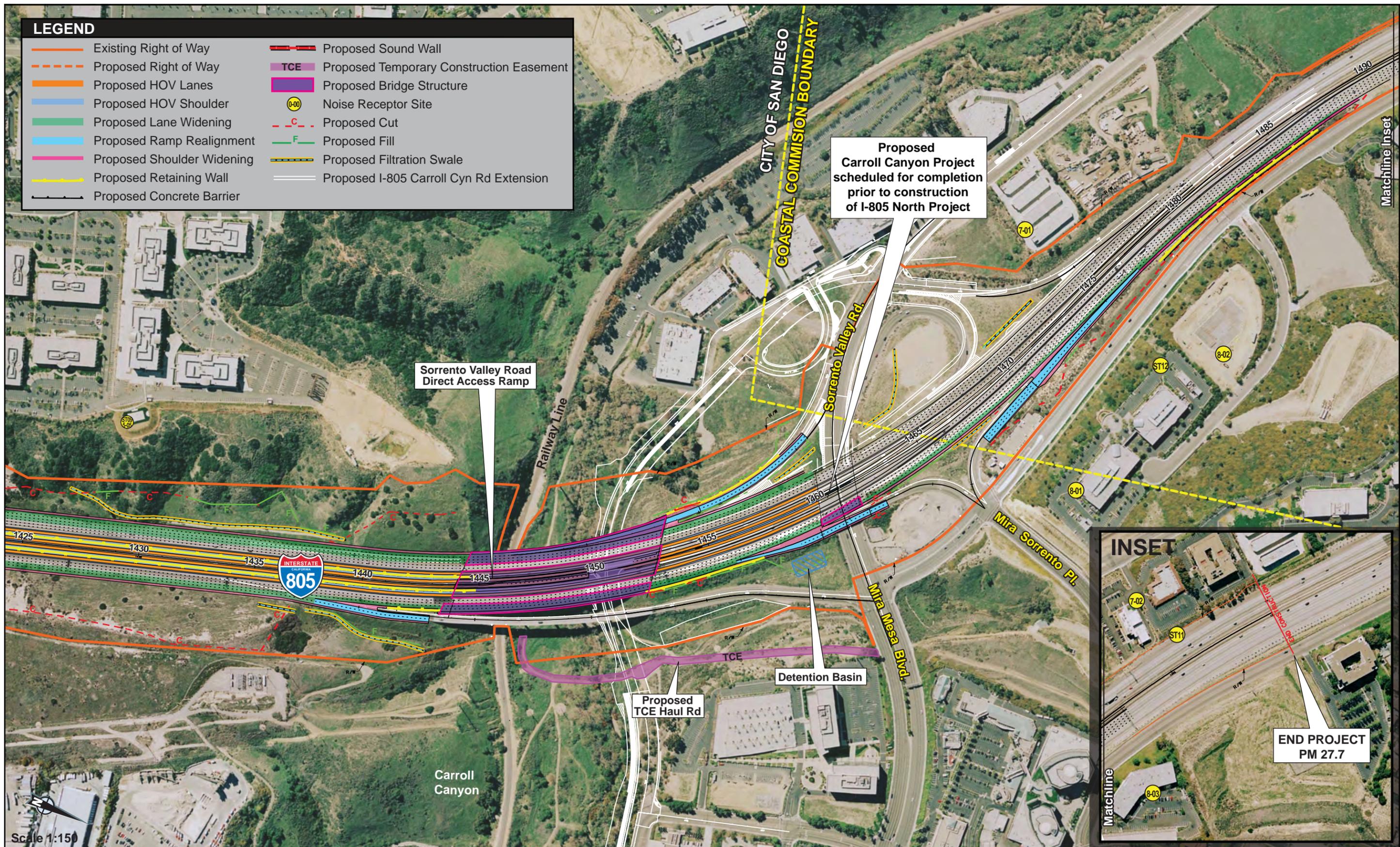


Figure 3D
 Project Features Map

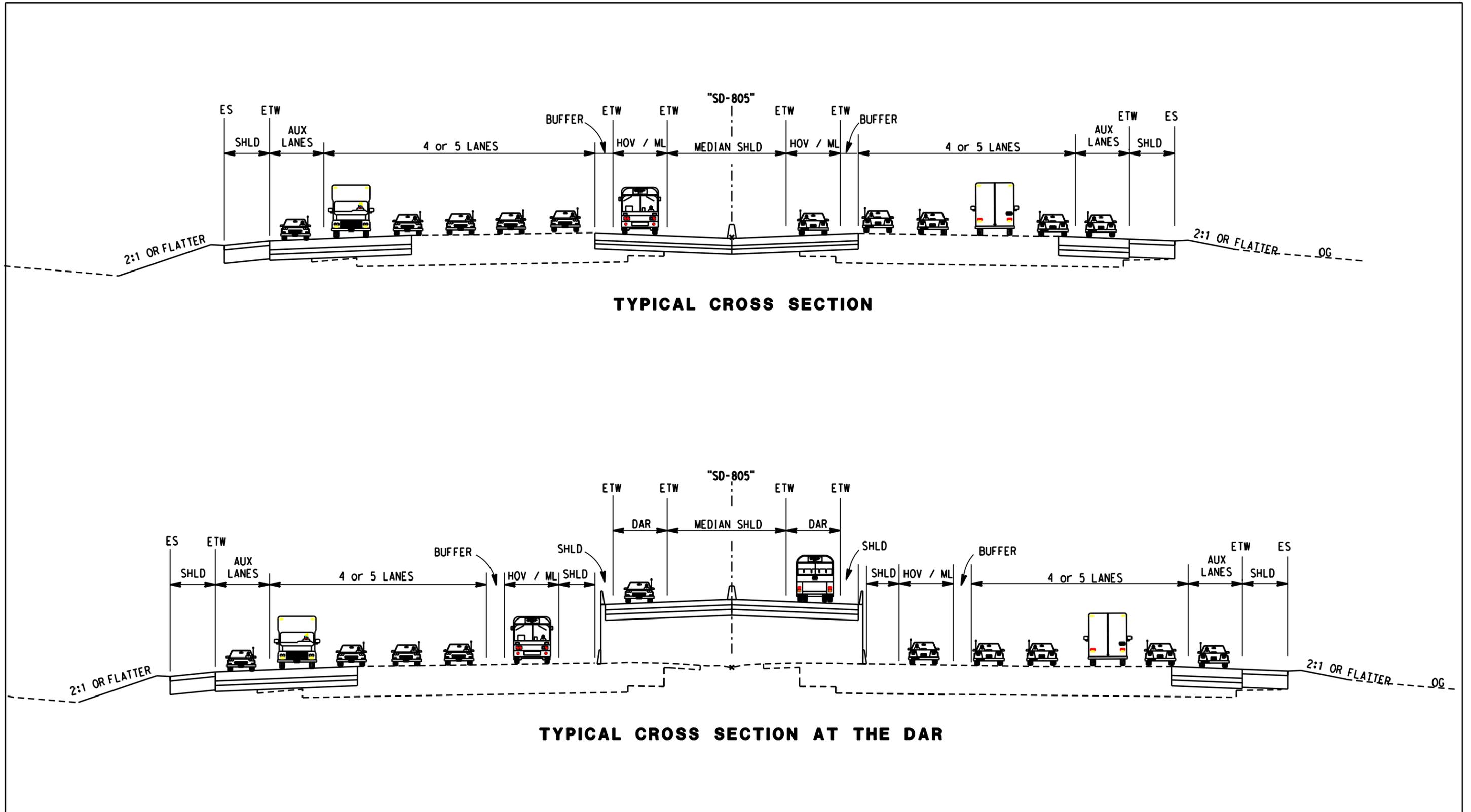


Figure 4
Typical Cross-section

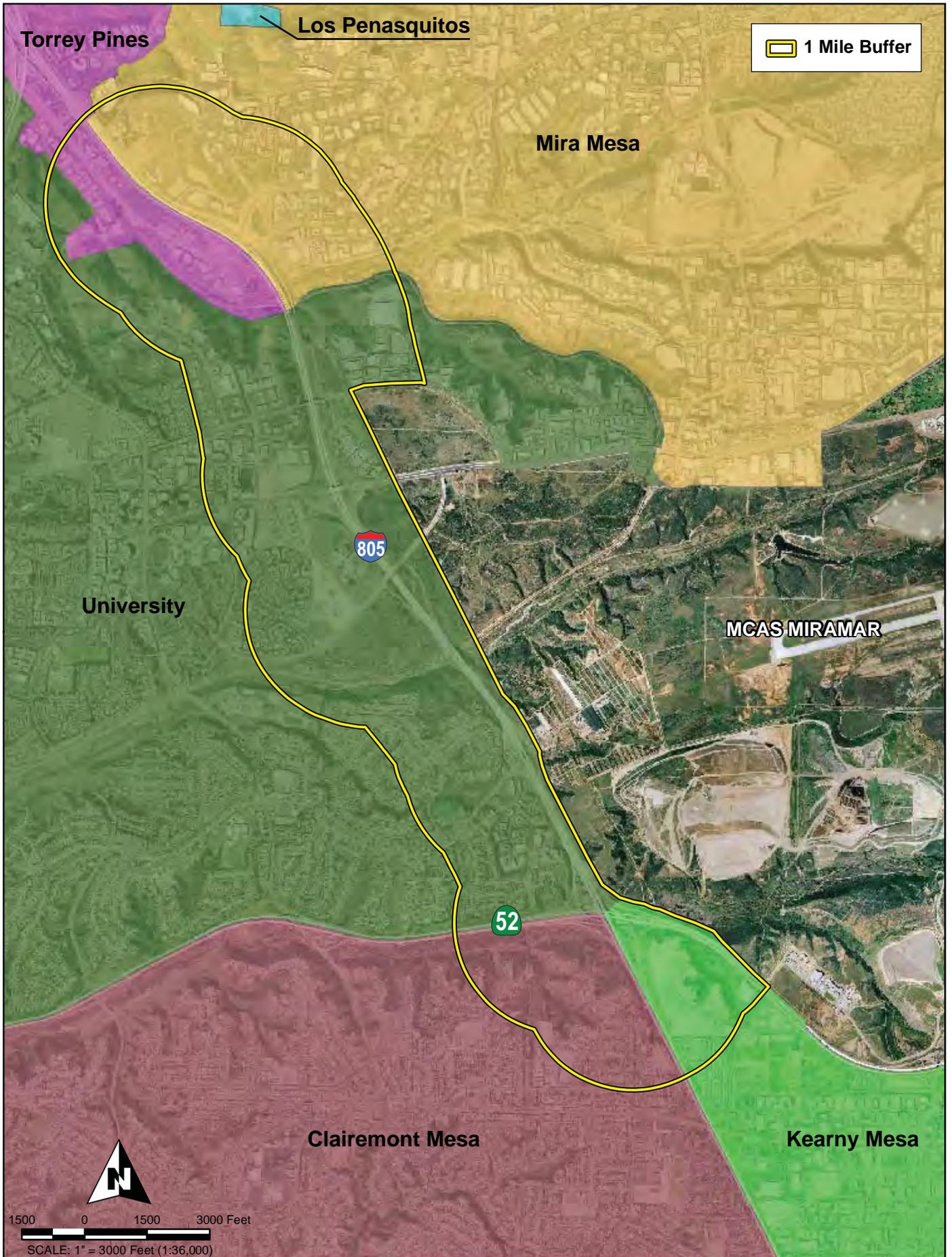
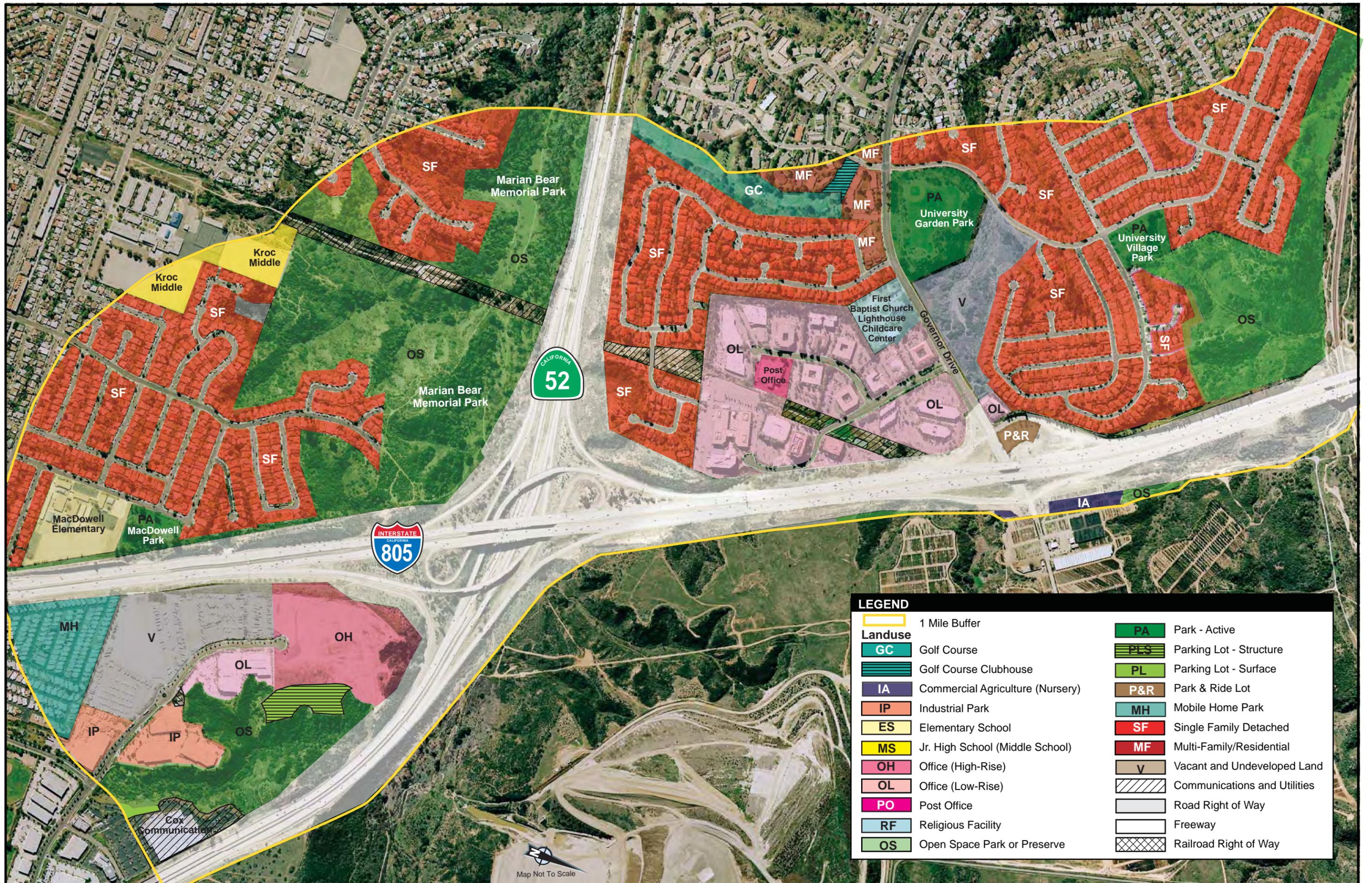


Figure 5
Adjacent San Diego Communities



LEGEND

	1 Mile Buffer		PA Park - Active
	Landuse		PLS Parking Lot - Structure
	GC Golf Course		PL Parking Lot - Surface
	Golf Course Clubhouse		P&R Park & Ride Lot
	IA Commercial Agriculture (Nursery)		MH Mobile Home Park
	IP Industrial Park		SF Single Family Detached
	ES Elementary School		MF Multi-Family/Residential
	MS Jr. High School (Middle School)		V Vacant and Undeveloped Land
	OH Office (High-Rise)		Communications and Utilities
	OL Office (Low-Rise)		Road Right of Way
	PO Post Office		Freeway
	RF Religious Facility		Railroad Right of Way
	OS Open Space Park or Preserve		

Figure 6A
Existing Land Use

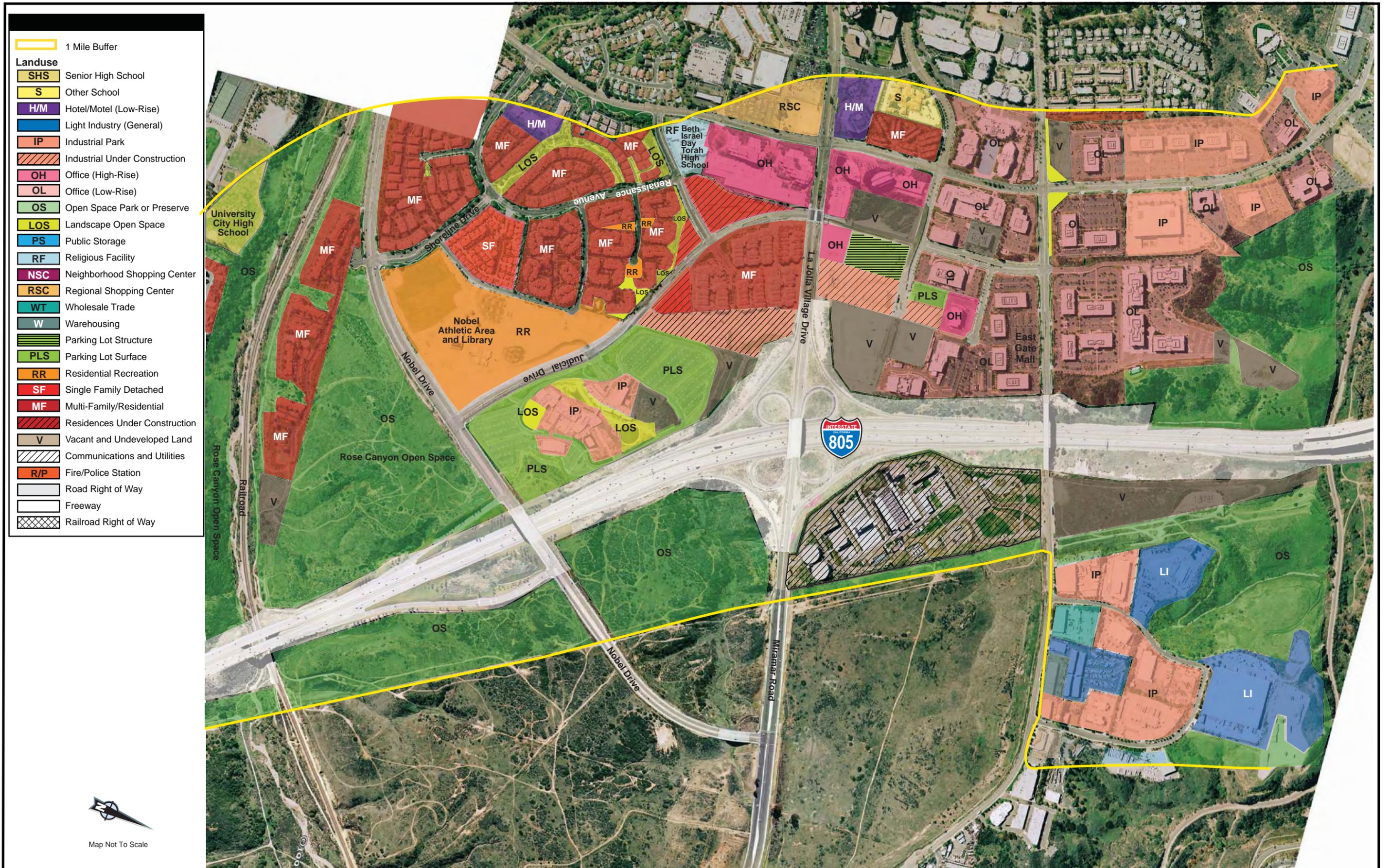
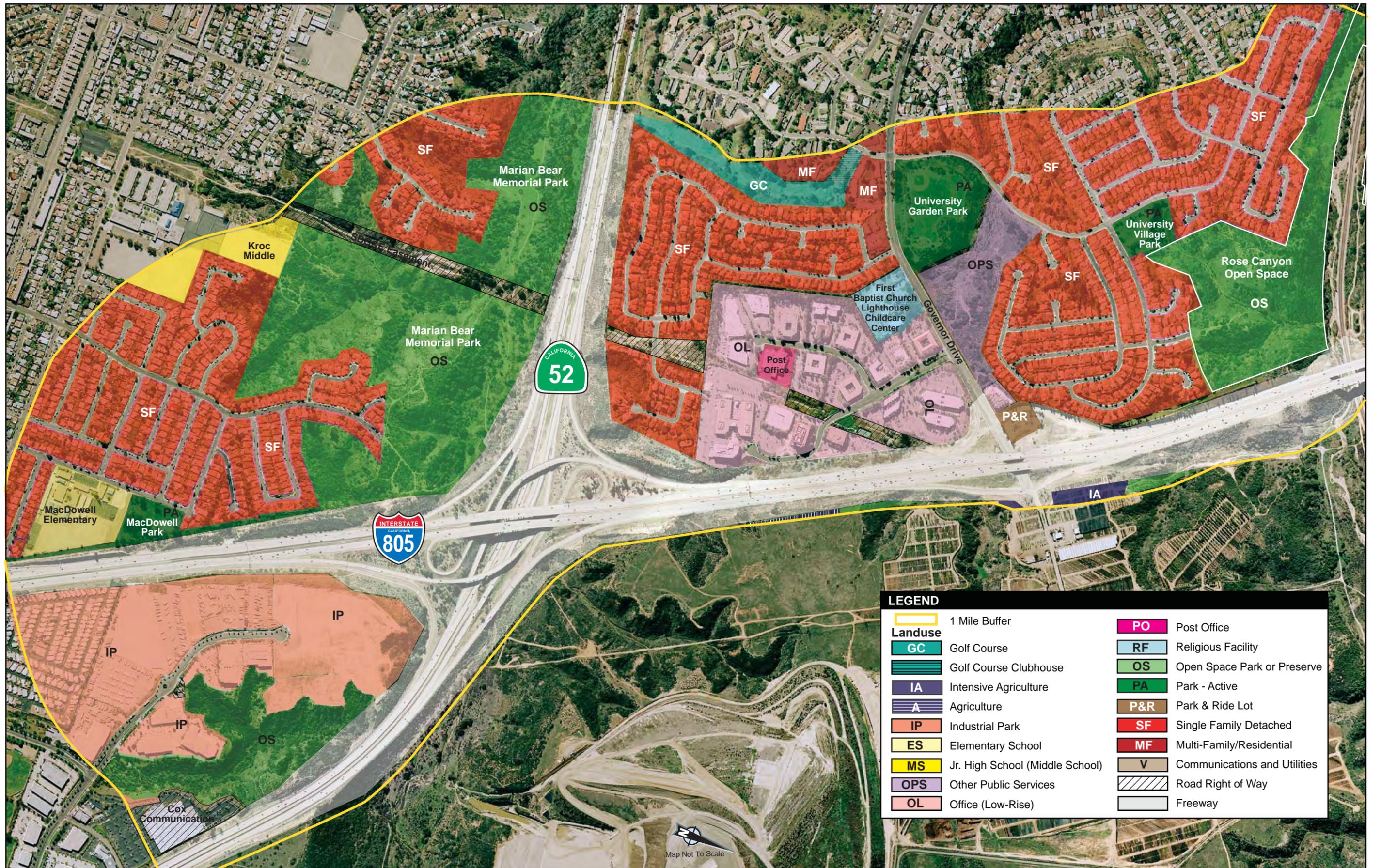


Figure 6B
Existing Land Use



Figure 6C
Existing Land Use

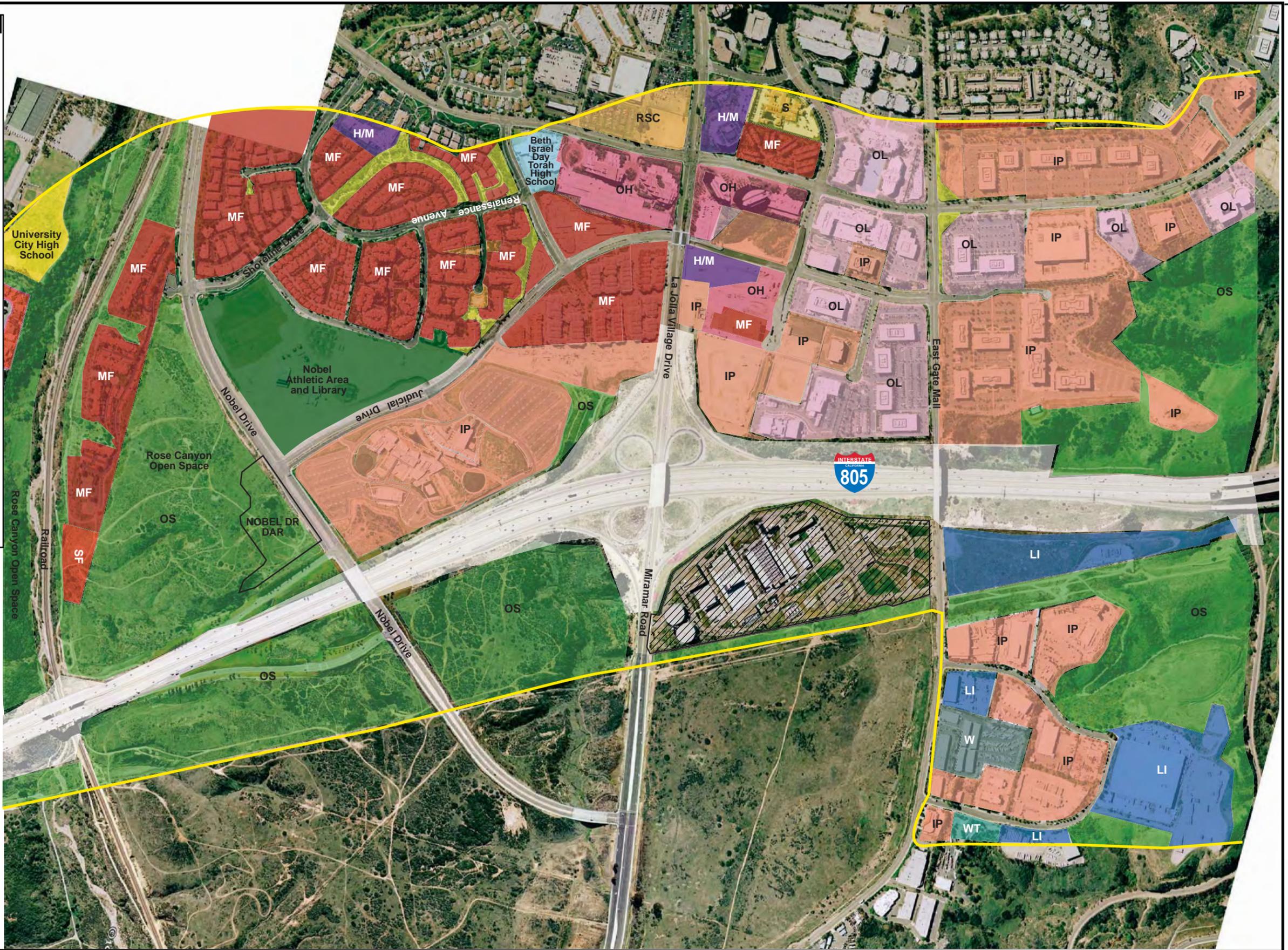


LEGEND	
	1 Mile Buffer
Landuse	
	GC Golf Course
	Golf Course Clubhouse
	IA Intensive Agriculture
	A Agriculture
	IP Industrial Park
	ES Elementary School
	MS Jr. High School (Middle School)
	OPS Other Public Services
	OL Office (Low-Rise)
	PO Post Office
	RF Religious Facility
	OS Open Space Park or Preserve
	PA Park - Active
	P&R Park & Ride Lot
	SF Single Family Detached
	MF Multi-Family/Residential
	V Communications and Utilities
	Road Right of Way
	Freeway

Figure 7A
Planned Land Use

LEGEND

-  1 Mile Buffer
- Landuse**
-  SHS Senior High School
-  S Other School
-  H/M Hotel/Motel (Low-Rise)
-  LI Light Industry (General)
-  IP Industrial Park
-  Industrial Under Construction
-  OH Office (High-Rise)
-  OL Office (Low-Rise)
-  OS Open Space Park or Preserve
-  LOS Landscape Open Space
-  PA Park Active
-  RF Religious Facility
-  NSC Neighborhood Shopping Center
-  RSC Regional Shopping Center
-  WT Wholesale Trade
-  W Warehousing
-  RR Residential Recreation
-  SF Single Family Detached
-  MF Multi-Family/Residential
-  Residences Under Construction
-  V Vacant and Undeveloped Land
-  Communications and Utilities
-  R/P Fire/Police Station
-  Road Right of Way
-  Freeway
-  Railroad Right of Way



**Figure 7B
Planned Land Use**



LEGEND	
	1 Mile Buffer
	Coastal Zone Boundary
Landuse	
	H/M Hotel/Motel (Low-Rise)
	LI Light Industry (General)
	IP Industrial Park
	OH Office (High-Rise)
	OL Office (Low-Rise)
	OS Open Space Park or Preserve
	LOS Landscape Open Space
	NSC Neighborhood Shopping Center
	ORT Other Retail Trade & Commercial
	WT Wholesale Trade
	W Warehousing
	RR Residential Recreation
	MF Multi-Family/Residential
	Communications and Utilities
	R/P Fire/Police Station
	Road Right of Way
	Freeway
	Railroad Right of Way

Figure 7C
Planned Land Use

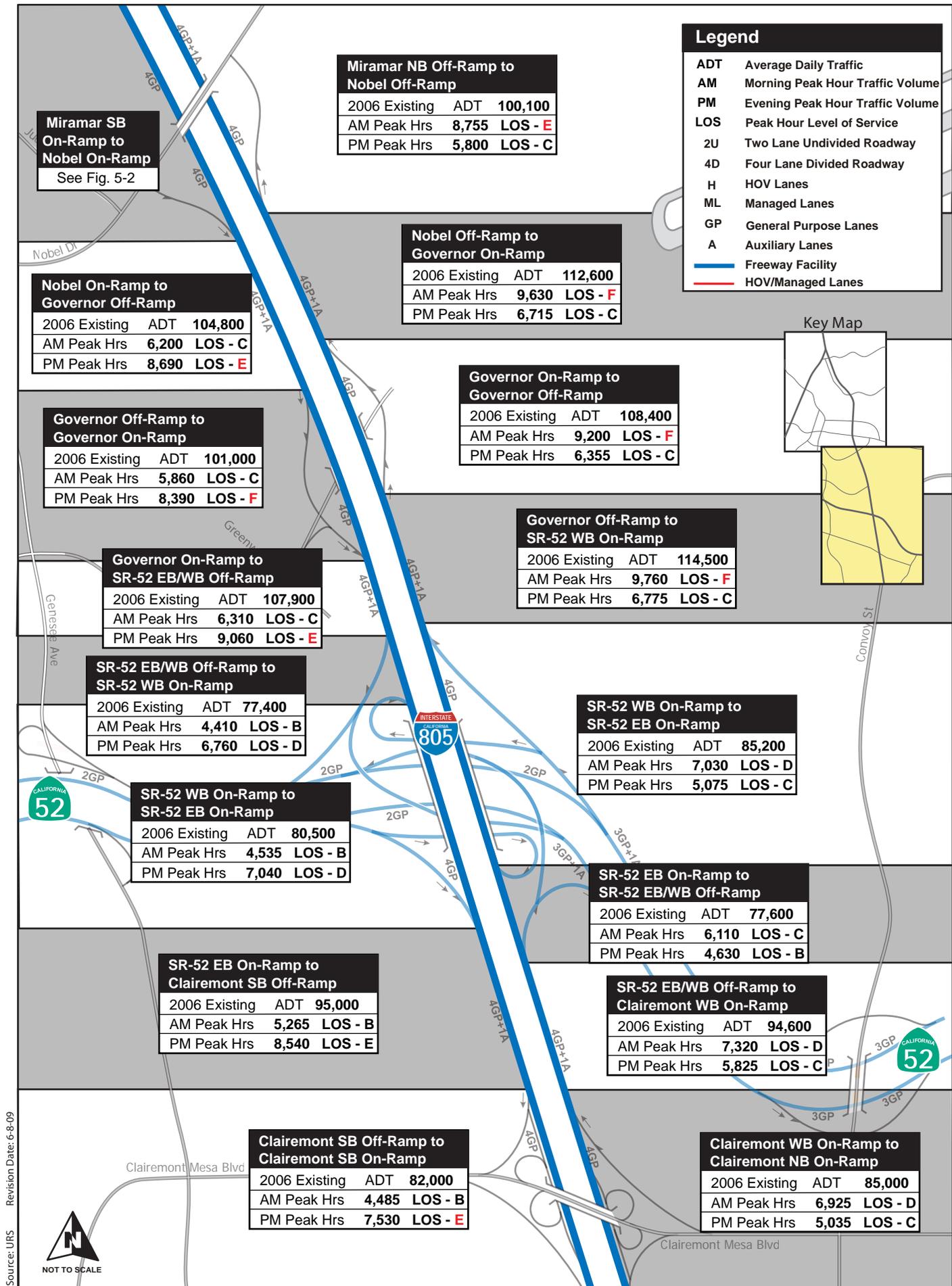


Figure 8A
2006 Existing Conditions Traffic Analysis

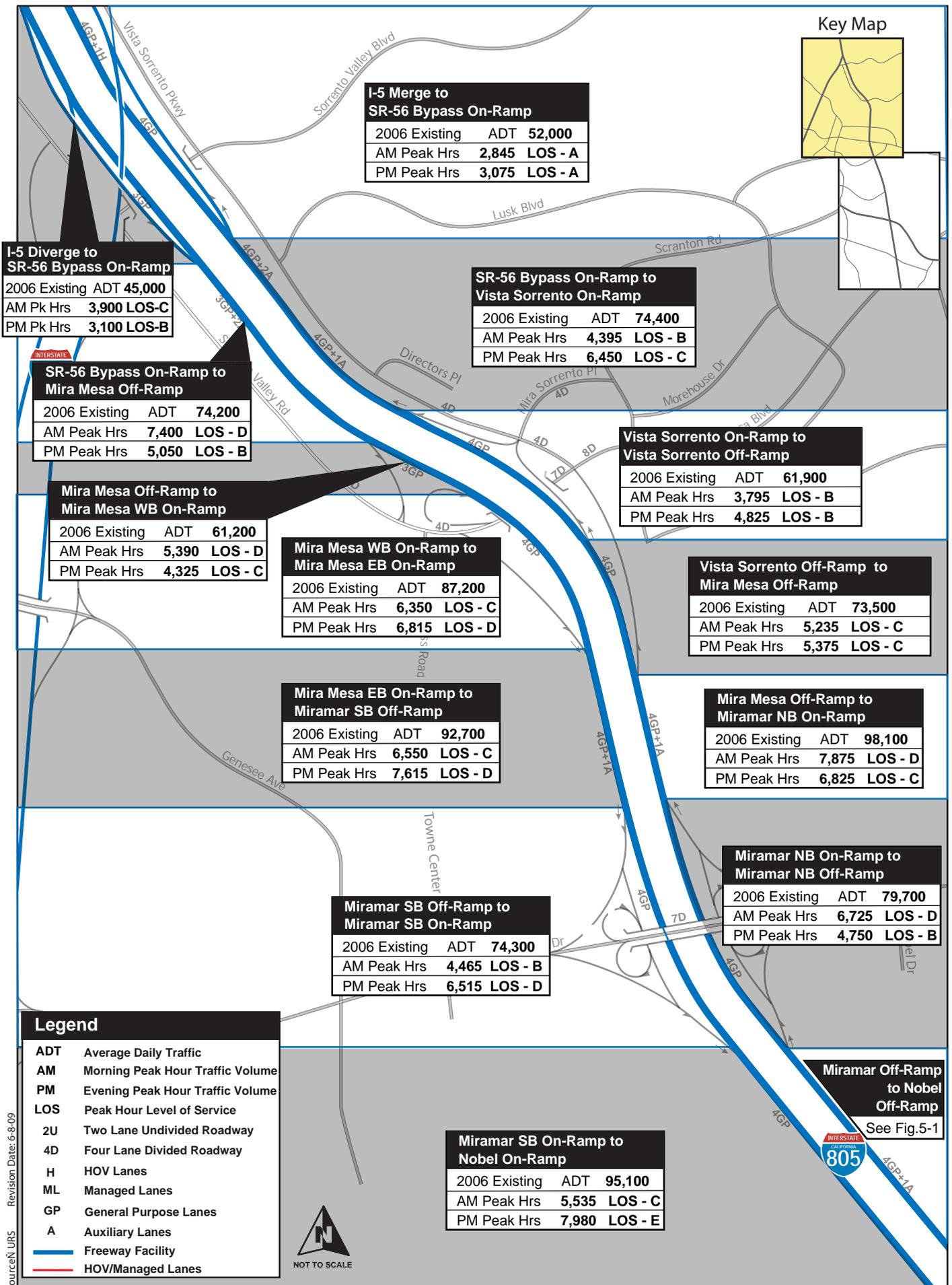


Figure 8B
2006 Existing Conditions Traffic Analysis

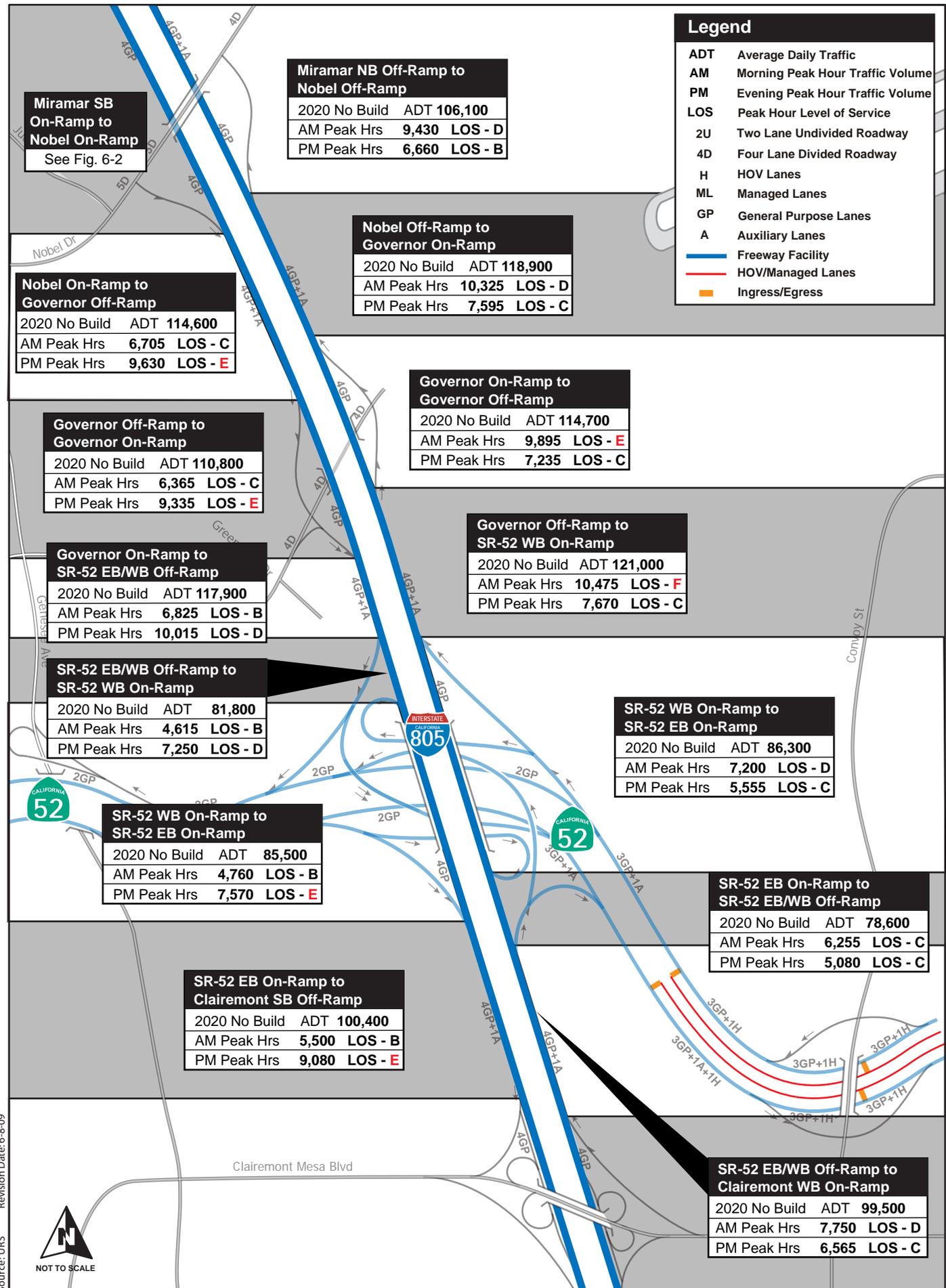


Figure 8C
2020 No Build Traffic Analysis Conditions

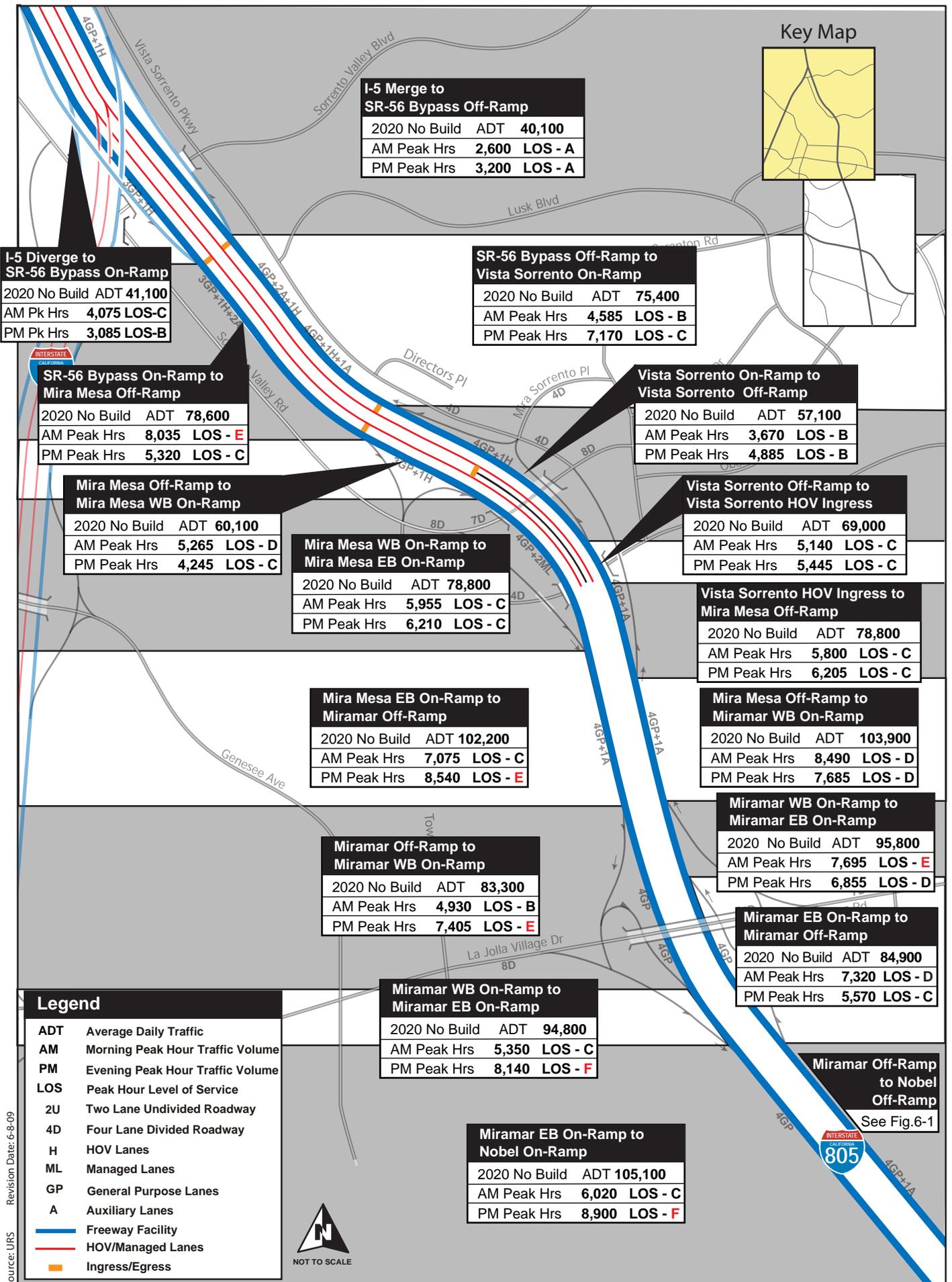


Figure 8D
2020 No Build Traffic Analysis Conditions

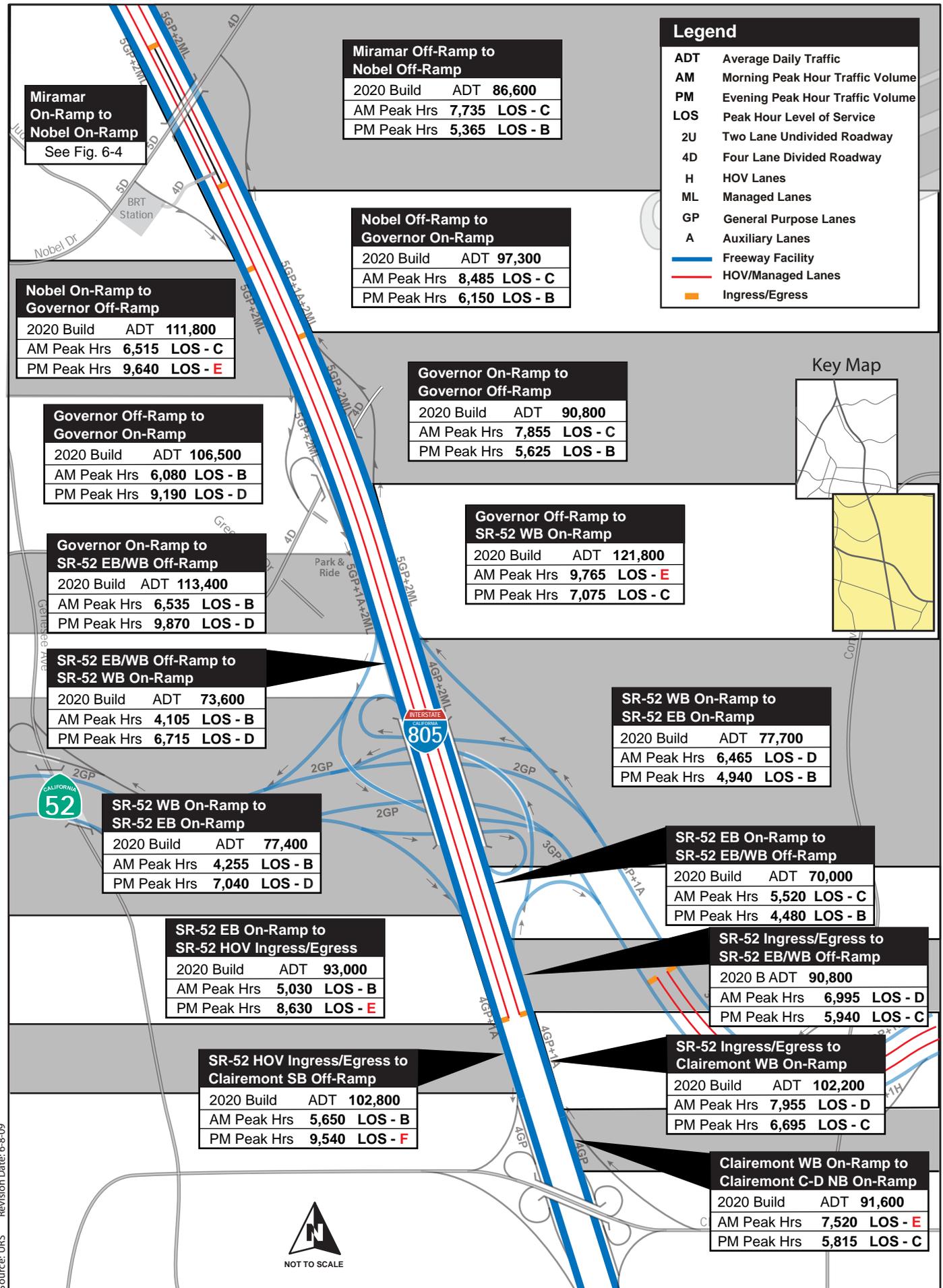


Figure 8E
2020 Build Traffic Analysis Conditions

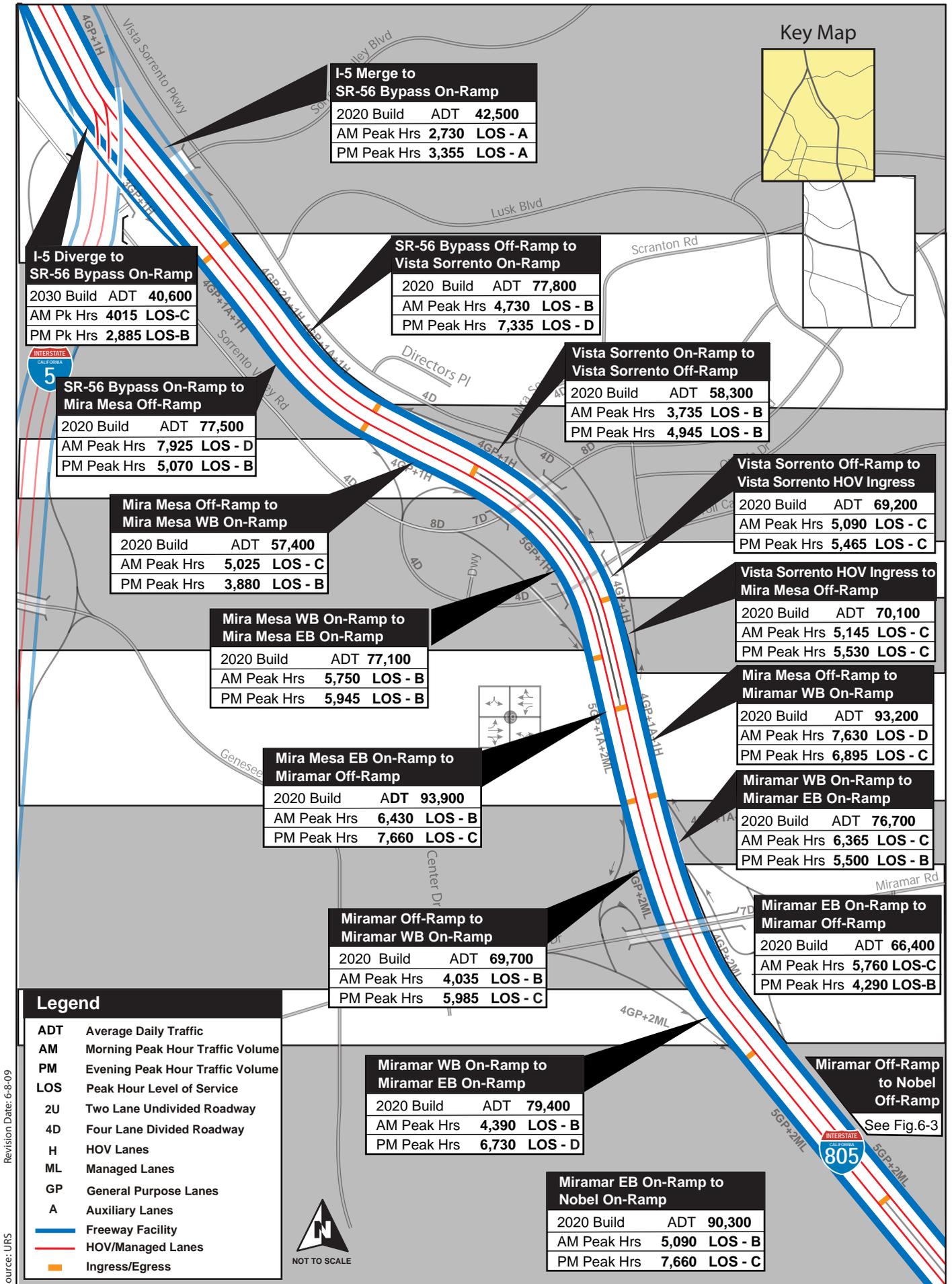


Figure 8F
2020 Build Traffic Analysis Conditions

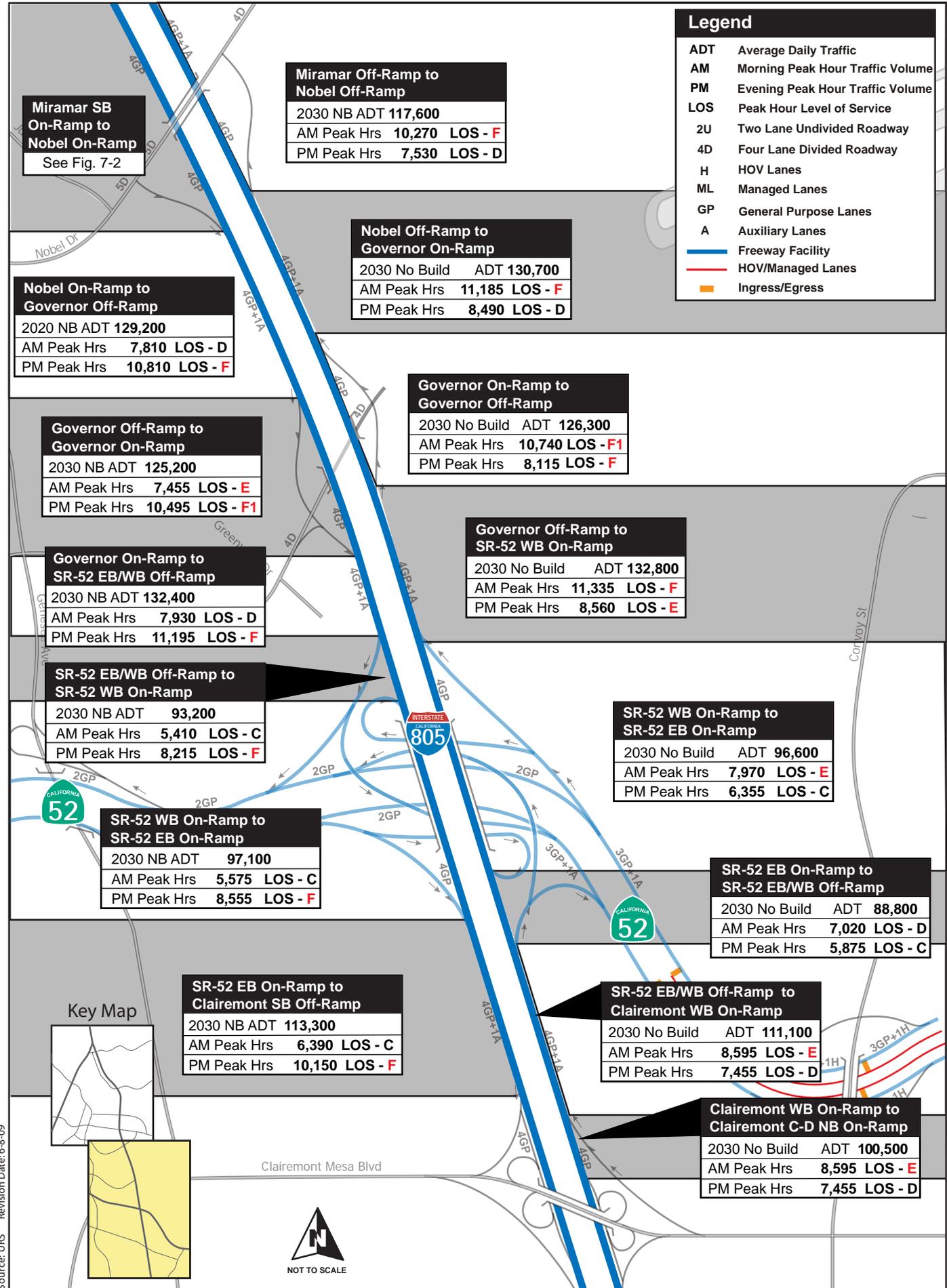


Figure 8G
2030 No Build Traffic Analysis Conditions

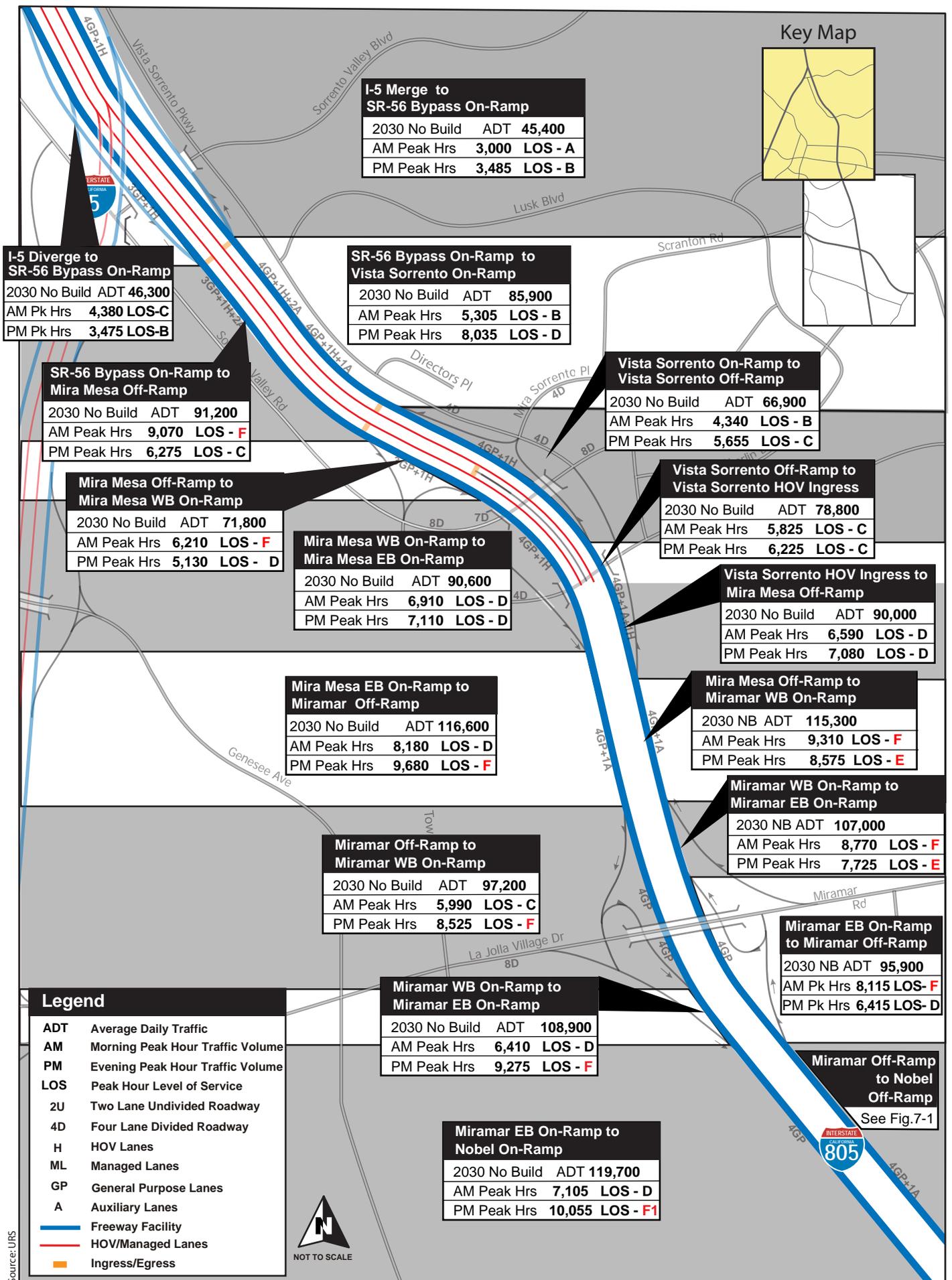


Figure 8H
2030 No Build Traffic Analysis Conditions

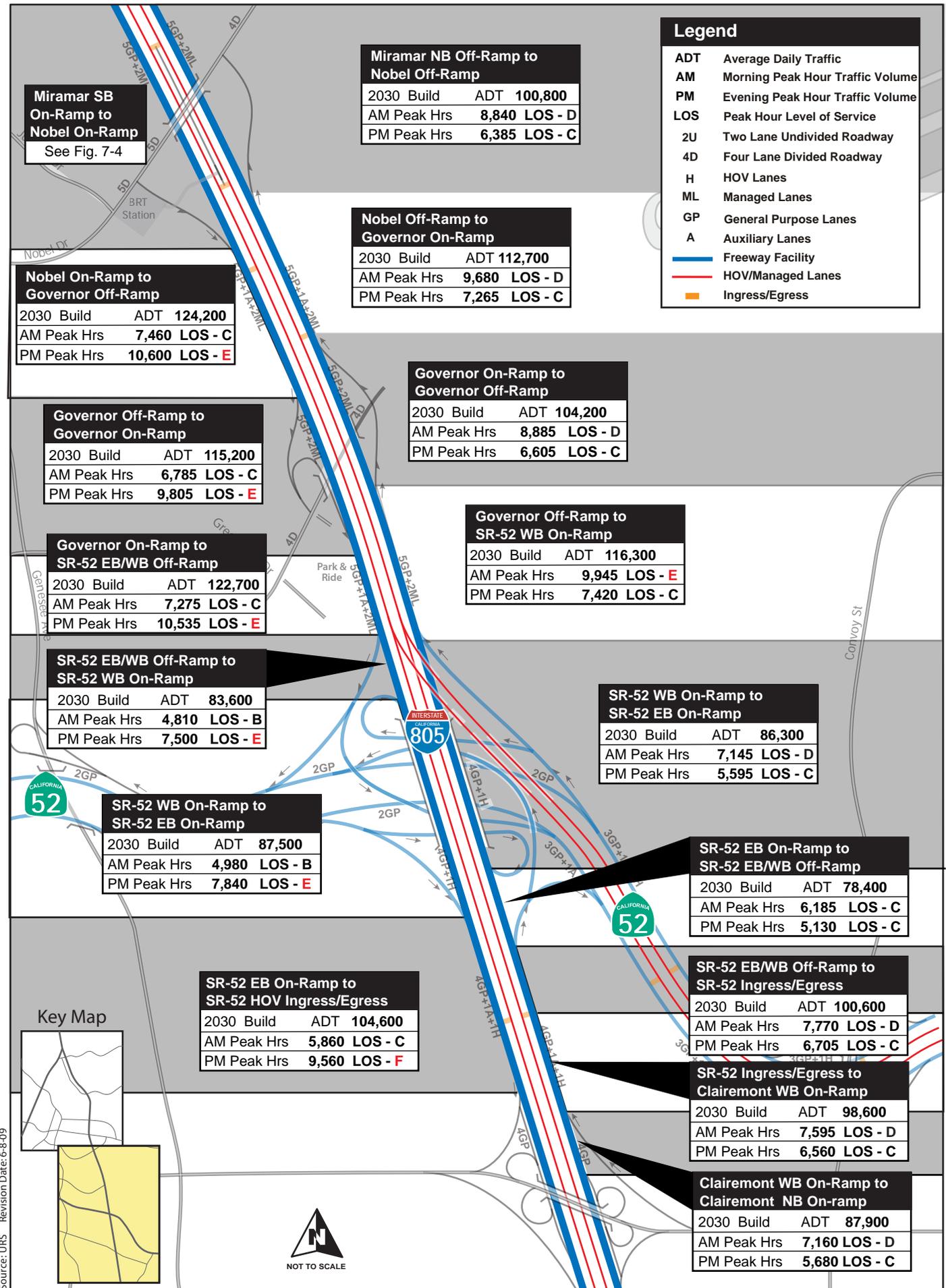


Figure 81
2030 Build Traffic Analysis Conditions

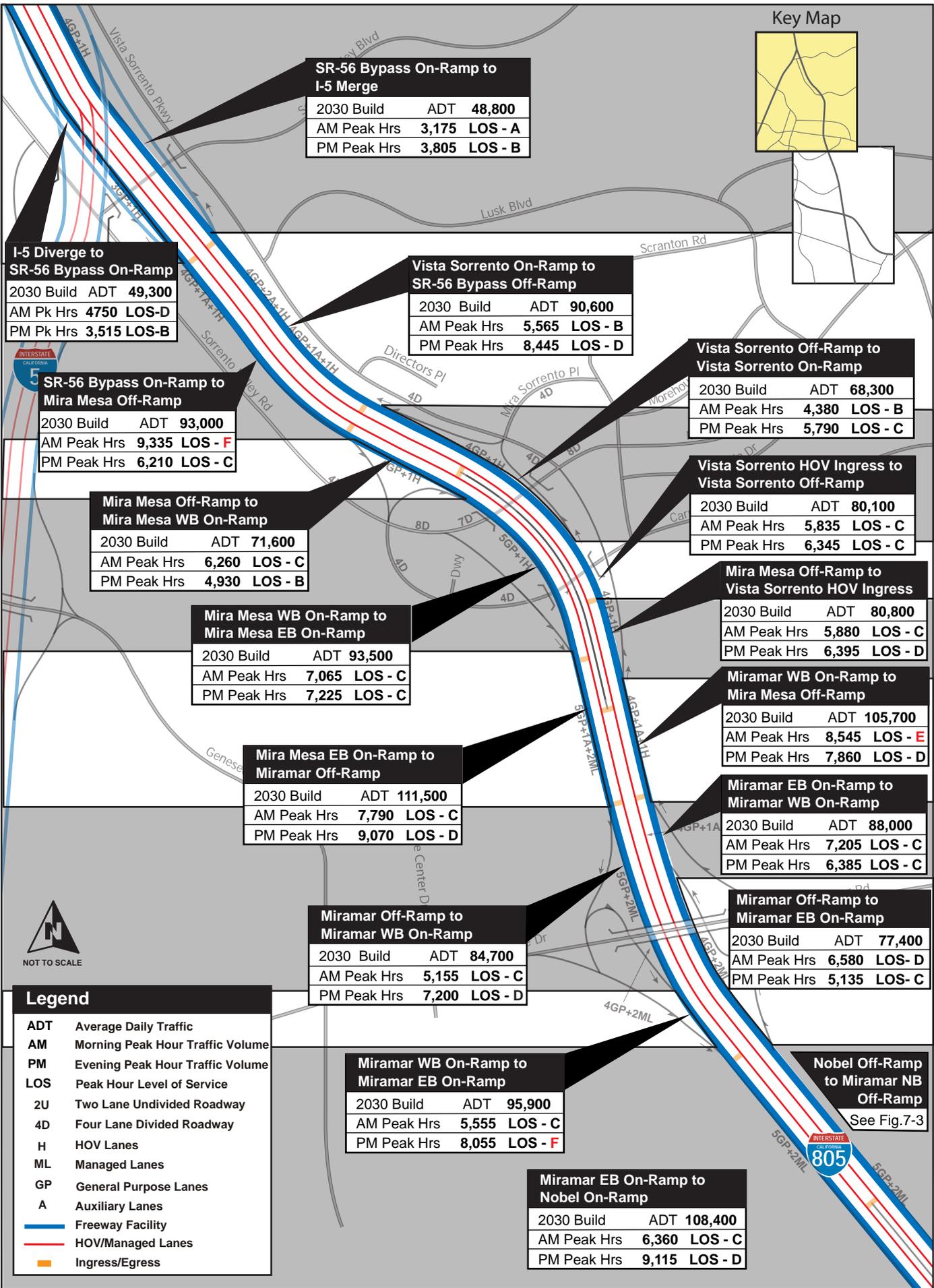


Figure 8J
2030 Build Traffic Analysis Conditions

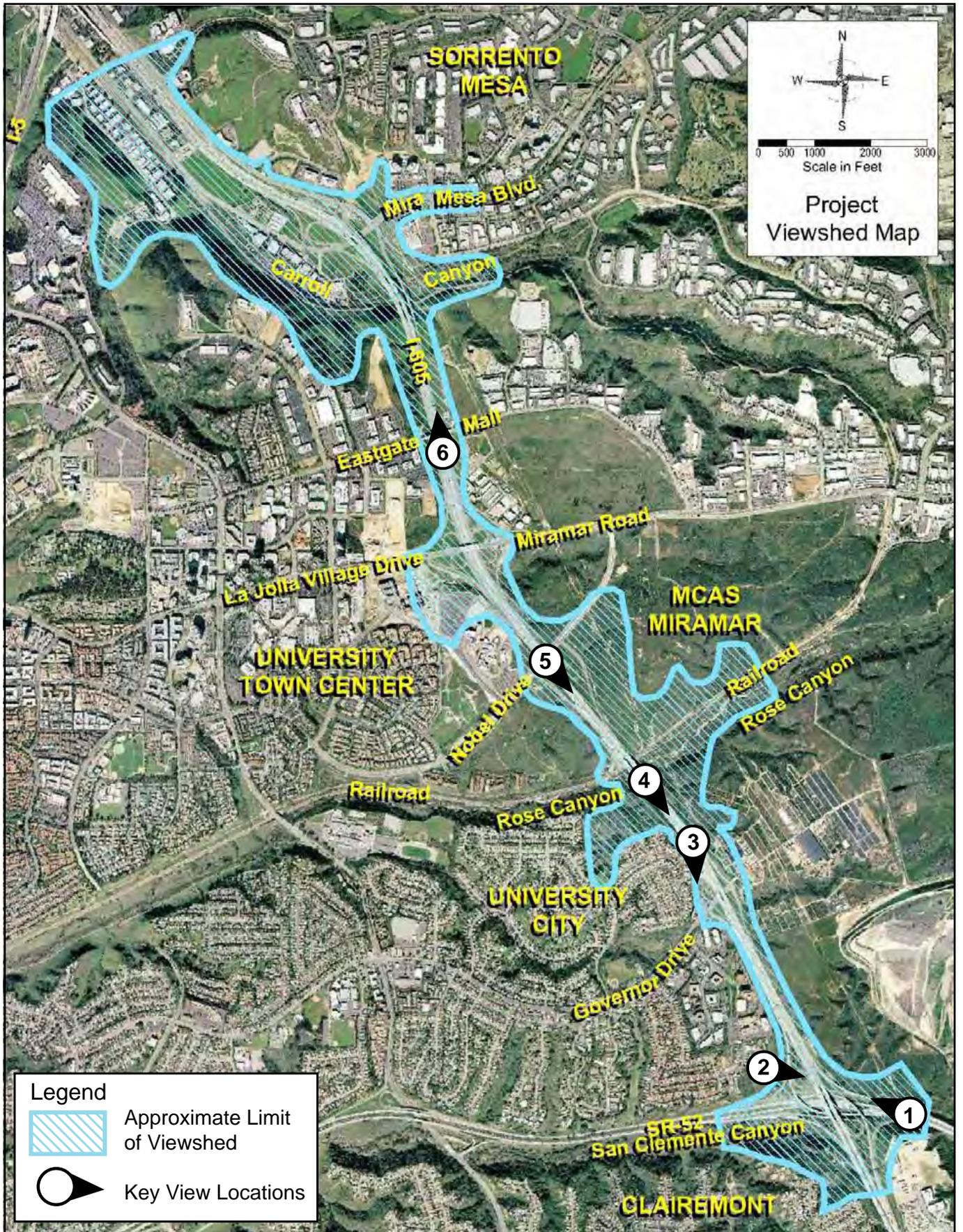


Figure 9
I-805 North Viewshed and Key View Locations



Figure 10-A : Key View 1- Existing Conditions

View from SR-52 westbound looking in a westerly direction toward the SR-52 / I-805 Interchange



Figure 10-B: Key View 1- Proposed Conditions

View from SR-52 westbound looking in a westerly direction toward the proposed connector bridge at the SR-52 / I-805 Interchange



Figure 11-A : Key View 2 - Existing Conditions

View from a private residence located in the northwest quadrant of the SR-52/I-805 interchange looking eastward.



Figure 11-B: Key View 2 - Proposed Conditions

View from a private residence located in the northwest quadrant of the SR-52/I-805 interchange looking eastward toward the new connector ramp structure and roadway widening along the I-805 corridor.



Figure 12-A: Key View 3 - Existing Conditions

View from Governor Drive southbound exit looking in a southerly direction toward the end of the off-ramp



Figure 12-B: Key View 3 - Proposed Conditions

View from the proposed realigned and widened Governor Drive southbound off-ramp with proposed concrete barrier, drought tolerant vegetation and noise wall.



Figure 13-A: Key View 4 - Existing Conditions

View from the fourth southbound lane approaching Governor Drive exit.



Figure 13-B: Key View 4 - Proposed Conditions

View of the proposed widened lanes, relocated noise berm to the west and continuous concrete barrier in the median.



Figure 14-A: Key View 5 - Existing Conditions

View from the shoulder of the southbound I-805 lanes just south of the Nobel Drive interchange.

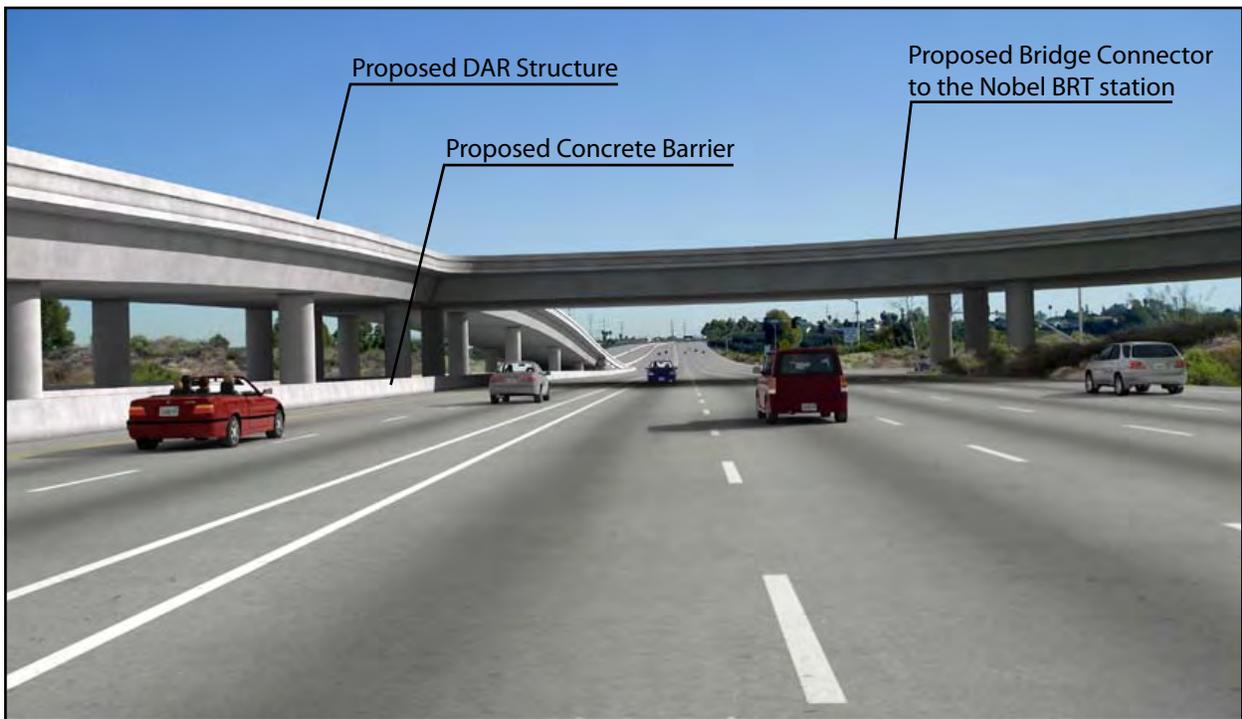


Figure 14-B: Key View 5 - Proposed Conditions

View from the widened southbound travel lanes in a southwesterly direction toward the new Direct Access Ramp for the Nobel Drive BRT station.

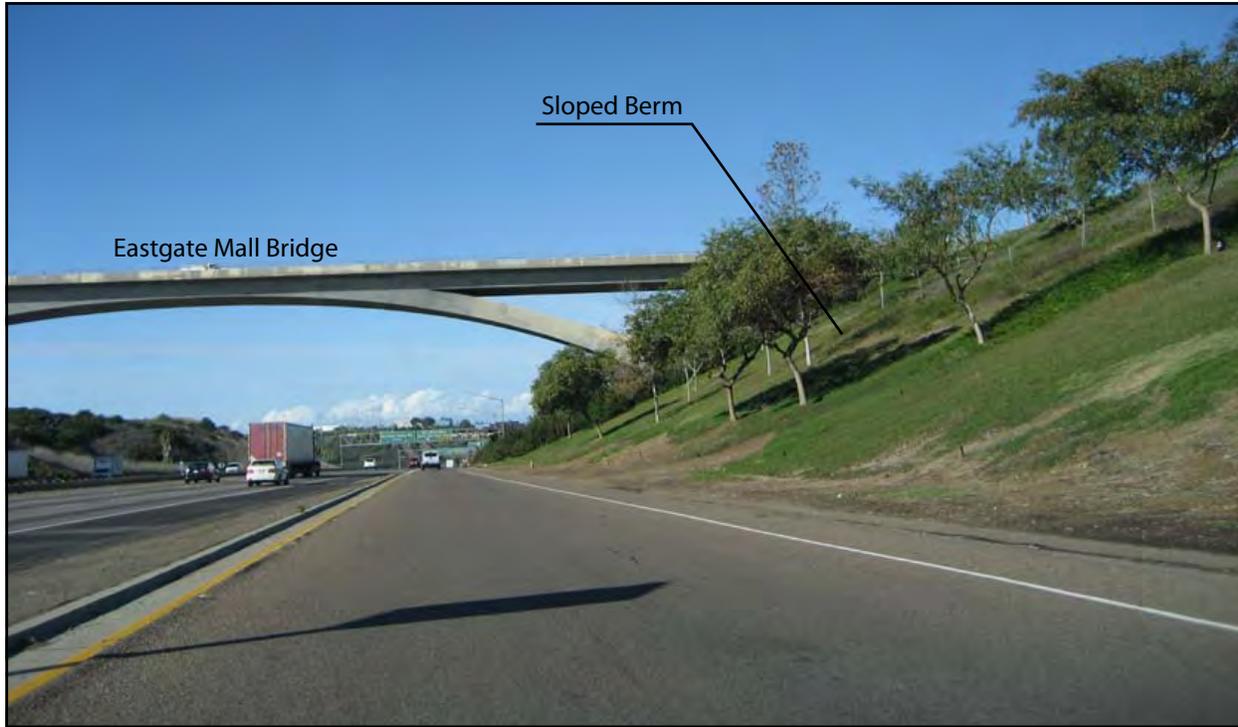


Figure 15-A: Key View 6 - Existing Conditions

View from the northbound on-ramp from the La Jolla Village Drive / Miramar Road interchange toward the Eastgate Mall Bridge.

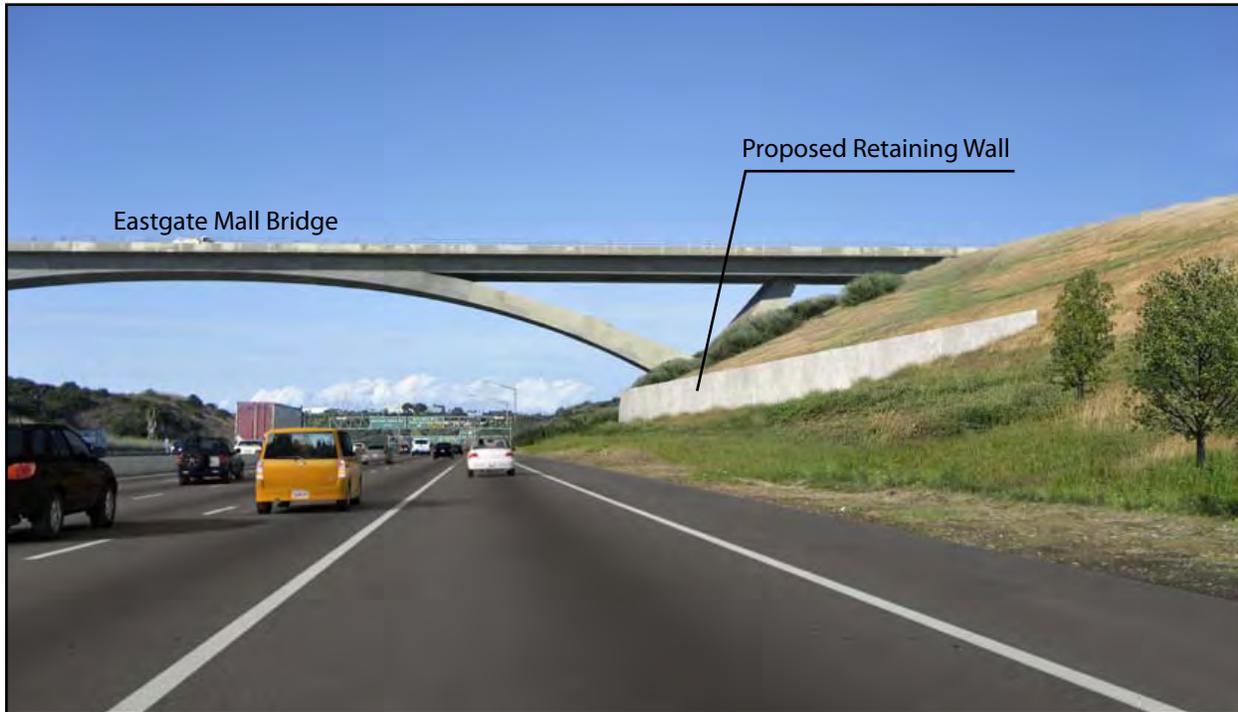


Figure 15-B: Key View 6 - Proposed Conditions

View of the proposed retaining wall at the Eastgate Mall Bridge at the edge of the widened roadway.

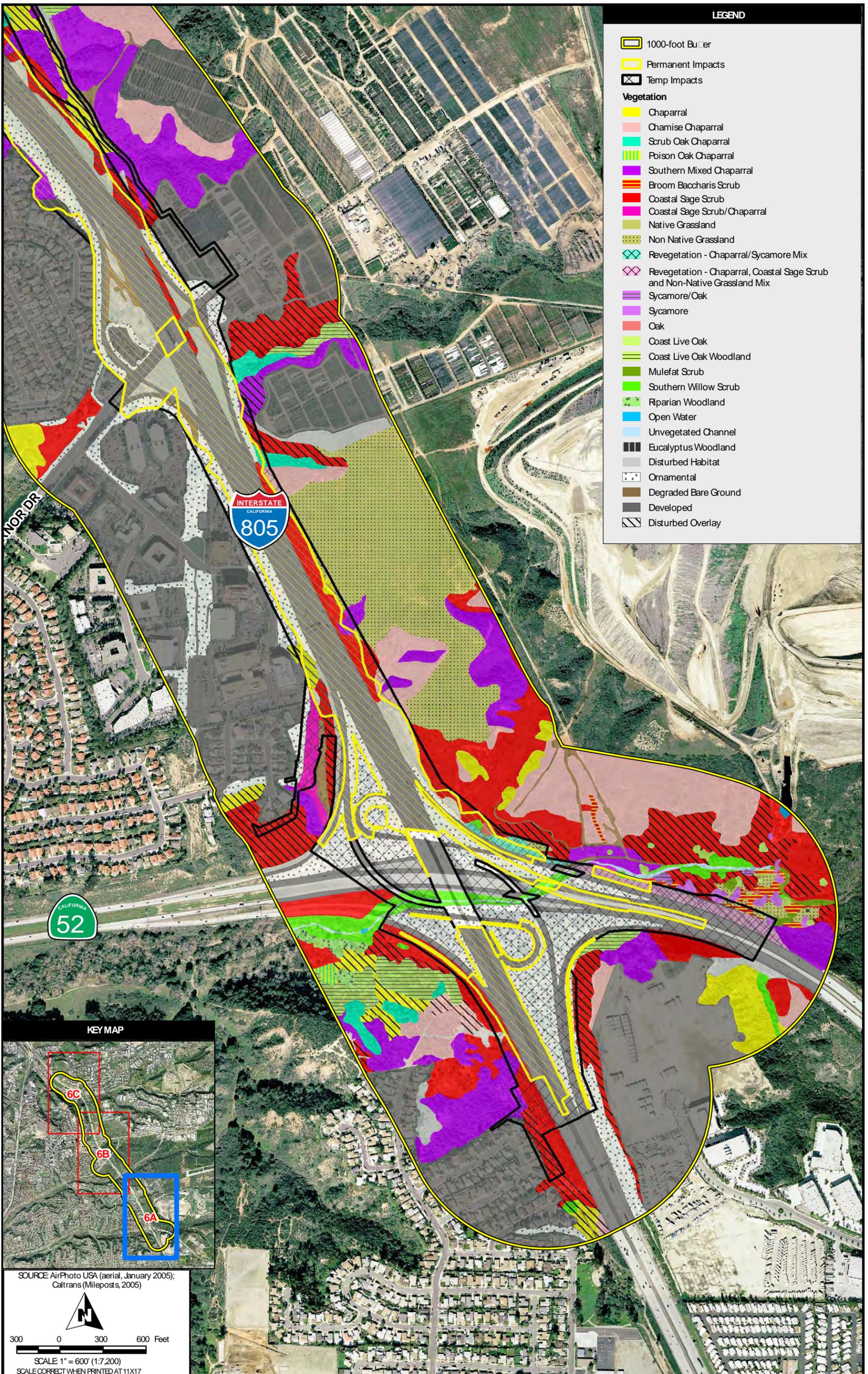


Figure 17A
Natural Communities

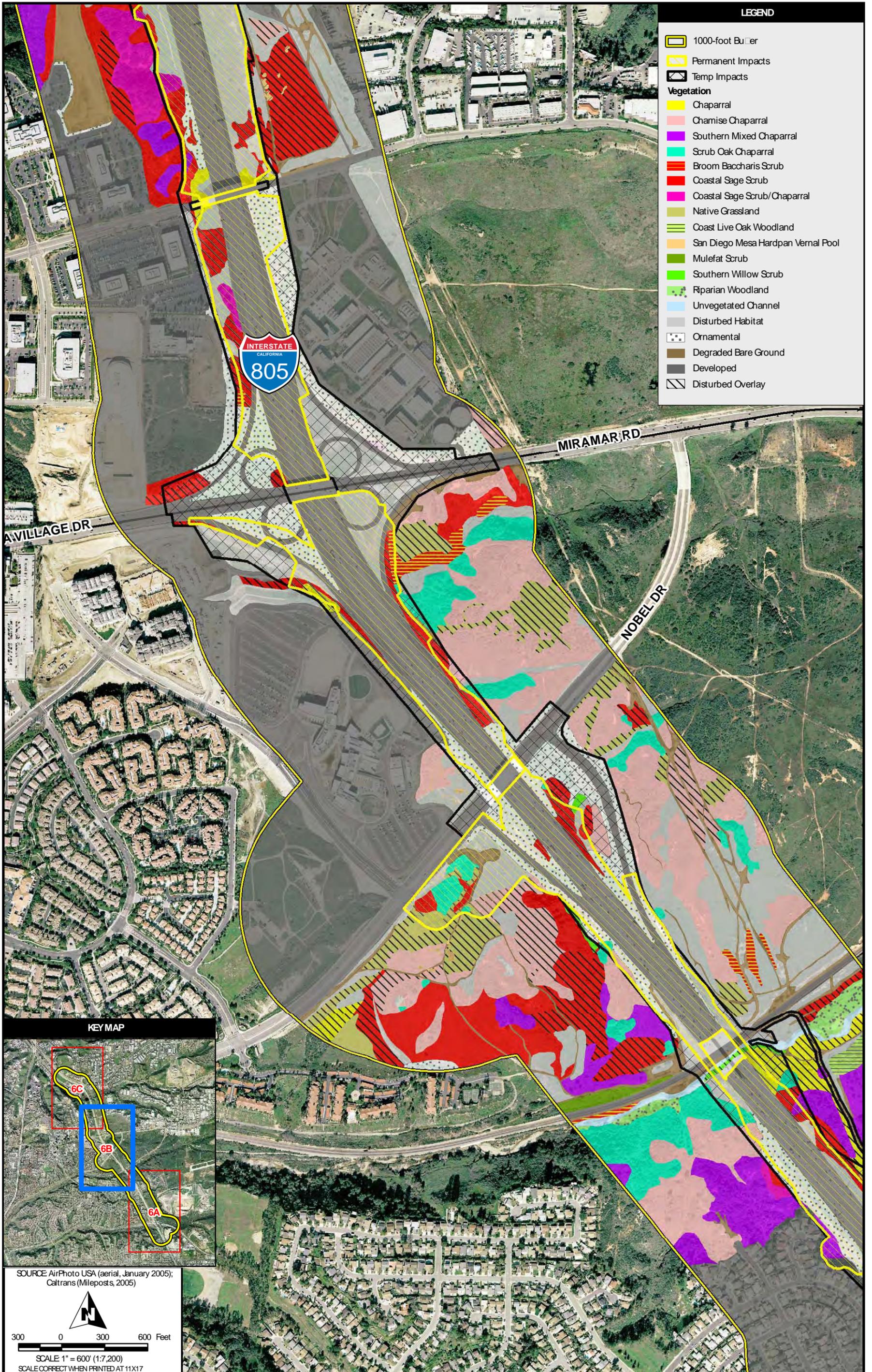


Figure 17B
Natural Communities

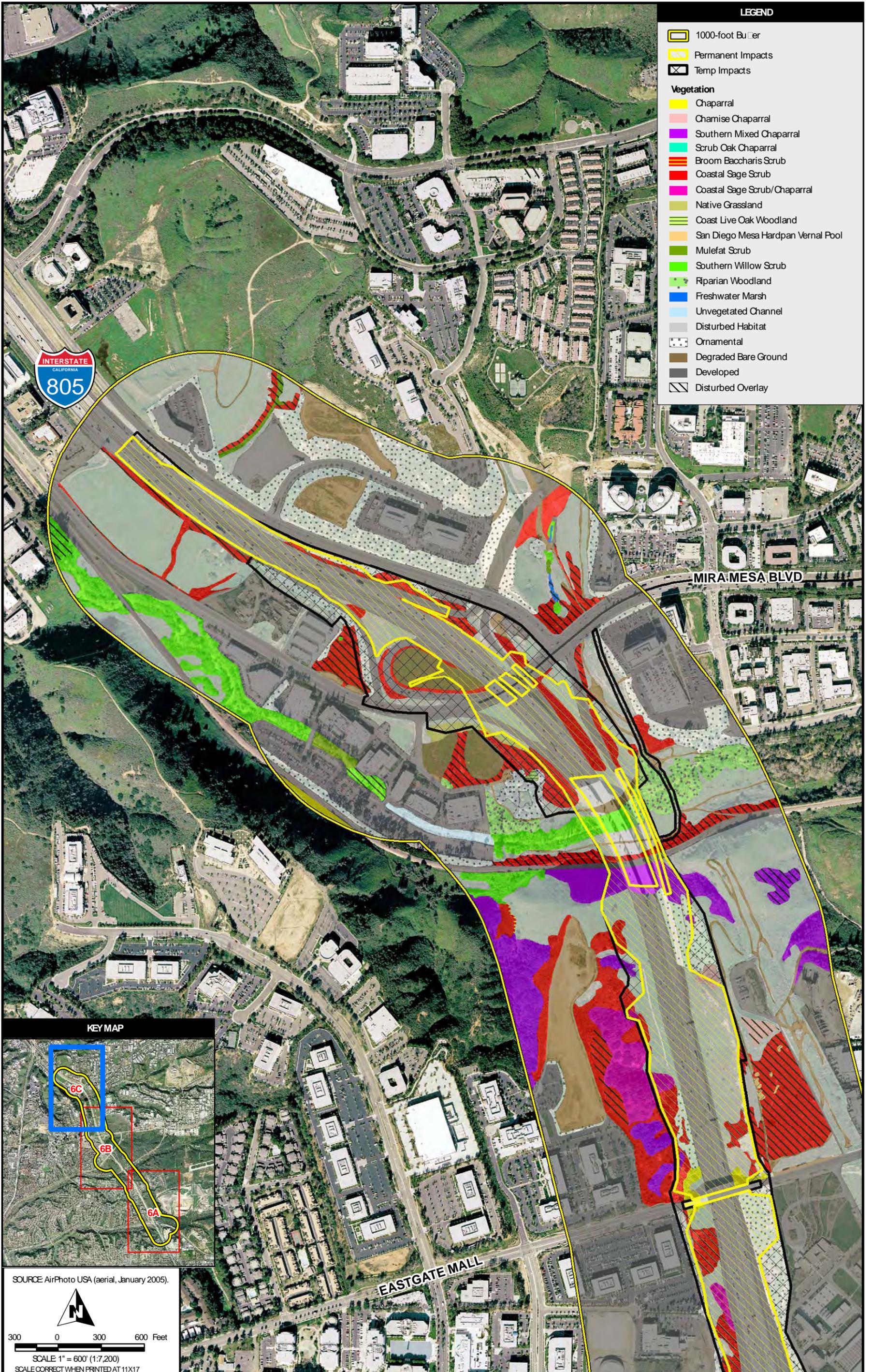


Figure 17C
Natural Communities

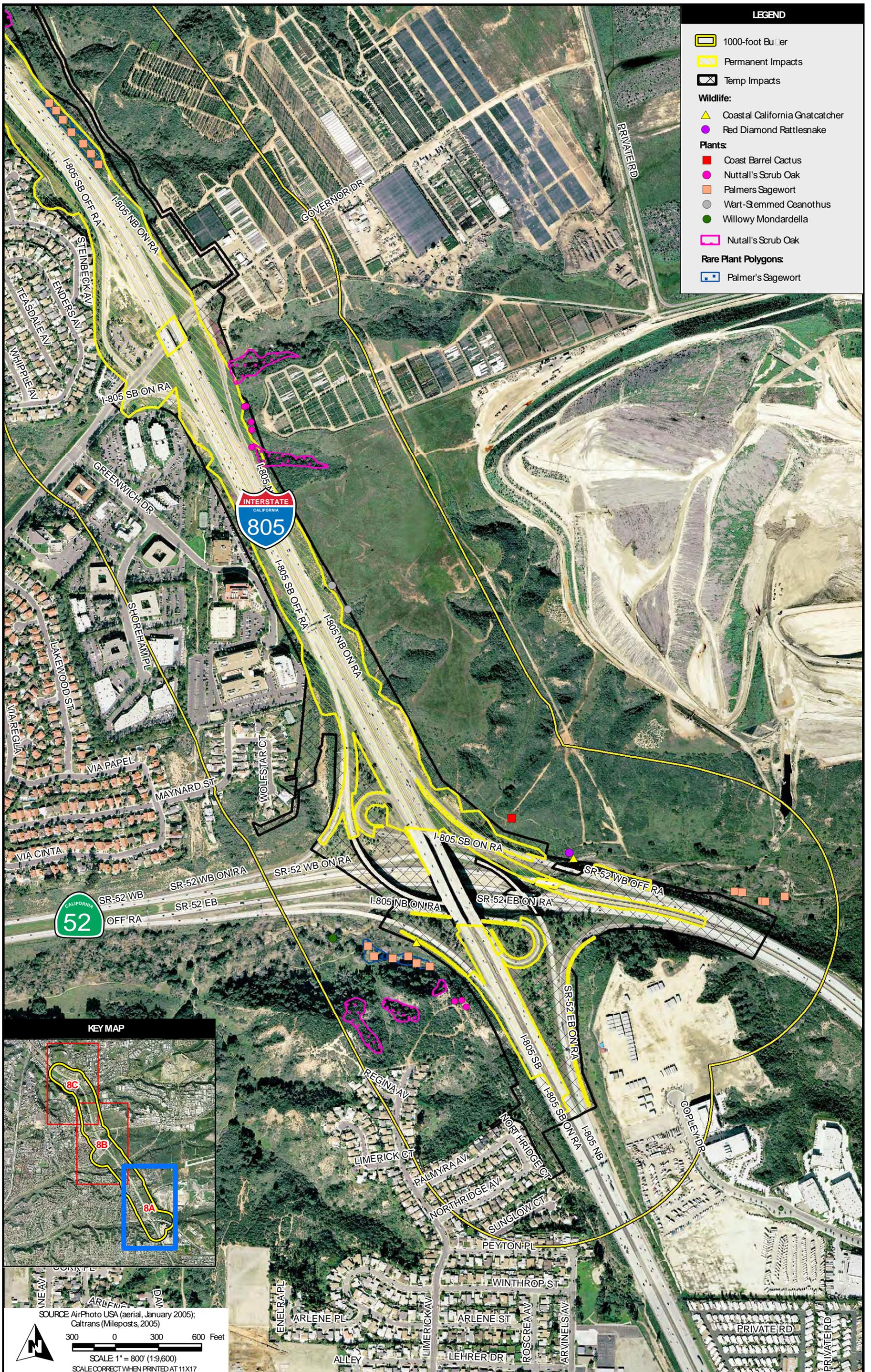


Figure 18A
Special Status Species

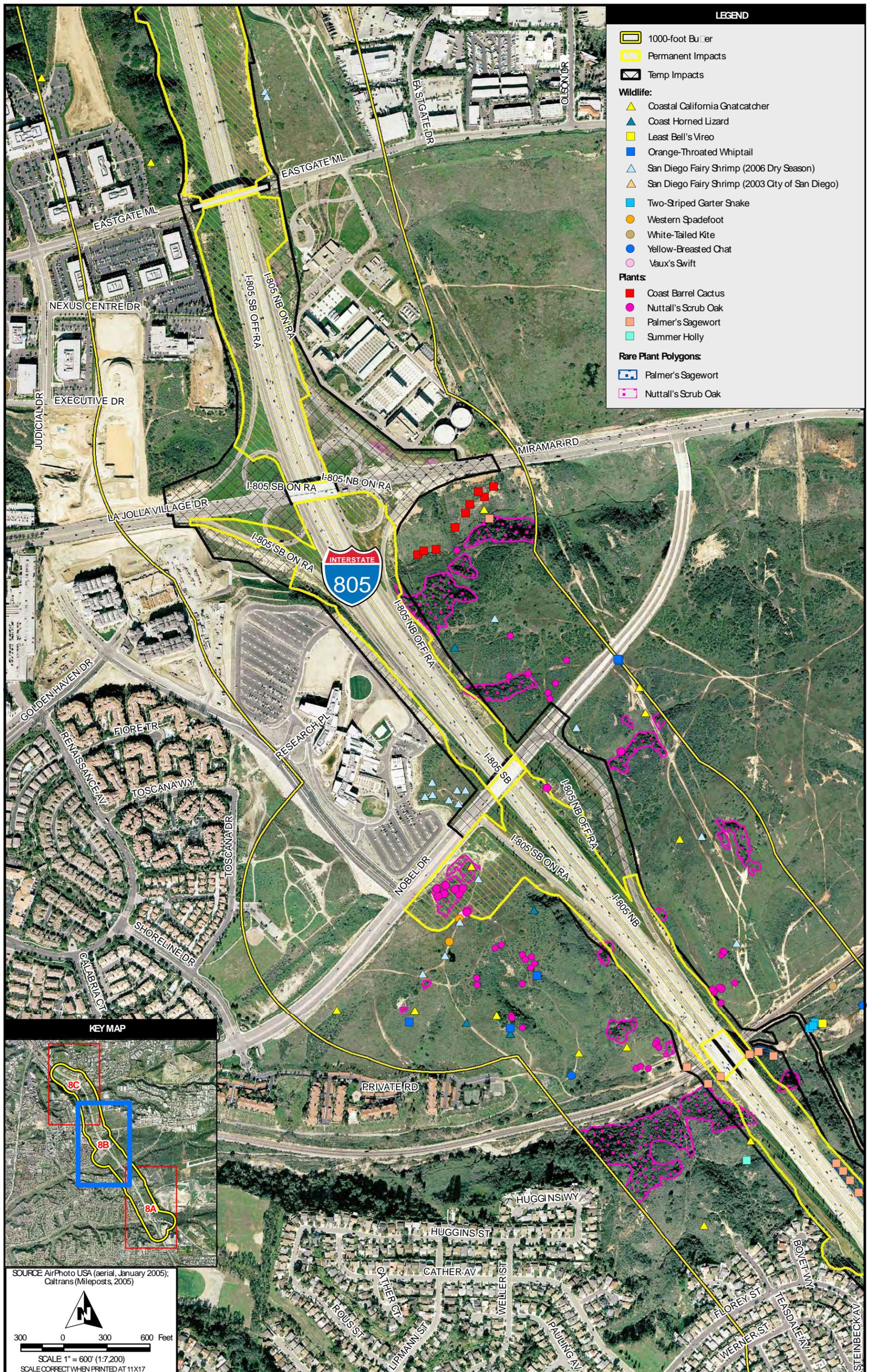
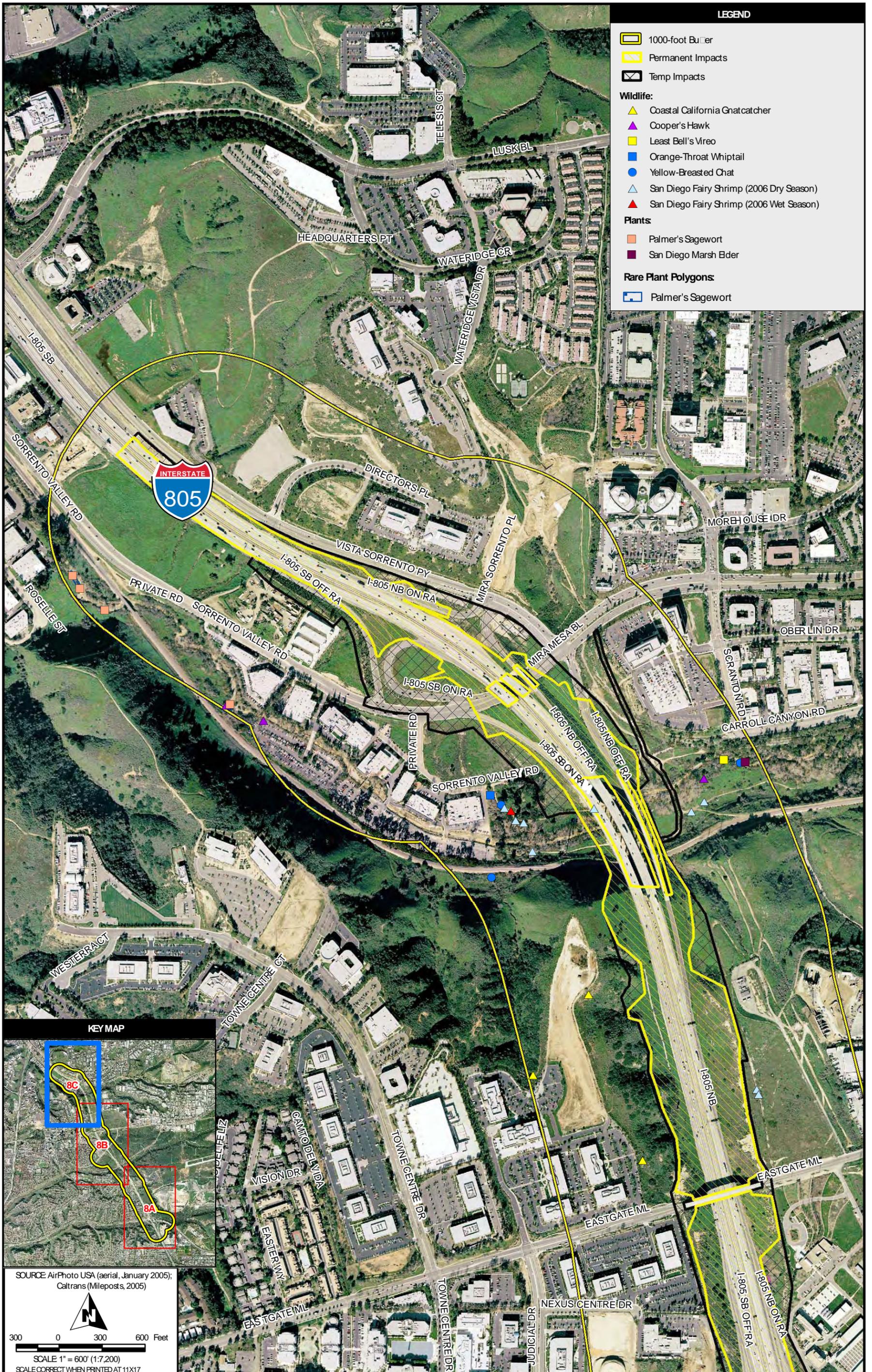


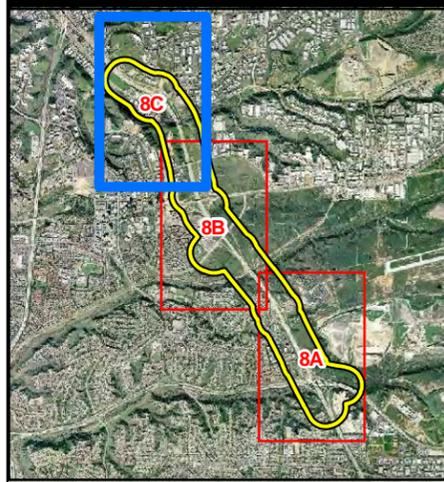
Figure 18B
Special Status Species



LEGEND

- 1000-foot Buffer
- Permanent Impacts
- Temp Impacts
- Wildlife:**
 - Coastal California Gnatcatcher
 - Cooper's Hawk
 - Least Bell's Vireo
 - Orange-Throat Whiptail
 - Yellow-Breasted Chat
 - San Diego Fairy Shrimp (2006 Dry Season)
 - San Diego Fairy Shrimp (2006 Wet Season)
- Plants:**
 - Palmer's Sagewort
 - San Diego Marsh Elder
- Rare Plant Polygons:**
 - Palmer's Sagewort

KEY MAP



SOURCE AirPhoto USA (aerial, January 2005);
Caltrans (Mileposts, 2005)

300 0 300 600 Feet

SCALE 1" = 600' (1:7,200)

SCALE CORRECT WHEN PRINTED AT 11X17

**Figure 18C
Special Status Species**



Legend

- Permanent Impacts
- Temporary Impacts
- Multiple Habitat Preserve Area

Endangered Species

- California gnatcatcher
- least Bell's vireo
- San Diego fairy shrimp
- Willow Monardella

Sensitive Species

- Coast barrel cactus
- Nuttall's scrub oak
- Palmer's sagewort
- Red diamond rattlesnake
- Wart-stem ceanothus

Rare Plant Populations

- Nuttall's Scrub Oak
- Palmer's Sagewort

Figure 19A
Special Status Species

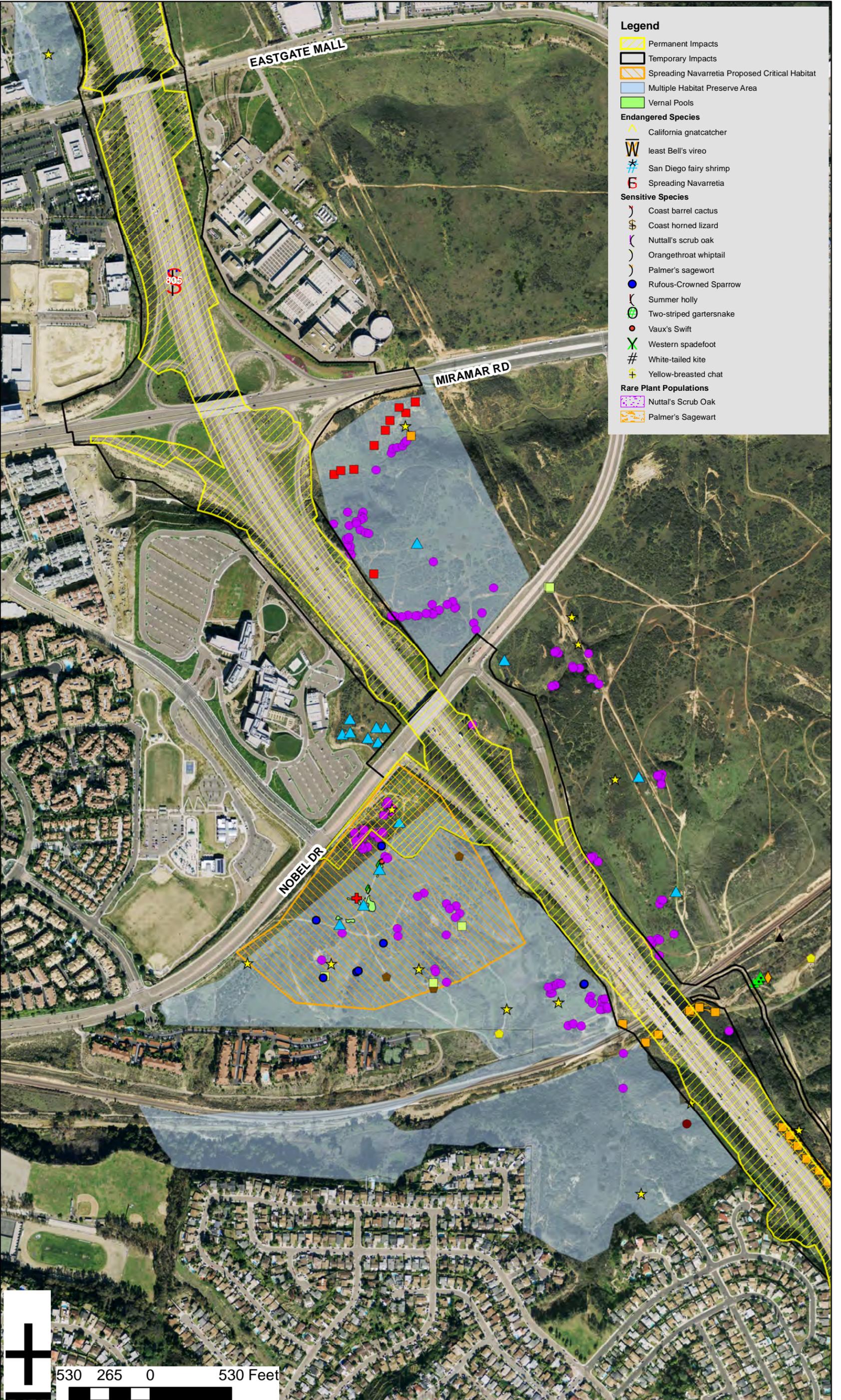


Figure 19B
Special Status Species



Legend

- Permanent Impacts
- Temporary Impacts
- Multiple Habitat Preserve Area

Endangered Species

- California gnatcatcher
- least Bell's vireo
- San Diego fairy shrimp

Sensitive Species

- Cooper's hawk
- Orangethroat whiptail
- Palmer's sagewort
- San Diego marsh elder
- Yellow-breasted chat

Figure 19C
 Special Status Species

Chapter 3 – Comments and Coordination

Early and continuing coordination with the general public and appropriate public agencies 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 project have been accomplished through a variety of formal and informal methods, including: project development team meetings, interagency coordination meetings, and public open houses. This chapter summarizes the results of Caltrans' efforts to fully identify, address and resolve project-related issues through early and continuing coordination.

Caltrans and SANDAG held three open houses in April 2004 for the I-805/I-5 Corridor Study. The purpose of the open houses was to provide information to the public on the study and obtain the public's input on the proposed transportation improvement alternatives. The open houses were held the week of April 12 on Monday, Wednesday, and Thursday in the evening (either from 5:00 to 7:00 or 6:00 to 8:00 pm). About 50 people attended the open houses in Chula Vista and the communities of City Heights and University City in the City of San Diego. Comments were received by e-mail and at the workshops from 18 people. Comments included suggestions regarding the various proposed alternatives and meeting locations and general comments about traffic, transit, and highways in the San Diego Region.

Presentations were made at meetings of Community Planning Groups of the City of San Diego and the County of San Diego. These presentations were made to various community planning organizations throughout September and October 2004.

Project Development Team (PDT) meetings were held every month from 2006 until the present to discuss issues related to the project.

Marine Corps Air Station Miramar

Initial coordination between the MCAS occurred during April and May 2009. MCAS requested project schedules, maps and additional technical information on the project to determine the level of involvement of MCAS at this stage in the project. On September 1, 2009, MCAS sent a formal response to Caltrans in electronic format with the following requirements for the project:

- Submit a FAA Determination Waiver in advance
- Provide MCAS at least two weeks, minimum, notice prior to start of work (more if possible). A contact person for this was identified.
- Requested formal Caltrans submittal to MCAS of any TCE requirements

The above requirements will be handled throughout the project Design phase/process for FAA requirements and/or Right of Way coordination. Any specific requirements for the contractor will be included in the construction contract.

Federal Aviation Administration

The project is in compliance with the Highway Design Manual (HDM) standards and the Federal Aviation Administration (FAA) regulations.

Index 207.3 (Submittal of Airway-Highway Clearance Data) of the HDM states that Notice to the FAA is required when highway construction is planned near an airport (civil or military). It further specifies that a “Notice of Proposed Construction or Alteration” should be submitted to the FAA administrator when required under criteria listed in Paragraph 77.13 of the latest Federal Aviation Regulations, Part 77.

Based on engineering measurements, the project does not meet any of the submittal criteria and therefore, does not require any notification to the FAA administrator.

The criteria above also holds true for temporary structures/equipment and an FAA Form 7460-1 will need to be submitted for the construction equipment necessary to construct the project to address the temporary impacts during construction. These notices will be submitted during the design phase just before the project is Ready-to-List (because this type of notice is only valid for 18 months). The contractor will also submit the notices, as the contractor will be more knowledgeable and responsible with the heights of the construction equipment that will be used during the project.

Coordination between Caltrans and Marine Corps Air Station Miramar (MCAS) resulted in the request for Caltrans to submit to FAA a Letter of Determination. Therefore, although not required to comply with formal policy, an FAA Form 7460-1 will be submitted during the 30% to 50% design stage to formally document that FAA coordination is not needed.

San Diego Gas & Electric

Coordination between Caltrans and San Diego Gas & Electric (SDG&E) regarding California Public Utilities Commission (CPUC) General Order 131D is required at the PA/ED phase. This coordination is also supported by an internal Caltrans memo, dated December 13, 1995, which requires coordination and environmental clearance for the relocation of electric lines exceeding 50KV.

Initial coordination regarding the relocation of two 69KV electrical lines at Rose Canyon began on September 30, 2009. A meeting was held to discuss the planned relocation of the 69 KV lines under the I-805 Overhead bridge at Rose Canyon. During October and November 2009, SDG&E and Caltrans coordinated to develop alternatives to relocate the existing two 69 KV lines under the I-805 bridge at Rose Canyon.

On December 10, 2009, a meeting between Caltrans and SDG&E reviewed the alternatives and determined that de-energizing the lines in distinct phases during bridge construction was the best solution to provide minimal grading and project related work outside of the State R/W at the lowest cost. In addition, SDG&E has a project scheduled prior to the I-805 project that will allow the necessary relocation of the existing poles.

Railroad Coordination

I-805 crosses over the railroad in two locations: Bridge no. 57-0760 at Rose Canyon and Bridge no. 57-0787 at Carroll Canyon. Due to the widening of these bridges and the additional DAR structure over Carroll Canyon, easements and construction/maintenance agreements will be coordinated with the railroad agencies/owners. The legal owner for formal coordination is the Metropolitan Transit System (MTS), but notice will be required to other users of the rail system. In addition, a long-clause permit application to the California Public Utilities Commission (CPUC) will be required.

The acquisition of this CPUC permit and coordination of easements/agreements will be addressed in the design phase of the project.

Public Hearing

Caltrans has prepared an extensive list of interested agencies and parties and distributed the draft environmental document to them for review. A list of all parties in which the document was sent to can be found in Chapter 5. The draft document went

through the public review process from February 9, 2010 to March 10, 2010. Caltrans held a public hearing for the project on February 23, 2010 at the Westfield University Towne Center. A copy of the Notice of Availability is included in this section. Ten people from the public attended the open forum style public hearing and 8 comments were received at the meeting. During the public review period 8 letters were received from individuals and agencies. The comment letters that were received are from the following agencies and individuals:

- California Department of Fish and Game
- U.S. Fish and Wildlife Service
- City of San Diego
- San Diego Gas and Electric
- Public Utilities Commission
- Department of Toxic Substances
- Richard and Deborah Shea
- Christian P. Tresize

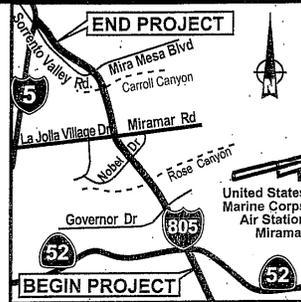
The letters and public hearing comments are included in this section along with Caltrans responses to the comments.

On September 1, 2010 Caltrans submitted to FHWA a request for the project-level conformity determination for the I-805 Managed Lanes North project pursuant to 23 USC 327 (a)(2)(B)(ii)(1). The project is in an area that is designated nonattainment for Ozone (O₃) and maintenance for Carbon Monoxide (CO). The project level conformity analysis submitted by Caltrans indicated that the transportation conformity requirements of 40 C.F.R. Part 93 have been met. The project is included in the San Diego Association of Governments (SANDAG) 2030 Regional Transportation Plan (RTP) and the 2008 Regional Transportation Improvement Program (RTIP). The latest conformity determinations for the RTP and the RTIP Amendment No. 25 were approved by FHWA and the Federal Transit Administration on November 17, 2008 and August 24, 2010, respectively. FHWA found that the Conformity Determination for the project conforms to the State Implementation Plan (SIP) in accordance with 40 C.F.R. Part 93.



Notice of Availability

of Initial Study/Environmental Assessment and Notice of Intent to Adopt a Mitigated Negative Declaration (MND), and Public Hearing for the Proposed Interstate-805 Managed Lanes North Project



WHAT'S BEING PLANNED? The California Department of Transportation (Caltrans) has prepared this Initial Study/Environmental Assessment (IS/EA) with proposed Mitigated Negative Declaration (MND), which examines the potential environmental impacts of the proposed Interstate I-805 Managed Lanes North Project located from SR-52 to just north of Mira Mesa Blvd. in San Diego, California. Effective July 1, 2007, Caltrans assumed all the United States Department of Transportation Secretary's responsibilities under NEPA pursuant to Section 6005 of SAFETEA-LU codified at 23 U.S.C. 327(a)(2)(A). Caltrans is now the lead federal agency for this undertaking.

WHY THIS NOTICE? Caltrans has studied the effects the project may have on the environment. Our studies show that the project will not have a significant effect on the environment with the included mitigation measures. An IS/EA, which discusses potential project impacts, has been prepared. This notice is to inform you of the proposed MND and its availability for review. Caltrans intends to adopt the MND for this project pending completion of the 30-day public review period that starts February 9th and ends March 10, 2010. This does not mean that Caltrans' decision regarding the project is final. This MND is subject to modification based on comments received by interested agencies and the public.

ABOUT THE PUBLIC HEARING: There will be no formal presentation. This will be an "Open House" format where you will have the opportunity to speak directly with Caltrans representatives about the project and its environmental impacts. A certified court reporter will be available to take public comments for the record, or comments may be submitted in writing. The public is invited to make formal comments on the project. Caltrans will address all substantive comments in the Final IS/EA.

WHAT'S AVAILABLE? The Draft IS/EA which describes the project is now available to the public for review at the following locations: Caltrans District 11, 4050 Taylor Street, San Diego, CA 92110; the University Community Branch Library, 4155 Governor Drive, San Diego, CA 92122-2501; and North University Community Branch Library, 8820 Judicial Drive, San Diego, CA 92122-4684. In addition, the environmental document will also be available on-line at the following web address: www.dot.ca.gov/dist11. Comments on this environmental document will be accepted until the end of the public circulation period on March 10, 2010.

WHERE YOU COME IN: Your comments will become part of the public record. You may submit comments at the meeting via the comment sheets provided, verbally to the stenographer, or mail your written comments to: David Nagy, Caltrans - District 11, 4050 Taylor St., MS 242, San Diego, CA, 92110.

PUBLIC HEARING: DATE: February 23, 2010 **TIME:** 5:00 p.m. to 8:00 p.m.
PLACE: Westfield UTC Forum Hall
4545 La Jolla Village Dr., Suite E25, San Diego, CA 92122.

Individuals who require special accommodation (American Sign or Foreign Language interpreter, accessible seating, documentation in alternate formats, etc.) are requested to contact the District 11 Public Information Office at (619) 688-6670 at least 10 days prior to the scheduled meeting date. TTY users may contact the California Relay Service TTY line at 711.

CONTACT: For more information about this project, please contact Ron Carat, Project Manager, at (619) 220-5391, or David Nagy, Senior Environmental Planner, at (619) 688-0224. For general information about transportation issues, please call the Caltrans Public Information Office at (619) 688-6670.



U.S. Department
of Transportation
**Federal Highway
Administration**

**Federal Highway Administration
California Division**

September 29, 2010

650 Capitol Mall, Suite 4-100
Sacramento CA 95814
(916) 498-5001
(916) 498-5008 fax

In Reply Refer To:
HDA-CA
File # EA: 081630

Pedro Orso-Delgado, District Director
California Department of Transportation
District 11
4050 Taylor Street, M.S. 242
San Diego, CA 92110

Attention: Mr. David Nagy
Environmental Analysis Branch Chief

Dear Mr. Nagy:

SUBJECT: FHWA Project Level Conformity Determination for the I-805 Managed Lanes
North Project

On September 1, 2010, the California Department of Transportation (Caltrans) submitted to the Federal Highway Administration (FHWA) a request for a project level conformity determination for the I-805 Managed Lanes North Project, PM 23.3 to 27.7 in San Diego County. The project is in an area that is designated Nonattainment for Ozone and Maintenance for Carbon Monoxide (CO).

The project level conformity analysis submitted by Caltrans indicates that the transportation conformity requirements of 40 C.F.R. Part 93 have been met. The project is included in the San Diego Association of Governments (SANDAG) *2030 Regional Transportation Plan (RTP)* and the *2008 Regional Transportation Improvement Program (RTIP)*. The latest conformity determinations for the RTP and RTIP Amendment No. 23 were approved by FHWA and the Federal Transit Administration (FTA) on November 17, 2008 and July 29, 2010, respectively. The design concept and scope of the preferred alternative has not changed significantly from those assumed in the regional emissions analysis

Based on the information provided, FHWA finds that the Conformity Determination for the I-805 Managed Lanes North Project conforms to the State Implementation Plan (SIP) in accordance with 40 C.F.R. Part 93.



Pedro Orso-Delgado, District Director
September 29, 2010
Page 2

If you have any questions pertaining to this conformity finding, please contact Stew Sonnenberg,
FHWA Air Quality Specialist, at (916) 498-5889.

Sincerely,



For
Walter C. Waidelich, Jr.
Division Administrator

Enclosure



U.S. Department
of Transportation
**Federal Highway
Administration**

Federal Highway Administration
California Division

August 24, 2010

650 Capitol Mall, Suite 4-100
Sacramento CA 95814
(916) 498-5001
(916) 498-5008 fax

In Reply Refer To:
HDA-CA

Ms. Cindy McKim, Director
California Department of Transportation
1120 N Street
Sacramento, CA 95814

Attention: Federal Resources Office, M.S. 82
For Rachel Falsetti, Division of Transportation Programming

Dear Ms. McKim:

SUBJECT: SANDAG 2008/09 – 2011/12 RTIP/FSTIP AMENDMENT NO. 25

We have completed our review of Amendment No. 25 to the San Diego Association of Governments (SANDAG) 2008 Regional Transportation Improvement Program (RTIP) that was submitted by your letter dated July 23, 2010. The SANDAG Board of Directors adopted Resolution No. 2011-03 on July 16, 2010, approving this RTIP modification and reaffirming the conformity of the transportation improvement program with the State Implementation Plan (SIP) for air quality. As detailed in the enclosure to your letter, this SANDAG RTIP amendment adds three new project listings and modifies twenty-one project listings that were previously approved for inclusion in the Federal Statewide Transportation Improvement Program (FSTIP).

We find that the SANDAG 2008 RTIP, including Amendment No. 25, was developed through a continuing, cooperative and comprehensive transportation planning process in accord with the metropolitan transportation planning provisions of 23 U.S.C. §134 and 49 U.S.C. Chapter 53. We have determined that the adopted modifications to the SANDAG RTIP comply with the conformity provisions of the Transportation Conformity Rule (40 CFR §93.122(g)). All non-exempt projects in Amendment No. 25 are included in the quantitative emissions analysis conducted for the 2030 RTP and 2008 RTIP. The metropolitan transportation planning and regional air quality conformity findings have been coordinated with the regional offices of the U.S. EPA and Federal Transit Administration (FTA).

This letter constitutes approval to incorporate SANDAG RTIP amendment number 25 into the 2008/09 FSTIP with the understanding that the eligibility of individual projects for funding is subject to the applicant's satisfaction of all administrative requirements. Based on our review of



the RTIP financial constraint documentation submitted with the subject amendment, we have determined that the amended RTIP is financially constrained as required by the Federal surface transportation programs authorizing legislation and statewide and metropolitan planning and programming regulations.

If you have questions or need additional information concerning our FSTIP approval for this SANDAG RTIP amendment, please contact Wade Hobbs of the FHWA California Division office at (916) 498-5027, or by email at wade.hobbs@fhwa.dot.gov, or Hymie Luden of the FTA Region IX office at (415) 744-2732, or by email at hymie.luden@fta.dot.gov.

Sincerely,

/s/ Leslie T. Rogers

Leslie T. Rogers
Regional Administrator
Federal Transit Administration



For
Walter C. Waideich, Jr.
Division Administrator
Federal Highway Administration

Department of Fish and Game

Response to Comments



California Natural Resources Agency
DEPARTMENT OF FISH AND GAME
South Coast Region
4949 Viewridge Avenue
San Diego, CA 92123
(858) 467-4201
<http://www.dfg.ca.gov>

ARNOLD SCHWARZENEGGER, Governor
JOHN MCCAMMAN, Director



March 10, 2010

Mr. David Nagy, Environmental Branch Chief
California Department of Transportation – District 11
Environmental Planning
4050 Taylor Street, MS 242
San Diego, CA 92110

Subject: Comments on the Draft Initial Study/Environmental Assessment and Proposed Mitigated Negative Declaration for the Interstate 805 Managed Lanes North Project, San Diego, California (SCH No. 2010021032).

Dear Mr. Nagy:

The California Department of Fish and Game (Department) has reviewed the above-referenced Initial Study/Environmental Assessment (IS/EA), dated February 2010. The following statements and comments have been prepared pursuant to the Department's authority as Trustee Agency with jurisdiction over natural resources affected by the project (California Environmental Quality Act [CEQA] Guidelines Section 15388) and pursuant to our authority as a Responsible Agency under CEQA Guidelines Section 15381 over those aspects of the proposed project that come under the purview of the California Endangered Species Act (Fish and Game Code Section 2050 et seq.) and Fish and Game Code Section 1600 et seq. The Department also administers the Natural Community Conservation Planning Program (NCCP).

The proposed California Department of Transportation (Caltrans) project is located on Interstate 805 (I-805) and consists of the construction of four "managed lanes" to a 4.4 mile section of I-805. The affected portion of I-805 lies within the central portion of the City of San Diego's (City) urbanized area. The managed lanes would extend from State Route 52 to La Village Drive. Eight general purpose lanes currently exist for this portion of I-805. The addition of managed lanes would permit transit vehicles, high occupancy vehicles lanes, and tolled single occupancy vehicles. Additionally, the project includes the construction of a 6.3 acre Park-n-Ride lot (300 spaces) with a Bus Rapid Transit Station, located at the southwest quadrant of Nobel Drive and I-805 and a 1.3 acre Park-n-Ride lot (110 spaces) at the southwest quadrant of Governor Drive and I-805. New direct access ramps (DAR) ramps would be added to serve the Nobel Drive transit station and Carroll Canyon Road lanes. The existing Rose Canyon Bridge would be widened 54 feet of either side of the freeway (requiring six additional columns) whereas the Carroll Canyon Bridge would be widened up to 53 feet on the southbound side and 44 feet on the northbound side (requiring construction of 22 additional support columns). The draft IS/EA identified three project alternatives: (1) Managed Lanes Alternative (Build Alternative); (2) No Build; (3) Transportation System Management Alternative.

The project corridor lies within the City's Subarea of the Multiple Species Conservation Program (MSCP), with a portion of the project footprint partially extending into the Multi-Habitat Planning Area (MHPA). The MHPA represents those lands that are targeted for conservation with the objective of creating a connected system of biologically viable habitat lands in a manner that maximizes the protection of sensitive species. The vegetation communities and land cover types (based on Natural Environmental Study, March 2009) that would be permanently or

Conserving California's Wildlife Since 1870

Mr. David Nagy, Environmental Branch Chief
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temporarily impacted by the project include native grassland, non-native grassland, chaparral, chamise chaparral, southern mixed chaparral, scrub oak chaparral, coastal sage scrub, coastal sage scrub chaparral, coast live oak woodland, broom baccharis scrub, individual sycamore and oak trees outside of a defined vegetation community, disturbed habitat, ornamental vegetation, graded/bare ground, and urban developed land. The wetland resources and jurisdictional waters (associated with San Clemente Creek, Rose Creek, and Soledad Creek) consist of open water, mulefat scrub, southern willow scrub, riparian woodland, freshwater marsh. Also San Diego mesa hardpan vernal pool areas were documented within the project study area, along with road rut pools/man-made depressions.

Nineteen territories for the federally-listed coastal California gnatcatcher (*Polioptila californica*; gnatcatcher) were identified within the project study area. Two territories for the federally and State listed least Bell's vireo (*Vireo bellii pusillus*; vireo) were identified within Rose Canyon and Soledad Canyon. Surveys conducted for quino checkerspot butterfly (*Euphydryas editha quino*) were negative. An assessment for those portions of the project footprint that are near areas that support vernal pools resulted in detecting the federally-listed endangered San Diego fairy shrimp (*Branchinecta sandiegoensis*) within two "rut" pools (dry season sampling conducted in 2008). Spreading navaretia (*Navarretia fossalis*; federally threatened) was present within a City-owned vernal pool complex southwest of the Nobel Drive DAR; approximately 7.3 acres of proposed critical habitat for this species would be permanently impacted by construction of the DAR and interchange.

The special status plant species that would be impacted by the project include Palmer's sagewort (*Artemisia palmeri*), wart-stemmed ceanothus (*Ceanothus verrococus*), and Nuttall's scrub (*Quercus dumosa*). The sensitive wildlife species documented within the project area included: western spadefoot toad (*Spea hammondi*; State Species of Special Concern (SSC)), coast horned lizard (*Phrynosoma coronatum*; SSC), orange-throated whiptail (*Aspidoscelis hyperythra beldingi*; SSC), red diamond rattlesnake (*Crotalus ruber*), two-striped garter snake (*Thamnophis hammondi*; SSC), Vaux's swift (*Chaetura vauxi*; SSC), Cooper's hawk (*Accipiter cooperii*), white-tailed kite (*Elanus leucurus*; state fully protected), yellow warbler (*Dendroica petechia*; SSC), and yellow-breasted chat (*Icteria virens*; SSC).

The permanent impacts to sensitive upland vegetation would be offset by preservation at Sage Hill Mitigation site. Those portions of the project crossing San Clemente Canyon, Soledad Canyon and Rose Canyon would result in permanent and temporary impacts to wetland resources and waters of the U.S. A notification for a Streambed Alteration Agreement, pursuant to Section 1600 *et seq.* of the Fish and Game Code will be necessary for project construction. Permanent impacts to waters of the State are proposed to be mitigated at a 3:1 ratio offsite by wetland creation at the Deer Canyon Mitigation site in McGonigle Canyon, whereas temporary impacts to areas would be offset at a proposed 2:1 ratio (1:1 onsite and 1:1 offsite).

The Department offers the following comments and recommendations to assist Caltrans in avoiding, minimizing, and adequately mitigating project-related impacts to biological resources.

1. The intent of Section 2.1.2 (IS/EA) is to determine consistency of the proposed project with State, Regional, and local Plans and Programs. However in reviewing the implications of the project's consistency to the City's MSCP, the analysis is limited to acknowledging that the Nobel Transit Station/DAR location is partially within the City's MHPA. Additionally, the initial study checklist identified no impact to this issue in either the Biological Resources or Land Use category. Accordingly, we do not agree with the aforementioned conclusion. Based on the limited documentation provided in the IS/EA the project would result in the

1: Due to discrepancies in the mapping of MHPA areas, it is difficult to accurately calculate impacts. Impacts have been calculated based on MHPA areas outside of the Caltrans right-of-way and updated in the document, section 2.1.2 to. Impacts to the habitats are described within the document and mitigation is proposed. The DAR at Nobel Drive has been redesigned to avoid conserved areas and to decrease the amount of MHPA affected. Mitigation ratios that are used in the document are at a higher ratio than the MSCP ratios and have been determined in consultation with USFWS.

Department of Fish and Game

Response to Comments

Mr. David Nagy, Environmental Branch Chief
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removal of environmentally sensitive lands under the City's MSCP Subarea plan. Although Caltrans is not a signatory to the City's MSCP, the implications on the overall effects of this action to the subarea plan should be disclosed in the IS/EA. Additional discussion/ analysis should be provided in the IS/EA that identifies the potential conflicts of this project and the effects of the project's encroachment into the MHPA. If there is an associated discretionary review associated with this process and/or amendments that would be required between the City and Caltrans to the MSCP Subarea Plan then they should be detailed within the Land Use discussion of the IS/EA.

Furthermore, it is the Department's policy to promote the development of regional conservation planning at the ecosystem level through active participation in the local development of regional NCCP and other forward-looking multiple habitat conservation planning efforts. We strongly recommend that the proposed project be consistent with the goals, objectives, and conditions set forth by the MSCP and corresponding Subarea Plan, so as to ensure the conservation of the biological resources, sensitive habitats, and high biological diversity of the San Diego region. We recommend the any resultant impact(s) to habitat be mitigated at the corresponding tier ratio identified within the City's Subarea Plan (see comment below) and that Caltrans coordinate project design with the City's MSCP Program Manager.

2. The IS/EA should included a figure(s) highlighting the boundaries of the City's MHPA, in relation to the entire project area. A corresponding discussion should also be included that identifies the total acreage encroachment into MHPA and each habitat type that would be permanently or temporarily impacted. This information is necessary so the City's MSCP staff can document the removal of preserved areas and include this information within their annual monitoring reports to the Department and U.S. Fish and Wildlife Service.
3. The mitigation measures for addressing permanent impacts to upland vegetation are limited to acknowledging an offset by preservation at Sage Hill Mitigation Site. The analysis in the IS/EA and corresponding mitigation language should be revised to identify the specific commensurate mitigation ratios that would be applied to each vegetation type that is impacted (32.5 acres of native upland habitat loss). Furthermore, the location of this conservation bank, service area, types of credits available, and responsible party for managing this area in perpetuity should be disclosed in the IS/EA. Lacking the availability of in-kind mitigation for each habitat type (e.g., native grassland) within the aforementioned mitigation site, commensurate mitigation for the balance will need to be identified prior to the initiating brush/clearing or grading activities.
4. The IS/EA states that "Localized wildlife movement in the project study area may be facilitated by the smaller culverts and drainages that connect one area of open space to another, such as those near MHPA conservation area at Nobel Drive." However, the IS/EA is lacking sufficient analysis as to project effects in this subject area. The issue is further compounded by the lack supporting documentation such as the Natural Environmental Study or figures depicting the location of these facilities. Further discussion should be provided in the IS/EA on the direct/indirect effects from construction activities (or placement of structures) within these areas.
5. Impacts to Palmer's sagewort, wart-stemmed ceanothus, and Nuttall's scrub oak are mentioned and a commitment is made to avoid and minimize these impacts. Additionally, transplantation and/or off-site mitigation would be provided as determined in coordination with the appropriate resources agencies. The extent of the impact and salvaging/

2: MHPA boundaries have been added to Figures 19A-19C.

3: Mitigation ratios that are used in the document are at a higher ratio then the MSCP ratios and have been determined in consultation with USFWS.

4: The following has been added to Section 2.14 under Environmental Consequences. The three main east/west wildlife corridors in the project area are under the San Clemente Canyon bridge, Rose Canyon bridge and Soledad/Carroll Canyon bridge. All three of these bridges are tall with no obstruction to deer, small mammals, or large predators such as bobcat, coyote, and mountain lion. Widening of these bridges would not impact the wildlife corridors in the long term. False work would be around the column locations and high near the existing bridge deck, so construction impacts to the corridors are expected to be minimal. Night work under the bridges is anticipated to be minimal. Small culverts that may be used by raccoon and other small mammals would be lengthened as part of the project; however, other than during construction, the wildlife passage through these structures should be minimal.

5: Salvage and transplantation would be dependent on conditions where the plants are. Palmer's sagewort is commonly available in nurseries and may be added to the seed mix or by containers to the revegetated slopes in the temporary impact areas. Section 2.16 has been updated to contain language concerning salvage options.

Department of Fish and Game

Response to Comments

Mr. David Nagy, Environmental Branch Chief
March 10, 2010
Page 4 of 5

translocation options should be included in the mitigation measure language (i.e., incorporating into the environmental commitments record) to support the proposed significance determination.

- 6. The Build Alternative environmental consequences states that "Edge effects and affects to movement corridors are anticipated to be minimal." However, the IS/EA is lacking specific discussion of the species type and utilization (e.g., small or large mammal movement) of these affected areas. Since the Natural Environmental Study was not included in the appendices of the IS/EA for the Department to review, it is unclear for the foundational support for this environmental determination. The analysis is currently limited to acknowledging that bridge height after construction would be high enough above habitat to have little effect after construction is completed. Additional discussion should be provided concerning species-specific use and movement patterns through these areas.

6A

Furthermore, specific details are required on the duration of bridge column construction activities, placement of construction lighting and potential effects to designated wildlife corridors associated with those portions of work activities that would affect San Clemente Canyon, Soledad Canyon and Rose Canyon.

- 7. It is unclear from the discussion provided in the IS/EA whether options existed for siting the Bus Rapid Transit Station/Park-n-Ride in an alternate location (i.e., outside environmentally sensitive lands). Considering that an alternative analysis was provided it would be beneficial to have included a discussion on alternative locations that were considered that would result in additional avoidance and/or minimization of impacts to sensitive biological resources.
- 8. As supplemental regulatory guidance for complying with section 3503 and 3503.5 of the Fish and Game Code, the mitigation commitment for restrictions placed on brushing/clearing activities should be revised to include the following:

To avoid any direct and indirect impacts to raptors and/or any migratory birds, grubbing and clearing of vegetation that may support active nests and construction activities adjacent to nesting habitat, should occur outside of the breeding season (February 15 to September 15; and as early as January 15 for raptors). If removal of habitat and/or construction activities is necessary adjacent to nesting habitat during the breeding season, Caltrans shall retain a Department-approved biologist to conduct a pre-construction survey to determine the presence or absence of non-listed nesting migratory birds on or within 100 feet of the construction area, determine the presence or absence of Federal- or State-listed birds (e.g., coastal California gnatcatcher, least Bell's vireo) on or within 300 feet of the construction area, and determine the presence or absence of nesting raptors within 500 feet of the construction area. The pre-construction survey will be conducted within 10 calendar days prior to the start of construction, the results of which must be submitted to the Department for review and approval prior to initiating any construction activities. If nesting birds are detected by the biologist, the following buffers should be established: 1) no work within 100 feet of a non-listed nesting migratory bird nest, 2) no work within 300 feet of a listed bird nest, and 3) no work within 500 feet of a raptor nest. However, there may be a reduction of these buffer widths depending on site-specific conditions (e.g., the width and type of screening vegetation between the nest and proposed activity) or the existing ambient level of activity (e.g., existing level of human activity within the buffer distance). If construction must take place within the recommended buffer widths

6: See answer to comment 4.

6A: See answer to comment 4.

7: A Direct Access Ramp (DAR) Technical Analysis Summary Report, was completed in August 2007. The report included several alternative DAR locations, including the location at the Nobel Drive Interchange. The specific alternative selection criteria for the DAR location evaluated local jurisdictional support, connections to transit access, environmental concerns, engineering construction and feasibility, access/geometric issues, and traffic operations and safety. The report considered the three undeveloped quadrants of the Nobel Drive interchange. Based on the evaluation of the selection criteria, the DAR report findings for the Nobel Drive location proposed the southwest quadrant as the location of the DAR to be carried into the PA/ED phase for further study. The DAR report did identify some biologically sensitive areas surrounding the DAR location that would be studied further during the PA/ED phase.

The technical studies conducted as part of this project determined that there were impacts to the Multiple Habitat Planning Area (MHPA). As a result, the conceptual plan and footprint of the BRT/Park and Ride facility was redesigned to minimize the impacts to the MHPA.

8: Section 2.18 of the document identifies that vegetation would be cleared outside of the breeding season from February 15 through August 31. A qualified biologist would thoroughly survey all vegetation prior to removal during the breeding season to ensure there are no nesting birds onsite.

Department of Fish and Game

Response to Comments

Mr. David Nagy, Environmental Branch Chief
March 10, 2010
Page 5 of 5

above, the Project applicant should contact the Department to determine the appropriate buffer.

A bio-monitor shall be present on site during all initial grubbing and clearing of vegetation to ensure that perimeter construction fencing is being maintained and to minimize the likelihood that nests containing eggs or chicks are abandoned or fail due to construction activity. A bio-monitor shall also perform periodic inspections of the construction site during all major grading to ensure that impacts to sensitive plants and wildlife are minimized. These inspections should take place once or twice a week depending on the sensitivity of the resources. The bio-monitor shall send weekly monitoring reports to Caltrans and shall notify both Caltrans and the Department immediately if clearing is done outside of the permitted project footprint.

We appreciate the opportunity to comment on the IS/EA for this project and to assist Caltrans in further minimizing and mitigating project impacts to biological resources. Should you have any questions regarding these comments, please contact Paul Schlitt of the Department at (858) 637-5510.

Sincerely,



Edmund Pert
Regional Manager
South Coast Region

cc: State Clearinghouse, Sacramento
Paul Schlitt, San Diego

Fish and Wildlife Service

Response to Comments



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ecological Services
Carlsbad Fish and Wildlife Office
6010 Hidden Valley Road, Suite 101
Carlsbad, California 92011



In Reply Refer To:
FWS-SDG-09B0274-10TA0427

MAR 10 2010

Mr. David Nagy, Chief
Environmental Analysis, Branch B
California Department of Transportation, District 11
Environmental Planning
4050 Taylor Street, MS 242
San Diego, California 92110

Subject: Comments on the Draft Initial Study/Environmental Assessment and Proposed Mitigated Negative Declaration for the Interstate 805 Managed Lanes North Project, San Diego, California

Dear Mr. Nagy:

We have reviewed the above referenced Initial Study/Environmental Assessment (IS/EA) and Proposed Mitigated Negative Declaration, dated February 2010. Our primary concern and mandate is the protection of public fish and wildlife resources and their habitats. We have legal responsibility for the welfare of migratory birds, anadromous fish, and endangered animals and plants occurring in the United States. We are also responsible for administering the Endangered Species Act of 1973 (Act), as amended (16 U.S.C. 1531 *et seq.*).

The project as proposed will result in the construction of two "managed lanes" in each direction in the existing freeway median from State Route 52 (SR-52) to just north of La Jolla Village Drive and one high occupancy vehicle lane in each direction from just north of La Jolla Village Drive to just north of Mira Mesa Boulevard. In addition, the project includes the construction of a SR-52 / Interstate 805 (I-805) direct connector ramp, a south facing Direct Access Ramp (DAR) at Carroll Canyon, a Nobel Drive DAR, and a park and ride / Bus Rapid Transit (BRT) Station at the southwest quadrant of Nobel Drive and I-805 (Nobel Station).

We offer the following comments to assist Caltrans in avoiding, minimizing, and providing adequate offsetting conservation for project related impacts to biological resources, and to ensure that the project is consistent with ongoing regional planning efforts:

- 1) Our primary concern with the proposed project pertains to the direct and indirect effects that the project as proposed will have on existing preserve lands associated with the



1: Due to discrepancies in the mapping of MHPA areas, it is difficult to accurately calculate impacts. Impacts have been calculated based on MHPA areas outside of the Caltrans right-of-way and updated in the document. Impacts to the habitats are described within the document and mitigation is proposed. The DAR at Nobel Drive has been redesigned to avoid conserved land and portions of the MHPA. Sections 2.14-2.18 of the document have been revised.

Fish and Wildlife Service

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Mr. David Nagy (FWS-SDG-09B0274-10TA0427)

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Multi-Habitat Planning Area (MHPA) of the City of San Diego's Multiple Species Conservation Program (MSCP) Subarea Plan. The project corridor lies within this Subarea Plan with freeway widening partially extending into the MHPA. The MHPA represents those lands that are targeted for conservation with the objective of creating a connected system of habitats in a manner that maximizes the protection of sensitive species. We emphasize that the success of the regional Natural Community Conservation Program (i.e., MSCP Subarea Plan) is dependent on the coordination of participating local jurisdictions and other entities to ensure that preserve areas are interconnected and contiguous, and meet the survival and recovery needs of multiple species in perpetuity. It is essential that every effort be made to protect these biological resources from additional direct and indirect impacts.

The intent of section 2.1.2 in the IS/EA is to determine whether the proposed project is consistent with State, regional, and local plans and programs. In evaluating the project's consistency to the MSCP, the IS/EA acknowledges that part of the project is located within the MHPA, but does not provide detailed information on how the proposed project will impact the MHPA (e.g., impacts to species, habitats, wildlife connectivity) and how those impacts will be offset. We request that this information be incorporated into the IS/EA, including figures depicting the boundaries of the MHPA in relation to the proposed project impact area and acreage of both temporary and permanent impacts to the MHPA by habitat type. We also request that the IS/EA include alternatives that avoid and/or minimize potential impacts to the MHPA.

- 2) In particular, we are concerned about the proposed placement of the Nobel Station at the southwest quadrant of Nobel Drive and I-805 which is in the MHPA and was recently restored by the City of San Diego through a grant from the Transnet Environmental Mitigation Program (AECOM, 2010. City of San Diego Vernal Pool and Quino Habitat Restoration Project Implementation Report). The restoration included dethatching, weeding, recontouring of pools, seeding, and access control. The IS/EA should address potential direct impacts to the restored area. The Nobel Station will also result in the permanent loss of 7.3 acres of proposed critical habitat for federally threatened spreading navarretia (*Navarretia fossalis*; "navarretia"), two road-rut pools occupied by federally endangered San Diego fairy shrimp (*Branchinecta sandiegonensis*; "fairy shrimp"), and one pair of federally threatened coastal California gnatcatchers (*Polioptila californica californica*; "gnatcatcher). Caltrans should examine alternative locations for the Nobel Station that avoid impacts to the MHPA, proposed critical habitat for navarretia, fairy shrimp and gnatcatcher.
- 3) On page 114 the IS/EA lists some potential indirect effects to the habitat adjacent to the Nobel Station, including drainage into adjacent pools from broken irrigation lines, exotic plant invasion, and unauthorized access. Other indirect effects, such as night lighting, are not included in the list. The document does not adequately address how indirect effects

2A

2: The Nobel DAR has been redesigned to avoid impacts to the Transnet Vernal Pool enhancement areas. The limit of conserved area has been avoided. The location for the DAR was selected due to constraints at other locations. The northwestern side of Nobel has a vernal pool preserve. The southeastern segment has an existing drainage and would require considerable fill and impacts to MCAS Miramar land. The northeastern location also has vernal pools and would place the ramps too close to the La Jolla Village Drive interchange causing safety concerns for the construction of interchanges. Spreading navarretia is located over 220 ft from impact areas.

2A: A Direct Access Ramp (DAR) Technical Analysis Summary Report, was completed in August 2007. The report included several alternative DAR locations, including the location at the Nobel Drive Interchange. The specific alternative selection criteria for the DAR location evaluated local jurisdictional support, connections to transit access, environmental concerns, engineering construction and feasibility, access/geometric issues, and traffic operations and safety. The report considered the three undeveloped quadrants of the Nobel Drive interchange. Based on the evaluation of the selection criteria, the DAR report findings for the Nobel Drive location proposed the southwest quadrant as the location of the DAR to be carried into the PA/ED phase for further study. The DAR report did identify some biologically sensitive areas surrounding the DAR location that would be studied further during the PA/ED phase. The technical studies conducted as part of this project determined that there were impacts to the Multiple Habitat Planning Area (MHPA). As a result, the conceptual plan and footprint of the BRT/Park and Ride facility was redesigned to minimize the impacts to the MHPA.

3: Night lighting will be added to the list of potential indirect impacts. The following avoidance/minimization measures will be added. Lighting at the Nobel DAR will be directed away from the native habitat and shielded to minimize light pollution. The station will be fenced to minimize human and domestic animal access. All drainage will be directed away from the vernal pools/MHPA and DAR is downslope from the vernal pool habitat; therefore, drainage should not impact the habitat. No invasive plants would be used within the DAR limits. Any nonnative, non-invasive plants would only be located on small islands within the DAR and not directly adjacent to native habitat.

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will be avoided, minimized, and offset on pages 115-116. If it is not feasible to relocate the Nobel Station, we request that the IS/EA provide more detail on how these indirect effects will be avoided and/or minimized. Avoidance of indirect effects at this location is important in part because the adjacent habitat was restored through the Transnet grant mentioned above.

- 4) The IS/EA describes the proposed critical habitat for navarretia within the Nobel Station impact footprint as unoccupied, however navarretia is known to occur adjacent to the impact footprint and surveys of this area were conducted during drought years in 2006 and 2007. If it is not feasible to relocate the Nobel Station, spreading navarretia surveys should be repeated this spring to verify that the Nobel Station impact footprint is unoccupied.
- 5) The IS/EA states that cut and fill will occur and utilities will need to be relocated as part of the project, however no detail is provided on the environmental impacts of these interrelated and interdependent actions. We request that all project impacts, including any necessary borrow and fill locations and utility relocation areas, be identified and mapped in the IS/EA.
- 6) We appreciate the commitment on page viii of the IS/EA to plant non-invasive species. However, on page 48 and 49, the IS/EA states that project plantings will include eucalyptus. Some eucalyptus species are invasive and can result in loss of biodiversity due to the production of allelopathic chemicals and the accumulation of high volumes of forest debris, which is also highly flammable and therefore a poor choice for roadside landscaping. Please remove these, and any other invasive plant species listed by the California Invasive Plant Council, from the project landscaping plans.
- 7) On page 62, the IS/EA states that construction BMPs for the proposed project include temporary fiber rolls. Please ensure that fiber rolls used for the proposed project are made from biodegradable materials such as jute, with no plastic mesh, to avoid creating a wildlife entanglement hazard.
- 8) The IS/EA lacks sufficient analysis regarding project impacts to wildlife connectivity and how they will be offset. We request that wildlife corridors, and the target species that use them, be identified throughout the project area. Project impacts to these corridors should also be identified (e.g., duration of construction activities such as bridge column construction within corridor areas, increase in the length of undercrossings) and information on how these impacts will be offset should be provided (e.g., avoiding night work in wildlife corridor areas, enlarging culvert size to provide an adequate openness ratio, incorporating median k-rail barrier openings, incorporating benches in undercrossings to allow wildlife to cross during storm events, etc.).
- 9) The IS/EA states, on page 130, that impacts to upland plant communities would be offset

Response to Comments

4: Spring surveys were completed at the Nobel DAR location in 2010. Spreading navarretia was only found in one pool outside of the existing project footprint by Caltrans biologists. Approximately 60 individuals were identified. The City of San Diego identified 10 plants in mid-April 2010 and 87 plants last year at the same location.

5: Utility relocations would occur within the existing footprint of the project. Cut and fill would be balanced within the project or would be the responsibility of the construction contractor to identify the source or disposal.

6: The two Eucalyptus species listed on the CalIPC list are not proposed for use on this project. Eucalyptus trees would not be used adjacent to any natural habitat and would only be used in areas of ornamental planting in the interior of the park and ride or along Governor Drive. Impacts to trees along the project have been identified in the visual impact section of the document.

7: Fiber rolls with biodegradable materials and no plastic mesh would be used as BMPs for the project.

8: The following has been added to Section 2.14 under Environmental Consequences. The three main east/west wildlife corridors in the project area are under the San Clemente Canyon bridge, Rose Canyon bridge and Soledad/Carroll Canyon bridge. All three of these bridges are tall with no obstruction to deer, small mammals, or large predators such as bobcat, coyote, and mountain lion. Widening of these bridges would not impact the wildlife corridors in the long term. False work would be around the column locations and high near the existing bridge deck, so construction impacts to the corridors are expected to be minimal. Night work under the bridges is anticipated to be minimal. Small culverts that may be used by raccoon and other small mammals would be lengthened as part of the project; however, other than during construction, the wildlife passage through these structures should be minimal.

9: Mitigation ratios that are used in the document are at a higher ratio than the MSCP ratios and have been determined in consultation with USFWS.

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by preservation at the Sage Hill Mitigation Site and that ratios have not been agreed upon at this time. We recommend that any impacts to habitat be offset in accordance with tier ratios identified within the MSCP. We request that the IS/EA incorporate information on the location of this conservation bank, the types of credits available, and the party responsible for managing this area in perpetuity. This information should document that an adequate quantity of in-kind credits are available at this location. If in-kind credits are lacking at this location, alternative conservation areas should be identified.

We appreciate the opportunity to comment on the referenced IS/EA and to participate in the transportation planning process. If you have any questions regarding this letter, please contact Sally Brown of this office at (760) 431-9440, extension 278.

Sincerely,



Karen A. Goebel
Assistant Field Supervisor

cc:

Paul Schlitt, California Department of Fish and Game, San Diego
Jeanne Krosh, City of San Diego
Betsy Miller, City of San Diego



THE CITY OF SAN DIEGO

March 10, 2010

David Nagy, Chief
Environmental Analysis Section, Branch B
California Department of Transportation, District 11
4050 Taylor Street, MS 242
San Diego, CA 92110

Submitted via email to: david_nagy@dot.ca.gov and katie_basinski@dot.ca.gov
Hard copy to follow via mail

Subject: CITY OF SAN DIEGO COMMENTS ON THE I-805 MANAGED LANES NORTH PROJECT INITIAL STUDY WITH PROPOSED NEGATIVE DECLARATION/ENVIRONMENTAL ASSESSMENT (SCH No. 2010021032)

The City of San Diego ("City") has received and reviewed the above referenced environmental document and appreciates this opportunity to provide comments to Caltrans. In response to the Draft Initial Study/EA the City has identified potential environmental issues that may result in a significant impact to the environment. Continued coordinated planning between the City, Caltrans, and other local, regional, state, and federal agencies will be essential.

Staff from the Development Services Department ("DSD"), the City Planning and Community Investment Department (CPCI-MSCP), and the Engineering and Capital Projects Department (ECP) have reviewed the draft document and associated technical reports and have the following comments:

DEVELOPMENT SERVICES DEPARTMENT – ENVIRONMENTAL ANALYSIS SECTION:
MYRA HERRMANN (619) 446-5372 MHERRMANN@SANDIEGO.GOV

GENERAL COMMENT

- [1] The project is located within the City's Coastal Overlay Zone and as noted on Page 20 of the environmental document will require a Coastal Development Permit (CDP) from the City of San Diego, not a Local Coastal Program Permit. This reference must be revised in the environmental document. In order for the City to issue a CDP, the decision-maker must be able to make a finding that the environmental document has been reviewed and considered and adequately addresses all environmental issues satisfactory to the Mayor's Environmental Designee. In addition, the applicant will be required to work with DSD staff to prepare permit findings for presentation in a public hearing.

1: The Permits and Approvals Section of the document has been updated to state the project needs a Coastal Development Permit.



Development Services
1222 First Avenue, MS 501 • San Diego, CA 92101-4155
Tel (619) 446-5460

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CULTURAL RESOURCES

- 2 The City of San Diego did not review a copy of the Historic Property Survey Report prepared for the project, but generally concurs with the conclusion for archaeological monitoring during construction. However, the City is unclear as to whether the Caltrans monitoring program includes the requirement for Native American monitoring as would be the case for the City. A detailed monitoring program with protocol for attendance at a preconstruction meeting, preparation of monitoring exhibits, discovery protocol, report preparation and curation requirements should be further detailed to ensure consistency with City requirements. As such, for issuance of the CDP, the City could require implementation of the City's Mitigation, Monitoring and Reporting Program for Archaeological Resources.

BIOLOGICAL RESOURCES AND STORM WATER FACILITIES MAINTENANCE

- 3 According to the wetlands and waterways discussion in the draft environmental document, the project would result in impacts to several natural drainage areas within the APE. The City's Storm Water Department is currently working on a Program EIR for maintenance of storm water facilities that could overlap with the I-805 managed lanes project. The Program EIR and accompanying Master CDP and Site Development Permit would allow the Storm Water Department to maintain earthen and concrete-lined facilities and provides for specific wetland and upland mitigation. DSD strongly recommends that Caltrans coordinate with the City prior to the final environmental document being completed in order to assure no conflicts within the project APE and the proposed maintenance program.

DEVELOPMENT SERVICES DEPARTMENT – TRANSPORTATION DEVELOPMENT SECTION:
ANN GONSALVES (619) 446-5294 AGONSLAVES@SANDIEGO.GOV
VICTORIA HUFFMAN (619) 446-5396 vhuffman@sandiego.gov

GENERAL:

- 4 1. The I-805 Managed Lanes North Project Initial Study with Proposed Mitigated Negative Declaration/Environmental Assessment indicates that the proposed project would have no significant traffic impacts or require mitigation for traffic; however, it should consider impacts on local streets, intersections and metered freeway ramp locations in the evaluation of impacts. Tables should be provided in both the proposed mitigated negative declaration and its traffic analysis indicating whether the project has any significant impacts on street segments, intersections, and metered freeway on-ramp locations within the study area. The City of San Diego Significance Determination *Thresholds, January 2007*, should be used to determine whether the project has significant impacts on City roadway facilities.

2: Section 2.7, the Avoidance and Minimization Measures section, contains standard provisions for monitoring and protecting cultural resources, with a description of how to proceed if cultural materials are discovered during construction. The sites that are in the APE were tested and are sparse lithic scatters with little or no subsurface remains. The State Historic Preservation Officer (SHPO) concurred that these sites were not potentially eligible to the National Register of Historic Places (NRHP) on May 19, 1995. No excavations will be occurring near any important cultural resources. No work is proposed adjacent to the village of Ystagua except for re-striping within the Caltrans right of way. Therefore, only if unexpected remains are unearthed, it will be the Resident Engineer's decision to call a District 11 Archeologist. If the cultural resource remains are indeed prehistoric, then the appropriate Native American monitors would be contacted if excavation is necessary. We do not anticipate any such finds according to the background research, survey, and excavation information. Additionally, if human remains are encountered, then Caltrans would follow the law by contacting the medical examiner, who would in turn contact the Native American Heritage Commission (NAHC) who would then notify the Most Likely Descendant (MLD). Therefore, Caltrans will not have provisions other than those outlined in the ED for inclusion in the City Mitigation, Monitoring and Reporting Program for Archeological Resources.

3: For City of San Diego projects occurring in the Caltrans right of way an encroachment permit is required. It is the responsibility of the City of San Diego's Storm Water Department to coordinate any work within the right of way with Caltrans.

4: Copies of the Interstate 805 Managed Lanes North Final Existing Conditions and Traffic Operations Analysis Report have been provided to City staff and are appended to the MND by reference. Local street level of service is discussed in sections 5, 6 and 7 of the report. Caltrans is not subject to City of San Diego thresholds, and uses its own guidelines for significance determinations.

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- 5. Tables should be provided in the proposed mitigated negative declaration comparing the Level of Service of the Build and No Build Alternatives for all street segments, intersections, freeway segments and metered freeway on-ramps evaluated in order to determine significance of impacts.
- 6. Per Table 6.4.8-1 and Table 7.4.8-1 of the *Interstate 805 Managed Lanes North Project Final Existing Conditions and Traffic Operations Analysis Report (November 3, 2009)*, the proposed project would have a direct significant traffic impact at the following intersection:

Mira Sorrento Place/Scranton Road

Additionally, the proposed project would have a cumulative impact at the following intersections:

Mira Sorrento Place/Scranton Road

Vista Sorrento Parkway/I-805 NB on/off ramp

The study should either mitigate these impacts, alter the proposed scope of work to eliminate these impacts or at least provide alternatives that reduce or avoid these impacts.

- 7. Per Table 6.47-2 of The *Interstate 805 Managed Lanes North Project Final Existing Conditions and Traffic Operations Analysis Report (November 3, 2009)*, the proposed project would have significant direct impacts to the following metered on-ramps:

EB Mira Mesa Blvd. to I-805 SB On Ramp
 WB Mira Mesa Blvd. to I-805 SB On Ramp

The proposed project would have significant cumulative impacts to the following metered on-ramps:

EB Mira Mesa Blvd. to I-805 SB On Ramp
 WB Mira Mesa Blvd. to I-805 SB On Ramp
 Vista Sorrento Pkwy. to I-805 NB On Ramp

The study should either mitigate these impacts, alter the proposed scope of work to eliminate these impacts, or at least provide alternatives that reduce or avoid these impacts. Also, the study seems to assume ramp meter rates would not be increased after the project improvements; the study should explain why this is a reasonable assumption or demonstrate the effect of increased meter rates if these are planned.

- 8. The results of the queue analyses should be summarized in both the *I-805 Managed Lanes North Project Initial Study with Proposed Mitigated Negative Declaration/Environmental Assessment*, and *The Interstate 805 Managed Lanes North Project Final Existing Conditions and Traffic Operations Analysis Report (November 3, 2009)*. Additional storage space should be

5: Please refer to comment 4. Table 2 of the document shows a comparison freeway level of service for existing, 2020 and 2030 build and no build conditions.

6: The referenced table 6.4.8-1 and 7.4.8-1, from the traffic study, shows that constructing the proposed project would result in incremental changes in delays ranging from a -25 second to +35 seconds depending on the intersection, the build year, and which peak period you reference. Caltrans is not subject to City of San Diego significance thresholds thus would not recommend any mitigation beyond what is currently outlined in the document. Despite the fact that Caltrans is not subject to City of San Diego significance criteria, additional coordination should occur during the design phase.

7: Caltrans is not subject to City of San Diego significance thresholds thus would not recommend any mitigation beyond what is currently outlined in the document. Though we aren't subject to the cities significance criteria, additional coordination should occur during the design phase of the project.

8: Please refer to the response to comment 4.

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provided for any intersection approach or freeway on-ramp with insufficient storage and where the Build Alternative increases the queue when compared to the No Build Alternative.

- 9. The proposed traffic signals at Governor Drive/I-805 NB On/Off Ramps and Governor Drive/I-805 SB On/Off Ramps, and any other traffic signals proposed as part of the project, should be clearly identified as project components in the MND/EA, and the impact of the Governor Drive southbound ramps reconfiguration should be clearly identified and mitigated if necessary.
- 10. The MND/EA should more fully discuss expected traffic impacts during construction, including expected duration of each phase of construction and locations of potential full or partial roadway closures.
- 11. An additional inside lane should be included on the proposed new cloverleaf for I-805 SB On-Ramp at Governor Drive to accommodate projected queues without significantly impacting Governor Drive and the operation of the Governor Drive/I-805 SB ramps intersection or the Governor Drive/Greenwich Drive intersection.

SPECIFIC:

- 12. Page 11, Project Description, should clarify on what basis the Project Development Team identified the Managed Lanes Alternative as the only viable build alternative.
- 13. Page 13, Ramp Realignment, replace the word "it" with "between" in the sentence, "The Governor Drive southbound off-ramp would be modified in order to increase the distance it the southbound I-805 to westbound SR-52 connector."
- 14. Page 14, Bus Rapid Transit/Park and Ride, the MND/EA should discuss that there is an existing park-n-ride lot at the north corner of the intersection of Governor Drive/I-805-southbound off-ramp that would be relocated by this project. Specify the number of parking spaces in this park-n-ride lot, and the number of spaces proposed in the relocated lot to evaluate if there is a parking impact due to the proposed relocation.
- 15. Page 19, Transportation System Management (TSM) and Transportation Demand Management (TDM) Alternatives, clarify which existing stop controlled intersections would be replaced with traffic signals.

9: Figure 3B of this document shows the proposed project features at Governor Drive. Due to comments from the public Caltrans would look into other alternatives for the final design at Governor Drive. The project description has been updated to include a list of modifications to traffic signals and ramp meters.

10: Additional information has been added to the traffic section found in chapter 2.5.

11: Traffic analysis shows that for the 2020 and 2030 no-build scenario at Governor Dr. to the southbound I-805 there would be an excessive queue during the PM peak hour. The 2020 and 2030 build scenario traffic data as the same on ramp does not show an excessive queue during the PM peak hour. This analysis shows that the build scenario improves the on ramp queue.

12: Two other alternatives were studied and subsequently rejected. The first alternative considered moveable barrier in reversible HOV lanes. This alternative is viable in corridors with peak directional splits of at least 65% to 35%, ie., when the traffic volume in one direction is more than 65% of the total traffic during the peak period. Along the I-805, within the project limits, the existing directional split ranges from 50%/50% to 60%/40% in some segments. The 2030 forecast volumes indicate a directional split of no more than 55%/45% throughout the corridor. Therefore, this alternative was rejected due to directional split not meeting the 65% requirement. The second alternative considered a barrier separated managed lanes. A barrier separated managed lanes would require additional shoulder widths resulting in a greater project footprint, which adds excessive cost and scope of work to widen and realign the ramps at the intersections. This alternative was rejected due to estimated excessive costs which were well above the Transnet II budget.

13: Sentence has been corrected.

14: There is an existing park and ride facility located at the northwest quadrant of the I-805/ Governor Drive interchange. As part of the proposed project, the existing Park-and-Ride facility will be relocated to the southwest quadrant to accommodate the proposed Governor Drive to SB I-805 loop ramp. The existing Park-and-Ride facility has 83 parking spaces and this new Park-and-Ride lot may accommodate up to 100 parking spaces.

15: As part of the proposed project, the proposed southbound 805 entrance loop ramp intersection will be signalized, which is currently not signalized.

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CITY PLANNING AND COMMUNITY INVESTMENT DEPARTMENT - MSCP
 KRISTEN FORBURGER, ASSOCIATE PLANNER (619) 236-6583 KFORBURGER@SANDIEGO.GOV

Due to the adjacency to the MHPA, MND/EA should be revised to address applicable MHPA Land Use Adjacency Guidelines (Section 1.4.3) of the MSCP Subarea Plan. In particular, lighting, drainage, landscaping, grading, access, and noise must not adversely affect the MHPA. Please address these issues in the project biology report and MND/EA.

- 16 Lighting
 Lighting should be directed away from the MHPA, and shielded if necessary. Please see Municipal Code §142.0740 for further information if needed.
- 17 Drainage
 Drainage should be directed away from the MHPA, or if not possible, must not drain directly into the MHPA. Instead, runoff should flow into sedimentation basins, grassy swales or mechanical trapping devices prior to draining into the MHPA.
- 18 Landscaping
 No invasive plant species shall be planted in or adjacent to the MHPA. The landscape plan should be revised to delete invasive plant species, e.g., *Cortaderia selloana*... from the planting palette.
- 19 Grading
 All manufactured slopes must be included within the development footprint and outside the MHPA.
- 20 Access
 domestic pet predation.
- 21 1. The City considers direct impacts to perennial native grasslands that are greater than 0.1 acre are significant and cumulatively significant. Direct impacts to this habitat type are mitigated via Tier 1 per Biology Guidelines. Cumulative impacts may be mitigated only via creation at a 1:1 ratio or greater with the feasibility of creation to be evaluated on a case-by-case basis. The proposed project would consist of impacts to native grassland greater than 0.1-acre resulting in a significant impact requiring mitigation. Please provide substantial justification as to why mitigation for native grassland, as well as, other sensitive upland species within the City's jurisdiction are not being mitigated within the City of San Diego.
- 22 2. Page 28 of the MND/EA states "The Nobel Transit Station/DAR location is partially within the City of San Diego's MHPA. Once Caltrans acquires this parcel the land would fall under state jurisdiction and local zoning and planning designations would no longer apply." Then further states in the Avoidance, Minimization, and/or Mitigation Measures Section: "Because the Build Alternative does not have any impacts to the existing or planned development and land uses, no mitigation is required. City MSCP disagrees with this conclusion as the direct take of MHPA lands and omitting MHPA Land Use adjacency guidelines (LUAG's) is a direct conflict of the

16: Comment Noted. Conservation measure concerning lighting for night construction will be modified to include permanent lighting will be shielded and directed away from native habitats.

17: The BRT /Park and Ride Transit Station at the Nobel Drive DAR will drain towards Nobel Drive, into the existing drainage facilities or patterns. The station will incorporate the required Best Management Practices (BMP's) to address the runoff from the facility.

18: No invasive plant species shall be planted in or adjacent to the MHPA. *Cortaderia selloana* is not in the planting palette and would not be planted as part of the project. Section 2.19 identifies that no noxious weeds will be planted and steps will be taken to minimize the spread of invasive species already in the project limits.

19: MHPA boundaries extend onto the freeway in many areas. Lines need to be reviewed and moved out of Caltrans right of way.

20: Standard specifications identify that no domestic pets are allowed onsite during construction.

21: Caltrans is not a signatory to the MSCP; therefore, mitigation ratios are determined by the resource agencies as they see fit. Sometimes they are lower than MSCP guidelines, in most instances they are higher. Mitigation ratios are only proposed at this time and are not set, but the proposed mitigation ratios that are used in the document are at a higher ratio than the MSCP ratios and have been determined with consultation with USFW.

22: The Nobel Drive Transit Station/DAR footprint has been redesigned to avoid most impacts to the City of San Diego owned MHPA areas. The Environmental Document text has been changed accordingly to reflect this redesign.

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MSCP Subarea Plan and the "existing" land use designation. Please revise and provide the MHPA LUAG's as mitigation for impacts to the existing land use designation of MHPA.

- 23 3. Please revise the MND/EA to provide the project impact footprint overlain with the MHPA Boundary. Impacts and Take of the MHPA must be quantified and disclosed with the environmental document. The City is obligated to report to the wildlife agencies on an annual basis, habitat loss and gain. This map and quantification are necessary to accurately track the City's habitat loss and gain.
- 24 4. Need Project impacts overlain with MHPA boundaries/quantify direct take of MHPA.
- 25 5. City MSCP strongly recommends mitigation be provided within the City's jurisdiction and within the City's MHPA in order to compensate for the loss of MHPA preserve. The city is obligated to track and report annual habitat loss and gain both inside and outside the MHPA through the MSCP Annual Report. This annual tracking is sent to the Wildlife Agencies in order to determine whether the conservation, monitoring, and management goals of the MSCP and Implementing Agreement are being met.
- 26 6. The project as proposed may result in impacts to the area previously restored by the City under a Transnet grant. The NES and environmental document must address the loss of these resources and provide mitigation within the City's MHPA acceptable to the City and Wildlife Agencies.

ENGINEERING AND CAPITAL PROJECTS DEPARTMENT - TRANSPORTATION
 JIM LUNDQUIST, BIKE COORDINATOR & ASSOCIATE CALTRANS LIAISON
 (619) 533-3045 JLUNDQUIST@SANDIEGO.GOV

- 27 1. The proposed project includes new Direct Access Ramps onto two City of San Diego streets at Carroll Canyon Road and Nobel Drive. For each of these locations, a comprehensive review of the designs are required by City of San Diego staff. The preliminary designs are not shown in the report.
- 28 2. The proposed project includes new Direct Access Ramps onto two City of San Diego streets at Carroll Canyon Road and Nobel Drive. For each of these locations, a comprehensive review of the existing and future traffic volumes and the resulting level of service on City streets and intersections should be provided in the report. A review is required by City of San Diego staff to insure that the City streets and intersections under the "with project" scenario will operate at an LOS C or better.
- 29 3. The proposed project includes 16 redesigns of freeway interchange ramps with City of San Diego streets. For each of these locations, a comprehensive review of the designs are required by City of San Diego staff. The preliminary designs are not shown in the report.

23: See response to comment 22
24: See response to comment 22
25: See response to comment 22
26: The Nobel drive DAR has been redesigned to avoid the Transnet Vernal Pool enhancement areas.
27: At this stage, only the preliminary design of the intersections have been completed and the turning moves were for the intersections analyzed and included in the Final Existing Conditions and Operational Analysis Report for the project. During the design phase of the project, a review of the intersections with improvements on City streets will be coordinated with City staff.
28: A comprehensive study of local streets and intersections adjacent to the proposed Direct Access Ramps (DARs) at Nobel Drive and Carroll Canyon Road has been done for the existing year (2008), and future years 2020 and 2030 for both the build and no build alternatives. The study includes existing and future traffic volumes and operational analyses. Please refer to the "Carroll Canyon & Nobel Direct Access Ramps & Park-and-Ride Local Circulation System Traffic Study, May 12, 2009". This study provides a comprehensive analysis of different scenarios for existing and future years both for build and no build alternatives.
29: The intersection at Governor Drive will be designed to accommodate the bicycle facility on Governor Drive. During the design phase of the project, a review of the intersections would coordinated with City staff.

City of San Diego

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David Nagy, Chief
Caltrans, District 11
March 10, 2010

- [30] 4. The proposed project includes 16 redesigns of freeway interchange ramps at City of San Diego streets. For each of these locations, a comprehensive review of the existing and future traffic volumes and the resulting level of service on City streets and intersections should be provided in the report. A review is required by City of San Diego staff to insure that the "with project" scenario is designed to operate at an LOS C or better.
- [31] 5. The proposed loop-ramp at Governor Drive southbound on-ramp should accommodate bicyclists. A careful review of the proposed design is required to ensure that bicyclist are provided a safe passage through the intersection.

ENVIRONMENTAL SERVICES DEPARTMENT

LISA WOOD, SENIOR PLANNER (858)-573-1236 OR lwood@sandiego.gov

- [32] 1. The City of San Diego Environmental Services Department is responsible for the operation of the Miramar Landfill, and for waste reduction programs. Projects that generate more than 60 tons of waste may have significant impact on solid waste facilities and waste reduction programs.
- [33] 2. Hazardous waste is addressed in the environmental document, but solid waste is not. The Initial Study checklist item XVI (f) says there is a landfill with sufficient capacity and that disposal of construction waste would not cause a significant impact. This may in fact not be the case.
- [34] 3. While a discussion of solid waste is included in the climate change section, it technically should be located under public services where the actual issue regarding impacts to, or the need for new facilities resulting from the project is located.
- [35] 5. Checklist Item XVI (f) was not discussed with the City. The City's Miramar Landfill is the closest landfill. The landfill imposes a surcharge on construction debris because it causes problems in the landfill, may contain hazardous materials, does not break down or compact, and can be recycled. For these reasons the City has a C&D ordinance attempting to minimize disposal of these materials, although Caltrans is not subject to this local ordinance. Furthermore, local governments are under mandate from the State to reduce disposal, and failure to achieve State waste-reduction mandates exposes local governments to fines of \$10,000 per day. Yet local government cannot subject Caltrans (or other State agencies) to local laws, such as the C&D ordinance, that are designed to reduce waste. So local government is potentially in a position of being penalized by the State for waste that is generated by State agencies. Thus, part of the local government public service is waste reduction, and State projects can have a serious impact on this State-mandated public service.
- [36] 6. Greenwaste in the landscaping is an issue that is not thoroughly addressed in the draft environmental document. Using greenwaste in the landscaping is indeed a benefit. Caltrans

Response to Comments

30: Please refer to responses to comments 4 and 28.

31: The proposed intersection at the Governor Drive to SB I-805 loop ramp will be designed to accommodate the bicycle facility on Governor Drive. During the design phase of the project, a review of the intersections will be coordinated with City staff.

32: Very little waste is expected to be generated from the project. Any materials identified to be disposed of become the property of the Contractor. Caltrans encourages the Contractor to recycle and reuse what he can on every project. Contractors have also been known to make arrangements with nearby Developers to take any unneeded earthwork material. Any material identified as hazardous will be taken to an appropriate disposal facility.

33: Any materials identified to be disposed of become the property of the Contractor. Contractors have also been known to make arrangements with nearby Developers to take any unneeded earthwork material. During construction the Contractor will have to make arrangements with the nearby landfill and/or other organizations for the proper disposal of excess material.

34: Caltrans encourages contractors to recycle and reuse, projects generate very little waste and do not pose impacts to local waste disposal facilities.

35: The City's concern with the C&D ordinance is noted, state projects are not subject to local ordinances. During construction, every attempt will be made to work with Contractors to ensure materials that can be recycled are recycled.

36: Very little greenwaste is expected to be generated from the project. Disposal of greenwaste as well as the procurement of compost material during landscaping operations will be the responsibility of the Contractor. Every attempt will be made to work with Contractors to ensure materials that can be recycled are recycled as part of this project.

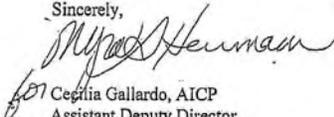
City of San Diego

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David Nagy, Chief
Caltrans, District 11
March 10, 2010

has, in the past, worked with the City's composting operation to procure materials. Caltrans needs to work with the City's composting staff, or with a private composter, to identify the materials that will be used, and ensure that the materials are available and appropriately priced. However, greenwaste is only a start. Aggregate, cement, and asphalt should also have post-consumer standards. These measures, together with waste reduction measure MAY mitigate impacts to below a level of significance, but the information needs to be included in the environmental document before this determination can be made.

- 37] 7. Environmental Services Department staff recommends a meeting with Caltrans to better understand the types of waste that will be generated from the project, and to assist with development of a plan for waste reduction that would not conflict with the City's Construction and Demolition Ordinance.
- 38] DSD strongly recommends meeting with City staff before the environmental document is finalized and prior to submitting for a CDP from the City. Please contact the appropriate above-named individual(s) if you have any questions on the submitted comments. The City respectfully requests that you please address the above comments in the FEIR and provide four copies of the document for distribution to the commenting department. If you have any additional questions regarding the City's review of the DEIR, please contact Myra Herrmann, Senior Planner at 619-446-5372 or via email at mherrmann@sandiego.gov.

Sincerely,


for Cecilia Gallardo, AICP
Assistant Deputy Director
Development Services Department

cc: Myra Herrmann, Senior Planner, Development Services
Kristen Forburger, Associate Planner, City Planning and Community Investment Department
Ann Gonsalves, Senior Traffic Engineer, Development Services Department
Victoria Huffman, Associate Traffic Engineer, Development Services Department
Mark Koll, Associate Civil Engineer, ECP
Linda Marabian, Senior Traffic Engineer, ECP
Jim Lundquist, Associate Engineer - Traffic, ECP
Lisa Wood, Senior Planner, Environmental Services Department
Environmental file

Response to Comments

37: State agencies are not subject to local ordinances. Caltrans, however, would be happy to meet with City of San Diego Environmental Services Department staff to have further discussions on ways to reduce the generation of waste. Meetings can be made by contacting the Project Manager.

38: Caltrans and the City of San Diego met after receiving this comment letter to discuss the proposed project.



March 10, 2010

Mr. David Nagy, Environmental Branch Chief
California Department of Transportation – District 11
Environmental Planning
4050 Taylor Street, MS 242
San Diego, CA 92110
David_I_nagy@dot.ca.gov

Subject: SDG&E Response to Caltrans I-805 Managed Lanes North Project Draft Initial Study with Proposed Mitigated Negative Declaration/ Environmental Assessment (MND/EA)

Dear Mr. David Nagy,

San Diego Gas & Electric (SDG&E) appreciates the opportunity to comment on the above-referenced MND/EA. SDG&E understands the importance of identifying and coordinating utility relocations and outages and recognizes that Caltrans is seeking comments for incorporation in the Final MND/EA.

SDG&E has reviewed the MND/EA and requests that Caltrans address the following three comments related to gas and electric utilities:

1. The MND/EA should adequately describe or fully assess potential all environmental impacts associated with the potential need to relocate two 69 kV transmission lines that traverse below the bridge.
2. In compliance with CEQA, the MND/EA should adequately describe and fully assess all environmental impacts associated with the potential relocation of a 30-inch gas line.
3. The MND/EA incorrectly assumes that SDG&E can commit to a 5 month electrical outage for construction purposes. While it may be possible to schedule some outages, SDG&E cannot guarantee when those outages will be available to Caltrans. SDG&E must be able to re-energize their circuits in an emergency situation. Therefore, the EA/MND should consider alternatives that may provide the project unhindered construction access timeframes (e.g., undergrounding of the line to ensure round the clock access for bridge construction).

An incomplete and/or inaccurate description and environmental analysis of the afore-mentioned utility relocations in the EA/MND may result in the need for SDG&E to perform additional environmental analysis and documentation. It may also necessitate a Permit to Construct (PTC) from the Public Utilities Commission (in compliance with GO-131-d) that will most likely result in project delays for Caltrans.

As previously discussed, SDG&E is currently preparing an engineering study to determine if the proposed scenario described in the EA/MND, not to relocate the poles, is possible. SDG&E is also evaluating the current easement to identify if changing pole locations within an existing

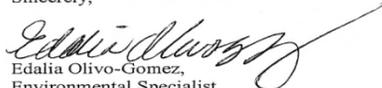
<p>1: The IS/EA Section 2.4 discusses California Public Utilities Commission (CPUC) General Order 131D requires that proposed relocations of electric lines exceeding 50 kV to have environmental clearance for all work associated with the relocation. Several options for the relocation of the 69 kV transmission lines in Rose Canyon were reviewed with SDG&E in December 2009. The preferred option to resolve the conflict with the overhead 69 kV transmission lines was to de-energize the lines in stages during the construction of the Rose Canyon Bridge Overhead lines. This option avoids the need to remove and relocate the lines. Caltrans would coordinate with SDG&E to de-energize the lines in work windows during the planned bridge construction stages.</p>
<p>2: The utility relocation conflict list included in the IS/EA, Appendix F, has been revised. The “relocate” shown for the 30-inch gas line was revised to “protect-in-place”, as relocation of the gas line would be avoided. In some instances, this will include potholing or field location of the facilities during the design phase to assure that the conflict is avoided and/or if the utility would need to be protected as part of the construction work.</p>
<p>3: The 805 North project would continue with the planned option to de-energize the 69kv lines in stages during the construction of the Rose Canyon Bridge. During the design phase, Caltrans will coordinate with SDG&E to develop mutually agreed work windows to de-energize the lines during bridge construction stages. This coordination would accommodate the possibility that SDG&E may need to re-energize the lines in the event of an emergency situation. Therefore, the IS/EA does not include the options to relocate or underground the transmission lines in the area of the Rose Canyon Bridge.</p>

Page 2 of 2

transmission easement corridor may result in the need to acquire additional right(s)-of-way and obtain approval from the California Public Utilities Commission (CPUC).

In order to address these three issues, SDG&E requests additional time to complete the engineering study related to the location of the poles. SDG&E also requests a meeting to discuss these issues in more detail. SDG&E will be contacting you in the next couple of weeks to set up the meeting. In the meantime, if you have any questions regarding these comments please feel free to contact David Emerson at (858) 654-1136, Demerson@SempraUtilities.com or me at (858) 637-3728, eolivogomez@SempraUtilities.com

Sincerely,


Edalia Olivo-Gomez,
Environmental Specialist
Land Planning & Natural Resources


David Emerson
Governmental Liaison Planner

Cc: Christina Van Wanseele

SAN DIEGO, CALIFORNIA, STATE OF CALIFORNIA
FOR THE COUNTY OF SAN DIEGO

TAKEN ON: TUESDAY, FEBRUARY 23, 2010

TAKEN AT: 4545 LA JOLLA VILLAGE DRIVE
SAN DIEGO, CALIFORNIA

REPORTER: GLORIA D. MAZON
CSR NO. 9356

COPY



Mazon & Associates
CERTIFIED COURT REPORTERS
2631 IMPERIAL AVENUE * SAN DIEGO, CALIFORNIA 92102

(619) 232-1890

1 CALTRANS PUBLIC HEARING, TUESDAY, FEBRUARY 23, 2010
 2 WESTFIELD UTC FORUM HALL
 3 4545 LA JOLLA VILLAGE DRIVE, SUITE E25
 4 SAN DIEGO, CALIFORNIA 92122
 5 5:00 p.m. - 8:00 p.m.
 6 * * *
 7
 8 PUBLIC COMMENTS:
 9
 10 [1] Models do not fully capture the real noise
 11 level, as they do not consider how much more sound
 12 travels in cold air.
 13 [2] The proposed onramp to South 805 from Governor
 14 Drive needs to be redesigned to preclude the need to move
 15 the existing 805 South off-ramp to Governor Drive.
 16 [3] The new onramp will be too noisy as vehicles
 17 accelerate from an elevated ramp. If the existing sound
 18 berm must be removed, the sound wall should be moved east
 19 and not on the Caltrans right-of-way, so as to improve
 20 esthetics to homeowners. It would also block airflow and
 21 light and avoid easement to homeowners property.
 22 [4] And 4, need to consider traffic vibration
 23 homeowners currently fill vibrations from trucks leaving
 24 the southbound off-ramp closer to homeowners and/or may
 25 cause long term structural damage to homes.

- 1: The Federal Highway Administration (FHWA) Traffic Noise Model (TNM) Version 2.5 is the model that is currently approved by FHWA for use in noise impact studies. For a given air temperature and relative humidity, the ratio of these remains constant in the atmosphere because the density of air will reduce or increase proportionally with changes in pressure. The speed of sound in our atmosphere is independent of air pressure. However, when air temperature changes, only density changes, while pressure does not change. Generally speaking the speed of sound decreases as air temperature decreases. Ambient noise fluctuates more with higher humidity since air densities are higher (+/- 1dBA). For this reason, cold temperatures have minor effects on the noise models.
- 2: Based on public input and comments, other alternative designs for noise abatement north of Governor Drive would be considered during the final design phase. These alternatives may include keeping a portion or all of the existing berm, shifting the proposed soundwall to the east away from the State right-of-way line, or increasing the length of the berm/soundwall combination. As stated in the IS/EA, "If during final design the conditions have substantially changed, noise abatement may not be necessary. The final decision of the noise abatement would be made upon completion of the project design and the public involvement processes."
- 3: See Response to Comment 2. The IS/EA has addressed all impacts to the homeowners and proposed mitigations as necessary.
- 4: The project would not increase truck traffic. Based on comments received by homeowners in the area a redesign is being considered to minimize the distance the off ramp is being shifted closer to homes.

Public Hearing Comments

Response to Comments

5 1 Next, Caltrans should provide hotels for
 2 homeowners during nighttime construction.

6 3 Next one, erect sound wall prior to removing
 4 berm, so homeowners can sleep during bridge work, call
 5 driving, cutting, et cetera.

7 6 Next one, homeowners homes were in place prior
 7 to freeway, find a solution that will not further impact
 8 real solution, us, not based on models.

8 9 And lastly, replace rear corner markers, so
 10 property rear corner markers -- so properties are
 11 maintained after grading.

12 That's it; thank you very much
 13 (whereupon the Caltrans Hearing concluded at
 14 8:00 p.m.)
 15 \\
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 25

5: It is not Caltrans standard practice to provide hotels for homeowners along the freeway when night work operations take place. Caltrans acknowledges that night work is potentially disruptive to nearby residents. Prior to working any night shifts nearby residents would be notified, and Caltrans would maintain close communication with nearby communities during construction. Every attempt would be made to minimize the amount of night work and its potential negative impacts.

6: Depending on the alternative selected during final design, it is possible that the new soundwall or berm would be in the same location as the existing. Therefore, it would not be possible to construct the soundwall or berm prior to construction. However, during the final design phase, the possibility of scheduling the soundwall or soundberm in a specific stage of construction may allow the wall or berm to be completed in a shorter time frame than the overall project.

7: The formal process to study and consider abatement for freeway noise is specifically used in situations where the homes pre-date the freeway.

8: Project grading would not change the location of the property line. During the construction phase, the correct location of the property fence would be determined. At the completion of the construction project, the State R/W line would be located, and survey monuments would be placed.

From:
Christian Weyer, MD
7125 Enders Ave
San Diego, CA 92122

To:
David Nagy, Chief
Environmental Analysis, Brach B
California Dept of Transportation, District 11
4050 Taylor Street, MS 242
San Diego, CA 92110

03. March 2010

Re: Comments concerning IS/EA for the I-805 Managed Lanes North Project

Dear Mr. Nagy,

I would like to thank you and your staff for answering questions and providing clarification in the open forum public hearing held on February 23 at Westfield UTC Forum Hall.

Having reviewed the information you provided, and reflected on my discussions with various CalTrans representatives, I would like to add the following comments to the public record.

Overall, my wife and I are deeply concerned about the negative impact that the planned project would have on the quality of life for our family, as well as all of the other residents of Steinbeck and Enders Avenues. From the overall project plan (Carroll Canyon to I-52), it seems evident that the neighborhood we call home would be, by far, the most affected residential area of the entire project.

- [1] We understand that, when viewed strictly from the standpoint of noise abatement regulations, there may well be options to mitigate the environmental impact of the proposed project. However, when viewed from the perspective of affected families, it is very obvious that the negative impact would be far greater.
- [1A] First there is the noise issue. Our children's second story bedroom windows face the I-805. The construction phase of the project alone is cause for serious concern because of the potential impact on their development. The noise caused by freeway construction is relentless and unavoidable. That noise will disrupt my children's naptimes and bedtimes. The newly constructed on-ramp to I-805 S would be so close to their bedrooms that they would be exposed, day and night, to all kinds of traffic issues and noises (e.g., cars and trucks accelerating to get onto the freeway). Sound walls and dual pane windows can only filter out so much.

1: Comment noted.

1A: Existing and predicted noise levels on your property were recorded to be 65dBA Leq (h). As part of this project, abatement measures such as the proposed (12 ft-high) sound wall near your property will reduce the predicted and existing noise to 60 dBA. The proposed soundwall would require us to remove the existing berm and in return would provide a quieter environment than existing conditions. The Federal Highway Administration (FHWA) requires Caltrans to study and propose soundwalls through a process of Feasibility and Reasonableness. The soundwall near your property is feasible since it provides a 5dB insertion loss and it is cost reasonable.

Christian Weyer

Response to Comments

2] Second, there is the issue of quality of life (outdoor living). The residents of Steinbeck and Enders Avenues have the most cause for concern. If the existing berm was to be replaced with a sound wall that is set to be located right on our property line, it was markedly diminish the joy we get from spending time in our backyards. A large part of what makes our yard beautiful is all of the greenery and trees that grow on the berm located behind our property line. That would all be removed in order to construct an unattractive sound wall.

2A] There is also the potential that the beautiful, large trees in our yard with deep roots would need to be removed in order to construct the sound wall. Finally, it is highly likely that

2B] there would be a negative impact on the property value of the homes in this area.

Based on these considerations, we would like to express our strong opposition to the proposed I-805 managed lane project.

Should the project be approved, however, we would like to provide the following points for serious consideration:

3] 1. On ramp (S) from Governor Dr. onto I-805 S:

Exhaust all options/alternatives to avoid building the proposed new 270 degree on-ramp, including obtaining a second opinion from an independent freeway engineer.

4] 2. Berm/Sound wall for section AA (Governor off-ramp)

Make every effort to avoid building a sound wall directly on the property lines.

- Evaluate the option to maintain at least a portion of the berm (the portion that faces private properties). Specifically, it seems that erecting a wall in what is presently the median of the berm may suffice to make room for the relocated off-ramp (see attached outline). This would help to preserve, as best as possible, the existing character of the properties, the quality of life of the residents (outdoor living), and would also help to minimize the potential negative impact on property values. Monies in the Caltrans project budget that are allocated to mitigating to impact on the overall neighborhood could be allocated to enable this option.
- If there was no other option than to remove the berm entirely, then the new sound wall should under no circumstances be erected directly on the property lines. Erecting it ~3 feet off the property lines may slightly increase maintenance requirements for Caltrans, but would at least preserve existing property structures and less dramatically affect the character of the properties (for instance, we have multiple trees, a stamped concrete BBQ area, and a large wood deck adjacent to the property line (fence).

Thank you for taking our concerns and comments into considerations

Sincerely, Christian and Miriam Weyer

2: Existing peak noisiest hour noise level is 64 dBA, future predicted peak noisiest noise level without abatement is 65 dBA, future predicted peak noisiest noise level with abatement is 60 dBA. Construction of the new loop on ramp would be temporary and would take place during appropriate times of the day considering the surrounding land uses.

2A: Depending on the alternative selected during final design, it is possible that the new soundwall or berm will be in the same location as the existing, or possibly shifted to the west. If the wall alignment on State right-of-way affects a tree, appropriate measures will be taken during the design or construction phase to coordinate with the affected residents.

2B: Comment Noted

3: Based on the public input and comments during the PA/ED phase, other alternative designs for noise abatement north of Governor Drive will be considered during the final design phase. These alternatives may include keeping a portion or all of the existing berm, shifting the proposed soundwall to the east away from the State right-of-way line, or increasing the length of the berm/soundwall combination. As stated in the IS/EA, "If during final design the conditions have substantially changed, noise abatement may not be necessary. The final decision of the noise abatement would be made upon completion of the project design and the public

4: See response to comment 3.

06 March 2010

Mr. David Nagy
Environmental Planning MS242
4050 Taylor Street
San Diego, CA 92110

Subject: I-805 Managed Lanes North Project – Area 3

Mr. Nagy,

The residence of the neighborhood that will be impacted by movement of the South I-805 off-ramp and the construction of the new South I-805 on-ramp have been victims of the 805 freeway noise for decades. The homes were built before the freeway was approved or constructed. Residents were subjected to years of freeway noise while Caltrans awaited funding needed to construct a sound abatement berm. Although far from perfect, the berm is a much better solution than is now planned, where this earthen berm will be removed and replaced by a concrete or brick wall; a wall that will be moved closer to the homes. This change is being made because Caltrans desires to move the existing off-ramp to the west. We were told that this move was made necessary because it provides a smoother transition. We think that an alternate solution should and can be found.

1 Removing the berm and installing the wall closer to the homes will cause the neighborhood to degrade, effecting many more homeowners that the 39 identified by the EIR – it will spread like a cancer. Other reasons to identify alternate solutions are:

1A • Aesthetics: The wall would destroy the homeowners view to the East creating a compound or prison look and inhibit the free flow of air. This wall would be up to 12 feet in height.

1B • Disruption: Caltrans would exercise an easement onto the homeowner's property. They would bulldoze parts of rear yards so that they could dig a trench, perform pile driving, and other efforts needed to construct the wall. There must be a better solution.

2 There is not a real need to move the wall this close to the homes. Caltrans stated that if they did not move it to the right of way, they would need to maintain the area between the wall or berm and the existing Caltrans chain-link fence. This is a small problem compared to the impact to homeowners and the neighborhood as a whole.

3 The EIR, while likely meeting NHA guidelines, was flawed, as these guidelines were developed to mask true conditions. For example, the sound receptors used to measure freeway noise are placed only five feet above the ground. They therefore do not capture the true impact to residents residing in single story homes; and definitely not those residing in two-story homes. Another example is that these sound measurements are performed or adjusted to a specified temperature and do therefore do not capture the real noise level. A corrected model would consider how much louder and further sound

1: Based on the public input and comments during the PA/ED phase, other alternative designs for noise abatement north of Governor Drive would be considered during the final design phase. These alternatives may include keeping a portion or all of the existing berm, shifting the proposed soundwall to the east away from the State right-of-way line, or increasing the length of the berm/soundwall combination. As stated in the IS/EA, "If during final design the conditions have substantially changed, noise abatement may not be necessary. The final decision of the noise abatement would be made upon completion of the project design and the public involvement processes."

1A: In the mitigation section of the Visual/Aesthetic chapter, provisions have been outlined that allow for the use of transparent noise walls to provide views to be maintained. In order for Caltrans to commit to installing transparent noise walls, private residences need to agree to maintain these features. Therefore, the transparent noise walls will be required to be ultimately placed on private property. The reason for this is that Caltrans operations and maintenance does not have the ability to maintain these specialized features such as tempered glass surfaces. In addition, in order to be an effective noise barrier system, it may also be necessary for additional adjacent properties to agree to maintain the wall systems on their property.

1B: The current proposal to have the proposed soundwall on the property line (State right-of-way line) will require temporary construction easements and the residents will be compensated for the loss or needed reconstruction of any improvements that are affected. The adjacent owners would need to approve of this easement to construct the wall. As stated in the response to Letter 5 Comment 2, other alternatives would be considered in the final design phase.

2: During the consideration of the alternatives to be considered during final design, the ability and access needed to properly maintain these areas adjacent to the properties is a consideration. Access for maintenance purpose will allow the areas on the State side of the property line to not negatively affect the private properties.

3: Noise receivers must be placed at a height of 5 feet above the ground because this is typically the average height of where the human ear is located. The Federal Highway Administration (FHWA) and Caltrans require noise abatement in areas of commonly human use. This is typically in your backyard and in the places where you spend outside quality time. These areas of concern have all been addressed and abated for. Measurements and projected ambient noise in this neighborhood revealed that indoor noise would be well under the established noise abatement criteria at any building level.

Anonymous

Response to Comments

travels when the air is cold. The existing NHA noise model is flawed and biased to producing an outcome that support project funding; residents be dammed!

- 4 The EIR also failed to consider traffic vibrations. Homeowners currently feel the vibration from trucks, and moving the off-ramp closer to the homes will worsen these vibrations to the distress to those living in these homes, and may cause long-term structural damage.
- 5 On another aspect of the Area-3 design, I seriously doubt that the sound impact from the planned elevated on-ramp to I-805 South has been properly calculated. This new on-ramp will be too noisy as vehicles both turn and accelerate from the elevated ramp. Line-of-sight noise calculations of trucks also need to be assessed and documented to capture the true (not model-based) impact on the wider east University City neighborhood. This ramp will have a wide clear line-of-sight across the neighborhood, reflecting how wide the sound from this ramp will spread. The proposed on-ramp to southbound I-805 from Governor Drive needs to be redesigned to preclude the need to move the existing 805S off-ramp to Governor Drive.
- 5A
- 6 The result to these and other measurement tricks make it possible for the NHA and Caltrans to mask the true impact of their design and construction on the residents. We understand that Stimulus-2 funding is being requested for this project, but it should come with the understanding that it will not be used to depress a neighborhood and so negatively impact its residents.
- 7 Night work along this off-ramp should be prohibited. If it cannot, the homeowners need to be provided resident-style hotels during periods where night-work underway. This includes any nights between when the berm is removed and the wall constructed.
- 8 Also, the sound wall needs to be constructed before the existing sound berm is removed, so that residents are not subjected to both increased freeway noise and construction noise (bridge work, pile driving, digging, cutting, lights, etc).
- 9 If any work extends onto homeowners property, the construction contract needs to include replacement of rear corner property markers. The project should also provide direct sound abatement to the homeowners, such as has been done for those residing near the San Diego airport. This should include sound dampening windows and insulation for walls and the attic.
- 10 I especially object to how late in the process Caltrans waited to seek community comments. Only after the EIR was completed and the funding was in its final approval, was the community informed and a meeting held. It is likely now too late and too costly to redo this pre-design and prepare an updated EIR. It was more of Caltrans telling the community what they were going to do at a time when real change was too late to incorporate. Seeking community input seems to be just another checkmark in the approval process; not one truly designed to reflect how Caltrans wishes to be a good neighbor.

4: The project would not increase truck traffic. Based on comments received by homeowners in the area a redesign is being considered to minimize the distance the off ramp is being shifted closer to homes.
5: Caltrans is required to consider the line of sight for truck stacks when developing a Noise Study Report and/or a Noise Abatement Report.
5A: Based on public input and comments, other alternative designs for noise abatement north of Governor Drive would be considered during the final design phase. These alternatives may include keeping a portion or all of the existing berm, shifting the proposed soundwall to the east away from the State right-of-way line, or increasing the length of the berm/soundwall combination. As stated in the IS/EA, "If during final design the conditions have substantially changed, noise abatement may not be necessary. The final decision of the noise abatement would be made upon completion of the project design and the public involvement processes."
6: Caltrans can ensure that all steps required to abate for noise were taken into consideration.
7: Depending on the alternative selected during the final design stage, it is possible that the new soundwall or berm would be in the same location as the existing. Therefore, it would not be possible to construct the soundwall or berm prior to the construction. However, during the final design phase, the possibility of scheduling the soundwall or soundberm in a specific stage of construction may allow wall or berm to be completed in a shorter time frame than the overall project.
8: See response to comment 7.
9: See Response to Letter 5 Comment 8. The project grading will not change the location of the property line. During the construction phase, the correct location of the property fence will be determined. At the completion of the construction project, the State R/W line will be located, and survey monuments will be placed along the State right-of-way line.
10: Caltrans follows both the state and federal laws in regards to public involvement.

In summary, the homes were in-place before the freeway was approved and constructed. Find solutions that will not further negatively impact our neighborhood – real solutions; not those based on biased and incomplete NHA models. The primary request are as follows:

- Do not move the off-ramp to the west, negating the need to remove the existing sound abatement berm and construct a new sound abatement wall.
- Find an alternative design solution for the south I805 on-ramp; not the elevated design that was identified in the EIR.
- If the off-ramp must be moved, minimize how much it is moved and place the new sound wall as far east as possible; not on the western edge of the Caltrans right of way.

Caltrans designer need to be more creative and find alternative solutions; ones that do not require that the existing off ramp be moved. And there needs to be a better solution to the Governor Drive to S-805 than building an unsightly, elevated ramp that will transmit extensive noise into the neighborhood.

Sincerely,

Concerned homeowners along Steinbeck Avenue and Enders Street



We'd like your comments! Your feedback is important to the overall success of the I-805 Managed Lanes North Project, and we thank you in advance for taking the time to provide your thoughts on this form.

1] As home owners on the Canyon rim our choice would be Alternative 1, section B-B. We are truly NOT interested in a 12' berm & a 12' back wall on top. Unfortunately, the current berm has shrunk in size. We didn't see any trucks, but now we see all trucks and can't imagine how long a berm with a back wall could possibly last/maintain its original height.

1: Based on the public input and comments during the PA/ED phase, both the current and other alternative designs for noise abatement north of Governor Drive would be considered during the final design phase. Noise Abatement Alternative 1 includes a section of grading on private property. This section requires 100 percent of the land owners to approve the Alternative and the grading on private property for this alternative to be selected. During the design phase, these alternatives and the owner views/opinions will be surveyed and coordination with the adjacent owners will occur to address any grading or other issues.

Optional. Please provide your contact information if you would like us to contact you. (Please Print)

Name Bobbie Day-DiSalvo
 Address 745 BOVET WAY, SD 92122
 Organization _____
 Phone 358-550-9900
 Email bday23@san.rr.com



We'd like your comments! Your feedback is important to the overall success of the I-805 Managed Lanes North Project, and we thank you in advance for taking the time to provide your thoughts on this form.

1 We are very interested in alternative 1,
on ONE CONDITION.

When you showed us the cross section plans at the library about a 1 1/2 yrs ago, you showed that to create the turn and designate it closer to our property, you showed that our back yard area would be tiered in 2 levels.

I would support the earthen berm if we and give up all the trees and vegetation in our back yard, if and only if our back yard level would be the same level that the fill will be leveled to.

I would like to have the use of that area at least.

Please assist us in a small redesign to create a level plot on our land.

Thanks for your understanding & consideration

Optional: Please provide your contact information if you would like us to contact you. (Please Print)

Name: MARK EFRON
Address: 7315 STEINBECK AVENUE SD, CA 92122
Organization:
Phone: (858) 225 4610
Email: mm1sr@sbcglobal.net

1: Based on the public input and comments during the PA/ED phase, both the current and other alternative designs for noise abatement north of Governor Drive will be considered during the final design phase. The Noise Abatement Alternative 1 includes a section of grading on private property. This section requires 100 percent of the owners to approve the Alternative and the grading on private property for this alternative to be selected. During the design phase, these alternatives and the owner views/opinions will be surveyed and coordination with the adjacent owners will occur to address any grading or other issues.

3/4/10

David Nagy
 California Department of Transportation
 4050 Taylor Street, MS-242
 San Diego, CA. 92110

Mr. Nagy,

I am submitting my comments via mail and email concerning the Proposed Interstate-805 Managed Lanes North Project as instructed during our attendance at the public hearing on 2/23/10 at the UTC Forum Hall. Our family has resided at 7241 Steinbeck Avenue since 1995 and per your maps this area is greatly impacted by the proposed project.

- 1 We endured the last project in 1999-2001 (Nobel Drive interchange) and the construction of a dirt berm along the back of our property. This berm was the least expensive substitute for the proposed sound wall at that time. The weeks of construction were noisy, dirty, and intrusive. This construction caused a major disruption in our lives.
- 2 At the meeting we were told that for this project there would be a need for a construction easement and that the duration would be for over a year. I state that this is completely unacceptable as the proposed length is unreasonable and the loss of use of our backyard, the disruption to our lives and the proximity of the construction equipment to the rear of our house is dangerous. There needs to be a solution to construct the proposed sound wall without this easement.
- 3 Looking at your drawings of the North Proposed Noise Barrier Alt. 1 and 2 (Section A-A) it appears that there is ample room for the construction and location of the wall to be facilitated entirely between the realigned off ramp and your right-of-way line at the back of our property. Furthermore the switching of the locations of the park-n-ride and the southbound on ramp causing the realignment of the off ramp appears to be a waste of time and money as in the end it accomplishes the same as the current configuration.
- 4 The height of the sound wall in our location absolutely needs to be the 12 feet as proposed in Alt. 2, any lower will not give the full noise attenuation as the current 12 height of the berm.

In conclusion, we would appreciate your feedback and ask that you keep us informed as this process continues.

Thank you,

Richard and Deborah Shea
 7241 Steinbeck Ave
 dshea1@san.rr.com

<p>1: Construction impacts would be temporary impacts. Caltrans would make every effort to limit the impacts to homeowners in the area.</p>
<p>2: The current proposal to have the proposed soundwall on the property line (State right-of-way line) would require temporary construction easements. The adjacent homeowners would need to approve of these easements. Based on the public input and comments during the PA/ED phase, both the current and other alternative designs for noise abatement north of Governor Drive would be considered during the final design phase.</p>
<p>3: Based on the public input and comments during the PA/ED phase, other alternative designs for noise abatement north of Governor Drive would be considered during the final design phase. These alternatives may include keeping a portion or all of the existing berm, shifting the proposed sound wall to the east away from the State right-of-way line, or increasing the length of the berm/sound wall combination. As stated in the IS/EA, "If during final design the conditions have substantially changed, noise abatement may not be necessary. The final decision of the noise abatement would be made upon completion of the project design and the public involvement processes."</p>
<p>4: The Federal Highway Administration (FHWA) requires Caltrans to study and propose sound walls through a process of Feasibility and Reasonableness. The proposed (10ft) sound wall near your property is feasible since it provides a 5dB insertion loss and it is also considered cost reasonable, thus it is being recommended. Each noise barrier has been evaluated for feasibility based on achievable noise reduction. For each noise barrier found to be acoustically feasible, reasonable cost allowances were calculated. For the proposed Alternative 1, the (10ft) sound wall met all the requirements needed to be recommended. Also, all geometric and traffic conditions warrant the proposal of this wall. Alternative 2, the 12ft sound wall can only be recommended for more severe noise impacts that can come from having much different traffic and geometric conditions.</p>

Mr. Nagy,

I have had the opportunity to review the I-805 Managed Lanes North Project Initial Study With Proposed Mitigated Negative Declaration / Environmental Assessment , with an issue date of February 2010 and signed for by Susan Glasgow, Deputy District Director – Environmental for Caltrans on February 1, 2010.

I take exception to the following information contained in this proposed Mitigated Negative Declaration, request that you review and respond to these comments, and to not issue the final version of this declaration until such time as these issues have been addressed and satisfied.

These items are:

- 1] As the owner of parcels #'s 343-010-19 & 341-321-37, portions of which were claimed for ROW easements for this project, I never received any notice of the public hearing scheduled to discuss this draft report, which was held on February 23, 2010. This failure to notify violates the requirements for proper notification and public responses.
- 2] Page v of the draft report, under the Determination Section states, " The proposed project would have no effect on Hydrology / Floodplain." This is untrue. According to the FIRM map issued by FEMA for the Carroll Canyon Creek streambed at this location, the permanent easement as well as the temporary construction easement for this project clearly encroach into the base floodway for this channel. As such the statement contained in this report concerning

1: Caltrans posted a notice of public hearing in the San Diego Union Tribune 15 days prior to the public hearing which was held on February 23, 2010.

2: One proposed column is within the floodway boundaries. Temporary construction access would not require existing ground elevations to change. Caltrans uses the HEC-RAS computer model to determine if there would be a change on a 100-year flood event. The model showed no change in water surface elevation between the existing condition and the proposed condition model.

no effect on hydrology / floodplain is materially false. By encroaching into the Carroll Canyon Creek floodway channel, storm flowage will be displaced from its existing floodway and diverted onto my property causing substantial damage and considerable loss in value to my property. This further violates the requirements of the US Fish & Game Department as well as the RWQCB as it concerns the altering of streambeds.

- 3 Page v of the report also states, " The proposed project will have no significant effect on: Wetlands and other waters, and water quality. This is false as well due to the reasons as stated above.
- 4 Page vi of the report states in part, " Appropriate BMP's would be used – no sediment or debris would be allowed to enter the vernal pools, creeks, rivers, or other drainages." Caltrans has already violated this requirement. Construction on this project began in December of 2009, 2 MONTHS **BEFORE** THIS REPORT WAS ISSUED. Heavy construction equipment was utilized in the floodway of the Carroll Canyon Creek to perform clear & grub operations. **NO BMP'S OF ANY KIND WERE UTILIZED WHILE THIS WORK WAS BEING PERFORMED** . Further, 2 weeks later, after the work had been completed, the multiple storm systems traversing through San Diego caused considerable runoff of the recently denuded creek banks and carried large quantities of silt and debris generated by Caltrans' recent construction activity directly into Carroll Canyon Creek which empties directly into the Los Penasquitos Preserve Lagoon 2 miles downstream. I have attached photographs of the Caltrans construction activity clearly depicting a lack of any BMP's as well as photographs of the silt and debris laden runoff from the subsequent storms.
- 5 Page vii states that "onsite" mitigation will be performed to offset the impacts to ESWL caused by the project. However, there are no descriptions in the report depicting the location of where this mitigation is to occur. Please forward this information to my attention.
- 6 The report states that the following approvals are needed and are currently pending: US Fish & Wildlife, US Army Corp of Engineers, California Fish & Game, and RWQCB. Please forward the approval permits from these respective agencies upon your receiving them.
- 7 Page 21 of the report states in part, "Although the proposed project encroaches upon existing floodplains immediately upstream from the proposed bridge widening at Carroll Canyon, it would not exceed the Federal Emergency Management Agency (FEMA) 100 year floodplain boundary. The proposed project would not impact any hydrology or floodplain values. This statement is false for the reasons as stated in item #1.

I look forward to receiving your response in the near future.

Christian P. Tresize P.E.
Canyon Properties LLC

3: Page vii of the document identifies proposed mitigation for impacts to wetlands and other waters that reduces the impacts to less than significant. After mitigation there is no significant effect to waters and other wetlands.

4: The initial clearing of vegetation for the Carroll Canyon Road extension project is currently underway information regarding the Carroll Canyon Road extension project can be found on the Caltrans District 11 website. Work for the 805 Managed Lanes North project has not begun.

5: As stated on page vii temporary impacts will be revegetated onsite at a 1:1 ratio. The term ESWL is not used. Temporary impact areas would be revegetated and restored to pre-existing conditions.

6: Agencies post copies of permits on their respective websites. Permits for the 805 Managed Lanes North project would be obtained at the conclusion of the PA/ED phase of the project and can be requested at that time.

7: See response to comment 2

Public Utilities Commission

Response to Comments

STATE OF CALIFORNIA

ARNOLD SCHWARZENEGGER, Governor

PUBLIC UTILITIES COMMISSION

320 WEST 4TH STREET, SUITE 500
LOS ANGELES, CA 90013



March 10, 2010

David Nagy
Caltrans, District 11
4050 Taylor Street
San Diego, CA 92110

Dear Mr. Nagy:

Re: SCH# 2010021032; Caltrans Interstate 805 Managed Lanes North

The California Public Utilities Commission (Commission) has jurisdiction over the safety of highway-rail crossings (crossings) in California. The California Public Utilities Code requires Commission approval for the construction or alteration of crossings and grants the Commission exclusive power on the design, alteration, and closure of crossings.

The Commission's Rail Crossings Engineering Section (RCES) staff is in receipt of the Mitigated Negative Declaration (MND) for the Caltrans Interstate 805 Managed Lanes North project and has reviewed the document for impacts to highway-rail crossings.

Caltrans proposes to add four managed lanes (two in each direction) on Interstate 805 from State Route 52 to La Jolla Village Drive. Two high occupancy vehicle lanes (one in each direction) from La Jolla Village Drive to just north of Mira Mesa Blvd. The project would also construct a transit station, Direct Access Ramp at Novel Drive, a park-n-ride at Governor Drive, the south facing portion of the Carroll Canyon DAR, and a direct connector from SR 52 to the I-805 Managed Lanes.

The proposed project is adjacent to the Metropolitan Transit System (MTS) tracks. Please provide staff with additional detail on the project specifically the proposed transit station. Staff is interested in the operation of transit station and whether the station would be used to service MTS patrons.

If you have any questions or if you would like to discuss these recommendations further, you may contact me at (213) 576-7076 or ldi@cpuc.ca.gov

Sincerely,

Laurence Michael
Utilities Engineer
Rail Crossings Engineering Section
Consumer Protection & Safety Division

1: Laurence Michael, Utilities Engineer with the Public Utilities Commission was contacted. It was conveyed that the design of the Nobel Drive Park and Ride/Bus Rapid Transit Station is being studied for a potential redesign due to the presence of biological resources. Once the issue with the Nobel Drive Park and Ride/Bus Rapid Transit Station is resolved, copies of the design will be provided.

Department of Toxic Substances

Response to Comments



Maziar Movassaghi, Acting Director
5796 Corporate Avenue
Cypress, California 90630



March 9, 2010

Mr. David Nagy
Caltrans, District 11
4050 Taylor Street
San Diego, California 92110

DRAFT MITIGATED NEGATIVE DECLARATION (ND) FOR INTERSTATE 805
MANAGED LANES NORTH (SCH# 2010021032)

Dear Mr. Nagy:

The Department of Toxic Substances Control (DTSC) has received your submitted document for the above-mentioned project. As stated in your document: "The California Department of Transportation proposes to add four managed lanes on Interstate 805 from State Route 52 to La Jolla Village Drive. Two high occupancy vehicle lanes (one in each direction) from La Jolla Village Drive to just north of Mira Mesa Blvd. The project would also construct a transit station, Direct Access Ramp at Nobel Drive, a park-n-ride at Governor Drive, the south facing portion of the Carroll Canyon DAR, and a direct connector from SR-52 to the 1-805 Managed Lanes".

Based on the review of the submitted document DTSC has the following comments:

- 1) The ND should identify and determine whether current or historic uses at the project area may have resulted in any release of hazardous wastes/substances.
- 2) The document states that the ND would identify any known or potentially contaminated sites within the proposed project area. For all identified sites, the ND should evaluate whether conditions at the site may pose a threat to human health or the environment. Following are the databases of some of the regulatory agencies:
 - National Priorities List (NPL): A list maintained by the United States Environmental Protection Agency (U.S.EPA).
 - EnviroStor, a database primarily used by the California Department of Toxic Substances Control, at [www. Envirostor.dtsc.ca.gov](http://www.Envirostor.dtsc.ca.gov).

♻️ Printed on Recycled Paper

1: Measures would be identified in the MND to avoid or mitigate any potential impacts that may occur related to hazardous waste issues/materials. Since no impacts were identified in the records search and review, no Phase II Environmental Site Investigations will be necessary or performed for this project

2: Since no impacts were identified in the MND no associated avoidance, minimization or mitigation measures are proposed. A review of the records search has been completed using First Search Database search utilizing all pertinent regulatory agency records.

Department of Toxic Substances

Response to Comments

Mr. David Nagy
March 9, 2010
Page 2

- Resource Conservation and Recovery Information System (RCRIS): A database of RCRA facilities that is maintained by U.S. EPA.
- Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS): A database of CERCLA sites that is maintained by U.S. EPA.
- Solid Waste Information System (SWIS): A database provided by the California Integrated Waste Management Board which consists of both open as well as closed and inactive solid waste disposal facilities and transfer stations.
- GeoTracker: A List that is maintained by Regional Water Quality Control Boards.
- Local Counties and Cities maintain lists for hazardous substances cleanup sites and leaking underground storage tanks.
- The United States Army Corps of Engineers, 911 Wilshire Boulevard, Los Angeles, California, 90017, (213) 452-3908, maintains a list of Formerly Used Defense Sites (FUDS).

- 3) The ND should identify the mechanism to initiate any required investigation and/or remediation for any site that may be contaminated, and the government agency to provide appropriate regulatory oversight. If hazardous materials or wastes were stored at the site, an environmental assessment should be conducted to determine if a release has occurred. If so, further studies should be carried out to delineate the nature and extent of the contamination, and the potential threat to public health and/or the environment should be evaluated. It may be necessary to determine if an expedited response action is required to reduce existing or potential threats to public health or the environment. If no immediate threat exists, the final remedy should be implemented in compliance with state laws, regulations and policies.
- 4) The project construction may require soil excavation and soil filling in certain areas. Appropriate sampling is required prior to disposal of the excavated soil. If the soil is contaminated, properly dispose of it rather than placing it in another location. Land Disposal Restrictions (LDRs) may be applicable to these soils. Also, if the project proposes to import soil to backfill the areas excavated, proper sampling should be conducted to make sure that the imported soil is free of contamination.

3: Measures would be identified during the MND to avoid or mitigate any potential impacts that may occur related to hazardous waste issues/materials. Since no impacts were identified in the records search and review, no Phase II Environmental Site Investigations will be necessary or performed for this project. Since no impacts were identified in the MND no associated avoidance, minimization or mitigation measures are proposed. A review of the records search has been completed using First Search Database search utilizing all pertinent regulatory agency records. It is not anticipated to encounter any hazardous waste on this project, but, if unexpected hazardous waste is encountered a site-specific Health and Safety Plan and Hazardous Waste Management Plan shall be prepared by qualified personnel and would be designed to minimize risk to human health and the environment during construction.

4: Soil will be exported for this project. Based upon investigations that were conducted as part of the Environmental Site Assessment Investigation, the soil excavated at the site would not be considered a hazardous waste with respect to lead according to Title 22 of the California Code of Regulations. Therefore, no restrictions are required on the use of the excavated soils. If unsuspected or unknown hazardous wastes are encountered during construction, an investigation and characterization would be performed in accordance with local, state, and federal regulations to evaluate the nature and extent of contamination, and to evaluate the potential threat to public health or the environment. This would be followed by appropriate remediation, if necessary. Fill imported for the project would be sampled/tested to ensure that the imported soil is free of contamination.

Department of Toxic Substances

Response to Comments

Mr. David Nagy
 March 9, 2010
 Page 3

- 5) Human health and the environment of sensitive receptors should be protected during the construction or demolition activities. A study of the site overseen by the appropriate government agency might have to be conducted to determine if there are, have been, or will be, any releases of hazardous materials that may pose a risk to human health or the environment.
- 6) If during construction/demolition of the project, soil and/or groundwater contamination is suspected, construction/demolition in the area should cease and appropriate health and safety procedures should be implemented. If it is determined that contaminated soil and/or groundwater exist, the ND should identify how any required investigation and/or remediation will be conducted, and the appropriate government agency to provide regulatory oversight.
- 7) If weed abatement occurred, onsite soils may contain herbicide residue. If so, proper investigation and remedial actions, if necessary, should be conducted at the site prior to construction of the project.
- 8) If it is determined that hazardous wastes are, or will be, generated by the proposed operations, the wastes must be managed in accordance with the California Hazardous Waste Control Law (California Health and Safety Code, Division 20, Chapter 6.5) and the Hazardous Waste Control Regulations (California Code of Regulations, Title 22, Division 4.5). If it is determined that hazardous wastes will be generated, the facility should also obtain a United States Environmental Protection Agency Identification Number by contacting (800) 618-6942. Certain hazardous waste treatment processes or hazardous materials, handling, storage or uses may require authorization from the local Certified Unified Program Agency (CUPA). Information about the requirement for authorization can be obtained by contacting your local CUPA.
- 9) DTSC can provide guidance for cleanup oversight through an Environmental Oversight Agreement (EOA) for government agencies that are not responsible parties, or a Voluntary Cleanup Agreement (VCA) for private parties. For additional information on the EOA or VCA, please see www.dtsc.ca.gov/SiteCleanup/Brownfields, or contact Ms. Maryam Tasnif-Abbasi, DTSC's Voluntary Cleanup Coordinator, at (714) 484-5489.

5: A Site Safety Plan, which addresses the management of potential health and safety hazards to workers and the public, would be prepared as part of this project.
6: It is not anticipated to encounter any hazardous waste on this project, but, if unexpected hazardous waste is encountered a site-specific Health and Safety Plan and Hazardous Waste Management Plan would be prepared by qualified personnel that would be designed to minimize risk to human health and the environment during construction.
7: There is no evidence of herbicide storage, mixing, or unlawful release within the project limits. As such, testing for herbicides was not indicated nor performed.
8: Comment Noted
9: Comment Noted

Department of Toxic Substances

Response to Comments

Mr. David Nagy
March 9, 2010
Page 4

If you have any questions regarding this letter, please contact me at (714) 484-5472 or at "ashami@DTSC.ca.gov".

Sincerely,



Al Shami
Project Manager
Brownfields and Environmental Restoration Program - Cypress

cc: Governor's Office of Planning and Research
State Clearinghouse
P.O. Box 3044
Sacramento, California 95812-3044

CEQA Tracking Center
Department of Toxic Substances Control
Office of Environmental Planning and Analysis
1001 I Street, 22nd Floor, M.S. 22-2
Sacramento, California 95814
ADelacr1@dtsc.ca.gov

CEQA #2819

Chapter 4 – List of Preparers

This IS/EA was prepared by the San Diego Region of the California Department of Transportation (Caltrans). The following Caltrans staff prepared this document.

Alsheikh, May - Registered Transportation Engineer, NPDES/Storm Water Compliance Branch, B.S. Civil & Environmental Engineering from San Diego State University, 10 years Caltrans experience.

Ambrosi, Rafael – Environmental Engineering/Air Studies, M.S. Civil Engineering from San Diego State University, M.S. Computer Science from San Diego State University, B.S. Bioengineering from the University of San Diego, 1 year Caltrans experience.

Baird, Gladys - Associate Environmental Planner (Natural Sciences), B.S. Biology from California State University, San Diego: 9 years Caltrans experience.

Barron, Claudia - Graphic Designer III, B.F.A. Illustration from Syracuse University, 19 years Caltrans experience.

Basinski, Katie –Associate Environmental Planner, B.A. Geography from San Francisco State University, 3 years Caltrans experience.

Crafts, Karen – Associate Environmental Planner (Archaeology), B.A. Anthropology, 28 years Caltrans experience.

Dominici, Debra – Registered Professional Archaeologist (RPA), B.A. Environmental Resource Studies, M.A. Anthropology, San Diego State University, 30 years Caltrans experience.

Nagy, Dave – Environmental Branch B Chief, B.S. Forestry and Natural Resource Management from California Polytechnic State University, San Luis Obispo, 10 years Caltrans experience.

Pedersen, Michael - Environmental Engineering (Noise), Transportation Engineer, Bachelor of Engineering (Civil) from University of Sydney, Sydney, Australia; 10+ years experience; 4 years Caltrans experience.

Scatolini, Susan – District Biologist, BA Aquatic Biology, University of California at Santa Barbara, M.S. Ecology, San Diego State University, 10 years Caltrans experience.

Trudell, Michelle - Associate Environmental Planner, M.A. City Planning from San Diego State University, B.A. Environmental Studies from University of California Santa Barbara, 11 years Caltrans experience.

Vermeuleun, Diane – Transportation Engineer, Civil Engineering, San Diego State University, 18 years Caltrans experience.

Zhang, Danielle – M.A. Landscape Architecture, University of Guelph, Canada, 10 years Caltrans experience.

Chapter 5 – Distribution List

City of San Diego, Development Services Dept. Attn: Myra Herrmann 1222 First Avenue, MS-501 San Diego, CA 92101	City of San Diego, Planning and Community Investment Dept. – MSCP 202 C Street, MS-5A San Diego, CA 92101	US Department of Transportation FHWA South Region CA Division Attn: Cesar Perez 650 Capitol Mall, Ste 4-100 Sacramento, CA 95814
Ms. Chiara Clemente Regional Water Quality Control Board San Diego Region 9174 Sky Park Court, Suite 100 San Diego, CA 92123	Mr. Gabriel Buhr California Coastal Commission San Diego District 7575 Metropolitan Dr, Ste 103 San Diego, CA 92108-4402	US General Services Administration San Diego Field Office Edward J. Schwartz Federal Building 880 Front Street San Diego, CA 92101-8897
City of San Diego City Clerk 202 C Street, 2nd Floor San Diego, CA 92101	CA Department of Fish & Game 4949 Viewridge Avenue San Diego, CA 92123	County of San Diego County Clerks Office 1600 Pacific Highway, Room 402 San Diego, CA 92101
San Diego Association of Governments 401 B Street, Suite 800 San Diego, CA 92101	University Community Branch Library 4155 Governor Drive San Diego, CA 92122-2501	CHP-Border Division 9330 Farnham Street San Diego, CA 92123-1216
US Fish & Wildlife Attn: Kurt Roblek 6010 Hidden Valley Road Carlsbad, CA 92001	CA Public Utilities Commission San Francisco Office (Headquarters) 505 Van Ness Avenue San Francisco, CA 94102	State Clearing House Office of Planning & Research 1400 Tenth Street Sacramento, CA 95814
North University Community Branch Library 8820 Judicial Drive San Diego, CA 92122-4684	California Transportation Commission - Division of Environmental Analysis 1120 N Street, Room 2221 (MS-52) Sacramento, CA 95814	Mark Efron 7315 Steinbeck Ave San Diego, CA, 92122
US Army Corps of Engineers Los Angeles District 915 Wilshire Blvd., Ste 980 Los Angeles, CA 90017	Ellen & Glenn Minter 7155 Enders Ave San Diego, CA, 92122	Council Member Donna Frye District 6 202 C Street, MS #10A San Diego, CA 92101
California Department of Toxic Substances Control 9174 Sky Park Court, Suite 150 San Diego, CA 92123	Richard & Deborah Shea 7241 Steinbeck Ave San Diego, CA, 92122	San Diego Gas & Electric Company 8315 Century Park Court, CP21E San Diego, CA 92123 Attention: Dashiell S. Meeks, PE, AICP
Metropolitan Transit Services 1255 Imperial Avenue, Ste. 1000 San Diego, CA 92101-7490	Ms. Linda Pardy 2707 K Avenue National City, CA, 91950-7563	City of San Diego Engineering Capital Projects 600 B Street MS-908A San Diego, CA 92101
Disalvo Trust 7445 Bovet Way San Diego, CA, 92122	Weyer Family Trust 7125 Enders Ave San Diego, CA, 92122	James & Debra Dawson Trust 7233 Steinbeck Ave San Diego, CA, 92122
Sol Rochman & Meryl Revoc Trust 7131 Enders Ave San Diego, CA, 92122		

Appendix A:
Resources Evaluated Relative to the
Requirements of Section 4(f)
For the Interstate-805 Managed Lanes North Project
San Diego, California

CHAPTER 1: INTRODUCTION

The following discusses existing and planned properties adjacent to the proposed Interstate 805 Managed Lanes North Project (805 North Project) that may warrant protection under Section 4(f) of the U.S. Department of Transportation (USDOT) Act of 1966. The document begins with a discussion of resources that do not warrant protection under Section 4(f) because the resources are not a public park, recreation area or historic property, or the resources are not publicly owned. The properties are evaluated with respect to any proximity impacts resulting from the proposed project. In instances where there is an actual use of a portion of a 4(f) resource, this impact is evaluated with references to de minimis criteria.

The environmental review, consultation, and any other action required in accordance with applicable Federal laws for this project is being, or has been, carried-out by Caltrans under its assumption of responsibility pursuant to 23 U.S.C. 327. The discussion is prepared in support of the Draft Mitigated Negative Declaration / Environmental Assessment (Draft MND/EA) being prepared for the proposed project. Figure A1 shows the locations of the potential 4(f) resources evaluated in this document.

Section 4(f) of the USDOT Act of 1996, codified in federal law as 49 U.S.C. 303, declares that “[it] is the policy of the United States Government that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites.”

Section 4(f) specifies that “the Secretary [of Transportation] may approve a transportation program or project...requiring the use of any publicly owned land from a public park, recreation area, wildlife and waterfowl refuge of national, State or local significance, or land of an historic site of national, State, or local significance (as determined by the Federal, State or local officials having jurisdiction over the park, area, refuge, or site) only if:

- (1) There is no prudent and feasible alternative to using that land; and

(2) the program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from such use.

Section 4(f) also requires consultation with the Department of the Interior and, as appropriate, the involved offices of the Department of Agriculture and Housing and Development in developing transportation projects and programs that use lands protected by Section 4(f). Reviews by these Departments are not required for Programmatic 4(f) Evaluations or de minimis findings.

This evaluation is organized into three chapters: Chapter 1 addresses regulatory language, Chapter 2 offers a brief project description of each build alternative, and Chapter 3 identifies all potential Section 4(f) properties within a half mile radius of the project.

CHAPTER 2: PROJECT DESCRIPTION

One build alternatives and one no-build alternative are under consideration for the 805 North Project. These alternatives are briefly described as follows. Please refer to Chapter 2 of the Draft EA/IS for a detailed description of the project alternatives:

Proposed Project

The I-805 North Project is located in the City of San Diego, on Route 805 (Post mile 23.3) from just south of Route 52 to just north of the Mira Mesa Boulevard Undercrossing (Post mile 27.7). The project covers a distance of approximately 4.4 miles. The project proposes to construct four managed lanes (two lanes in each direction) in the freeway median from Route 52 to Carroll Canyon Road and single HOV (High Occupancy Vehicle) lanes from Carroll Canyon Road to Mira Mesa Boulevard. These median lanes would result in shifting the existing main lanes and auxiliary lanes to the outside. These mainlane shifts would result in the realignment of all existing ramps within the project limits. Existing overcrossing and undercrossing structures will need to be modified to accommodate the proposed cross-section. Retaining walls will be placed along the route at appropriate locations to minimize right-of-way impacts. Noise barriers may be placed at some locations within the project limits. Modifications have been proposed in the Governor Drive interchange in order to increase the weaving distance

between the existing Governor Drive on-ramp to southbound I-805 and the connector from southbound I-805 to westbound Route 52. The existing southbound on-ramp will be replaced by a loopramp originating from the westbound side of Governor Drive and this would result in the relocation of the existing Park and Ride lot at this area to the southwest side of the Governor Drive interchange.

Additional transit features consist of Direct Access Ramps (DAR) at Nobel Drive and Carroll Canyon Road (southbound only), a Park and Ride/ Bus Rapid Transit (BRT) Station at Nobel Drive, and an HOV/transit Direct Connector Ramp for the Route 52/ Route 805 Interchange (westbound to northbound and, southbound to eastbound).

In the median, both northbound and southbound, four 12-ft PCC lanes are proposed and are separated by a Type 60 concrete barrier. In each direction, 10-ft PCC inside shoulders will be adjacent to the concrete median barrier. A 4-ft buffer and continuous HOV ingress/egress will be used to separate the HOV/Transit lanes from the mixed-flow lanes. HOV/transit direct connectors will be two-lane structures, with one lane in each direction separated by a Type 60 concrete barrier, with 5-ft inside shoulders, 12-ft lanes and 10-ft outside shoulders. For locations with a DAR, the HOV/transit lanes will be separated from the DAR with a combination of barriers and retaining walls.

No Build Alternative

The No-Build Alternative would include normal maintenance or the reconstruction of a facility to modern, safe, and structurally adequate standards without increasing capacity in the transportation corridor. The No-Build Alternative implies an evaluation of existing conditions; a projection of existing conditions based on the best available information on population increase, density, and location, the availability and use of resources, and the conditions of the environment resulting from available transportation; and a comparison of the existing and project situation after the improved transportation system is provided (Adams 1973).

CHAPTER 3: DISCUSSION OF PROPERTIES

Field reconnaissance and reviews of applicable general plans, parks and recreation websites, and Google Earth aeriels were used to identify resources that could potentially be subject to evaluation under Section 4(f). All potential Section 4(f) properties within a half-mile of the build alternative were identified.

From this analysis, the following list was developed (Table A1). The location of each property is shown in Figure A1. After assembly of this list, the properties were researched to determine if they met the criteria for eligibility as Section 4(f) properties. The remaining properties were inspected to confirm their location with respect to the proposed project and to inventory the attributes of each property. Properties that are over a half-mile from the proposed project are not included in the analysis.

Table A1: Potential Section 4(f) Resources and Distance from I-805 North Project

Resource	City	Dist (mi) to I-805
Innovation Middle School	San Diego	0.46
MacDowell Park	San Diego	0.36
Marian Bear Memorial Park	San Diego	0.01
University Garden park	San Diego	0.37
University Village park	San Diego	0.25
Nobel Athletic Fields and Recreation Center	San Diego	0.21
Rose Canyon Open Space	San Diego	0.05

3.1 Resources Not Protected by Section 4(F)

Table A2 provides a list of the properties that were evaluated but were found not to warrant protection under Section 4(f). Although the properties listed below have the potential to be parks, recreational facilities, wildlife refuges and historic properties found within or adjacent to the project area, they do not trigger Section 4(f) because: 1) they are not publicly owned, 2) they are not open to the public, 3) they are not eligible historic properties, 4) the project does not permanently use the property and does not hinder the preservation of the property, or 5) the proximity impacts do not result in constructive use.

The following section briefly characterizes the resources found within a half-mile limit from the proposed project which were found not to be eligible for protection under Section 4(f).

Table A2: Resources Not Protected by Section 4(f)

Resource	City	Type	Dist (mi) to I-805
Innovation Middle School	San Diego	playground and fields	0.46

Innovation Middle School

Innovation Middle School is located on the west side of I-805 south of SR-52. The school sits directly south of MacDowell Park in the Clairemont Mesa Community. It is located approximately 0.46 miles south of the proposed project. The school opened in the fall of 2008 and focuses on education in science, technology, engineering, and mathematics for 7th and 8th grades. Recreational equipment at this location includes fields, basketball and handball courts, and playground equipment. The play area is located behind the school between the buildings and I-805. These facilities are not open to the public after school hours.

3.2 Section 4(F) Resources Evaluated for Proximity Impacts

Constructive use (23 CFR 774.15) involves the evaluation of indirect or “proximity impacts” to a 4(f) resource. No actual use or “take” is involved. A constructive use occurs when the project’s proximity impacts are so severe that the protected activities, features or attributes that affords the resource for protection under Section 4(f) are “substantially impaired.” Substantial impairment occurs only when the protected activities, features or attributes are substantially diminished by the proposed project.

All public and publicly accessed parks, recreational facilities, and wildlife refuges within approximately 0.5 mi of the project have been identified and inspected. The attributes contributing to the Section 4(f) resources listed in Table A3 below have been inventoried and the effects of the project upon access, visual, noise, vegetation, wildlife, air quality and water quality have been considered. It has been determined that the proposed

project would not result in a constructive use due the project's proximity to these resources. Each of these Section 4(f) resources is described briefly below.

Table A3: Section 4(f) Resources and Distance from I-805 North Project

Resource	City	Type	Dist (mi) to I-805
MacDowell Park	San Diego	community park	0.36
Marian Bear Memorial Park	San Diego	Trails, open space	0.01
University Garden park	San Diego	community park	0.38
University Village park	San Diego	community park	0.25
Nobel Athletic Fields and Recreation Center	San Diego	community park	0.21
Rose Canyon Open Space	San Diego	Trails, open space	0.05

MacDowell Park

MacDowell Park is a 7.2 acre neighborhood park that is owned by the City of San Diego. It is located west of I-805 and south of SR-52 in the Community of Clairemont Mesa. The park is located 0.36 miles south of the proposed project, directly adjacent to I-805. The park has a large, flat, open grassy area with picnic benches and a sandy area with dedicated playground equipment. The eastern edge of the park is bounded by a meandering sidewalk/bike path that continues south of the park parallel to I-805. It is surrounded by numerous large eucalyptus trees. Access is achieved by City streets and parking is available directly in front of the park. Given the public ownership of the park, it is clear that McDowell Park is a Section 4(f) resource.

In this area, the I-805 is located below the urban development on the mesa tops. Here, the park is situated well above (although adjacent to) the freeway. Given this context, the only park functions and/or activities that could be impacted by the proposed project would be those that have visual or auditory components.

With respect to visual, from the park, one sees residential development to the north and west, commercial and industrial areas to the north and on the opposite side of the freeway (east), and a school play ground to the south. One would have to go to the

eastern edge of the park to see the freeway below. Because the project is located north of the park and is located well beneath it, none of the proposed project improvements would be seen by park visitors as they would be shielded by the existing development and the large trees. As stated above, the park is directly adjacent to I-805 and is therefore located in an already noisy context. People use the park despite its proximity to the freeway. Given the distance from the proposed project, park users would not notice any increase in noise level when compared to the existing condition.

Due to its distance from the proposed improvements, elevation above the freeway, and shielding from existing structures, the proposed project would not impact any of the park's recreational features or attributes. The proposed project would not cause a constructive use of MacDowell Park because the proximity of the project would not substantially impair the protected activities, features, or attributes of the park.

Marian Bear Memorial Park

As described by the City of San Diego, Marian Bear Memorial Park is located in San Clemente Canyon directly south of SR-52. It stretches from I-5 to I-805 in the Clairemont Mesa Community. The park is owned by the City of San Diego. It provides 467-acres of dedicated natural parkland and includes finger canyons and mesas on the south side. There are over three miles of mostly flat trails along the length of the canyon, with more challenging hiking available on the trails in several of the finger canyons leading up to the mesa tops. Biking is permitted on the maintenance roads in the canyon however no equestrian use is permitted. Major entries to the park are off of Genesee Avenue and Regents Road, where parking and picnic areas with restroom facilities are available. A Park Ranger assigned to the park area provides interpretive programs, public assistance, guidance, enforcement, and protection. In terms of the park's spatial relationship to the proposed project, only its extreme eastern edge (the portion accessed by the Limerick Avenue trailhead) is adjacent to the project. In this area and depending on where one is located within the park (canyon top or bottom), the freeway is either visually blocked by hills/freeway cut slopes or partially shielded by the mature vegetation in the park, respectively. At this location, changes closest to the park would include minor ramp and freeway widening that would not be much different than what currently exists.

An important purpose of the park is to provide a natural setting for recreational hiking and biking. This natural setting is integral to the park. Users enjoy the main canyon and its tributaries which support a population of resident wildlife including raccoons, skunks, rabbits, amphibians, reptiles, and birds, and serve as a pathway for coyote, fox, and other mammals. Along the length of the canyon are oak, sycamore, and willow trees and their undergrowth of native and other plant species. There is riparian woodland along the creek beds and side canyons where water flows. The hillsides contain coastal sage scrub and chaparral. Although the park is important for the natural setting it provides its users, it is situated directly adjacent to a busy freeway (SR-52) for its entire length and abutted at each end by two other heavily traveled transportation corridors, I-5 and I-805. Even with these freeways so close to the park, it is enjoyed by users despite its context within an urban, built environment.

Given its public ownership and the fact that the park is open to the public for their enjoyment, it is clear that Marian Bear Memorial Park is a Section 4(f) resource. In addition to considering both auditory and visual impacts that may result as part of the proposed project, impacts to the vegetation and wildlife had to be considered given their importance to the park.

Habitat within Marian Bear Park in the vicinity of I-805 is dominated by southern willow scrub and riparian woodland dominated by sycamore trees (*Platanus racemosa*) along San Clemente Creek. The slopes of the canyon are a mixture of coastal sage scrub and chaparral habitat with some coast live oak woodland. An endangered plant, willowy monardella (*Monardella viminea*), is found along San Clemente Creek in a part of the park where a revegetation project was completed. Coastal California gnatcatcher (*Polioptila californica californica*) inhabit the slopes of the park in coastal sage scrub. The park is an important wildlife corridor that connects the park with open habitat east of I-805. The project will minimally impact some wetlands and coastal sage scrub within Caltrans right of way adjacent to the park, but it will not effect the wildlife corridor along San Clemente Creek under I-805

With respect to any auditory impacts, noise measurements were taken at three locations in the eastern most area of Marian Bear Memorial Park to determine if the proposed project would affect noise levels. Existing noise measurements in this part of the park

range from 63 to 72 dBA. With the proposed project in place, the measurements showed an increase of only 0.2 dBA over the existing noise levels. This increase would be unperceivable.

Due to the freeways location below surrounding grade, views of the project from the park are limited and would remain consistent with existing views. Users currently see a shielded view of the freeway, this would not change and the additional infrastructure would not be noticeable. People would be able continue to enjoy the park in the manner they do today, there would be no impairment to their hiking or biking in a natural setting. Therefore, the proposed project would not cause a constructive use to the Marian Bear Memorial Park because the proximity of the project would not substantially impair the protected activities, features, or attributes of the Park.

University Gardens Park

University Gardens Park is located approximately 0.38 miles west of the proposed project off of Governor Drive in the University Community. The park is owned by The City of San Diego. The park is 10 acres of developed, dedicated park land, as described in the Open Space and Recreation Element of the University Community Plan. The park includes a single baseball/softball field, a large flat grass field area, a small playground area that was remodeled in 2002, and a comfort station that was constructed in 2006. Access to the park is achieved off of Governor Drive. Numerous, large trees border the park to its south and west. The park is surrounded by residential and commercial development. Views of the existing freeway are nonexistent. Given its status as a publicly owned park that is open to the public, University Gardens Park is a Section 4(f) resource.

This park, due to its location within a heavily developed residential community far removed from I-805, would not have any of its functions impaired by the proposed project. Any improvements to I-805 would go unnoticed by a park user. All activities that occur today would continue unimpaired with the proposed project in place. Therefore, the proposed project would not cause a constructive use to the University Gardens Park because the proximity of the project would not substantially impair the protected activities, features, or attributes of the Park.

University Village Park

University Village Park is located 0.25-miles west of the proposed project at Florey Street and Gullstrand Street in the University community. The park is owned by the City of San Diego and is 2.5-acres of partially developed, dedicated park land, as described in the Open Space and Recreation Element of the University Community Plan. The park is essentially an open grass field containing a few, sparsely spaced picnic tables surrounded by tall, mature trees. This layout is consistent with the Community Plan's description of the park which states that the parks emphasis should be on less intense recreational uses such as open play lawns and picnic facilities. Access to the park is achieved by on-street parking directly adjacent to the park.

The park is surrounded on three sides by residential development and it abuts a Rose Canyon finger canyon to its north. Rose Canyon is shielded from view by large, mature trees. Views of the existing freeway are nonexistent. Given its status as a public ally owned park that is open to the public, University Village Park is a Section 4(f) resource.

This park, due to its location within a developed residential community far removed from I-805, would not have any of its functions impaired by the proposed project. Any improvements to I-805 would go unnoticed by a park user. All activities that occur today would continue unimpaired with the proposed project in place. Therefore, the proposed project would not cause a constructive use to the University Gardens Park because the proximity of the project would not substantially impair the protected activities, features, or attributes of the Park.

Nobel Athletic Fields

The Nobel Athletic Fields and Recreation Center (also known as Nobel Athletic Area) is located within the University Community. The Center was completed in 2007 and is located just north of the proposed Nobel DAR. The Center includes a 30-acre municipal park with children's play areas, an off-leash dog park, two softball fields (one lighted), two soccer fields, multi-purpose fields, shaded picnic tables, barbeque pits, an exercise circuit, outdoor basketball courts, and a comfort station. Community buildings include a 16,100 square foot branch library (North University Branch Library) and a 10,200 square foot gymnasium/recreation center (Nobel Athletic Complex) with community meetings

available for rent. Public ownership and accessibility afford this resource protection under Section 4(f).

Areas directly adjacent to the Nobel DAR consist of fire pits, planted buffers and parking areas that are located below the grade of Nobel Drive. From these locations views of the proposed transit Station are obscured by the existing slope, which also act as a barrier to freeway noise. Any improvements to I-805 would go unnoticed by a park user. All activities that occur today would continue unimpaired with the proposed project in place. Therefore, the proposed project would not cause a constructive use to the Nobel Athletic Fields and Recreation Center because the proximity of the project would not impair the protected activities, features, or attributes of the center.

Rose Canyon Open Space Park

The Rose Canyon Open Space Park is located in the Clairemont Mesa and University communities and is located west of the project area. Rose Canyon is directly adjacent to the San Diego Northern Railway Coaster tracks and extends from the I-5/SR-52 interchange to I-805. Access to the park is achieved via numerous city streets. Rose Canyon is owned by the City of San Diego and consists of a well-defined valley floor bordered on the south and north by steep slopes. An existing unpaved hiking and biking trail runs along much of the length of the canyon, east-west, along the south side of the existing coaster tracks. To the north of the tracks, the City of San Diego is planning to develop existing unpaved utility access roads as part of their proposed Coastal Rail Trail project.

As was the case for Marian Bear Memorial Park, an important purpose of Rose Canyon is to provide a natural setting for recreational hiking and biking. Rose Canyon Creek is located within the canyon and eventually drains into Mission Bay. Rose Canyon Open Space Park contains many interacting habitats unique to Southern California. Coastal sage scrub and chaparral cover hills and fields, an oak woodland works along the north-facing hillsides, while a very rare riparian habitat runs the length of the park. The Rose Creek watershed is local in nature extending no further east than Scripps Ranch. The creek naturally meanders around the canyon floor, which continues to deepen and widen until it drains into Mission Bay. Wildlife includes raccoons, skunks, rabbits, coyotes,

foxes, and mule deer. The raptors flying above Rose Canyon include many varieties of owls and large hawks.

The Recreation Element of both the City of San Diego General Plan and the University Community Plan discuss open space as a dual purpose resource. According to each, open space is intended to preserve and protect native plants and animals while providing public access and enjoyment by the use of hiking, biking, and equestrian trails. In terms of this analysis, only those areas within Rose Canyon that are used for recreational purposes are discussed. Open Space dedicated for the preservation of habitat is not a resource afforded protection under Section 4(f). Those areas that are designated for hiking, biking, and equestrian enjoyment are Section 4(f) resources given that they are publicly owned recreational facilities open to the public.

The proposed Nobel Drive BRT Station is located directly adjacent to Rose Canyon park boundary. This area of park is located south of Nobel Drive and west of Judicial Drive. According to communications with City of San Diego staff, this area lacks officially recognized trails and is an open space area whose function is to conserve habitat and wildlife. Though the park does not exclude people from the area, it is not officially a recreational use area. Due to the limited uses in this area, views of the transit center would not affect the intended purpose of this area. The proposed transit center was designed to ensure hydrology of the vernal pools in the conservation area is not affected. This part of Rose Canyon is not a recreational use area and therefore no Section 4(f) analysis is required.

Although the natural setting surrounding the existing trail in Rose Canyon is important for its users, the trail is situated directly adjacent to a frequently traveled rail line for its entire length, parallels I-5 for almost one-half of its length, and terminates 0.17 miles west of I-805. Even with existing transportation infrastructure so close to the park and trail, both are enjoyed by users despite a context within an urban, built environment. Due to the trails distance from the freeway and existing topography, views of the project are limited and would remain consistent with existing views. With the proposed project in place, people would continue to be able to enjoy the park in the same manner as they do today. There would be no impairment to their hiking or biking in a natural setting. Therefore, the proposed project would not cause a constructive use to the Marian Bear

Memorial Park because the proximity of the project would not substantially impair the protected activities, features, or attributes of the Park.

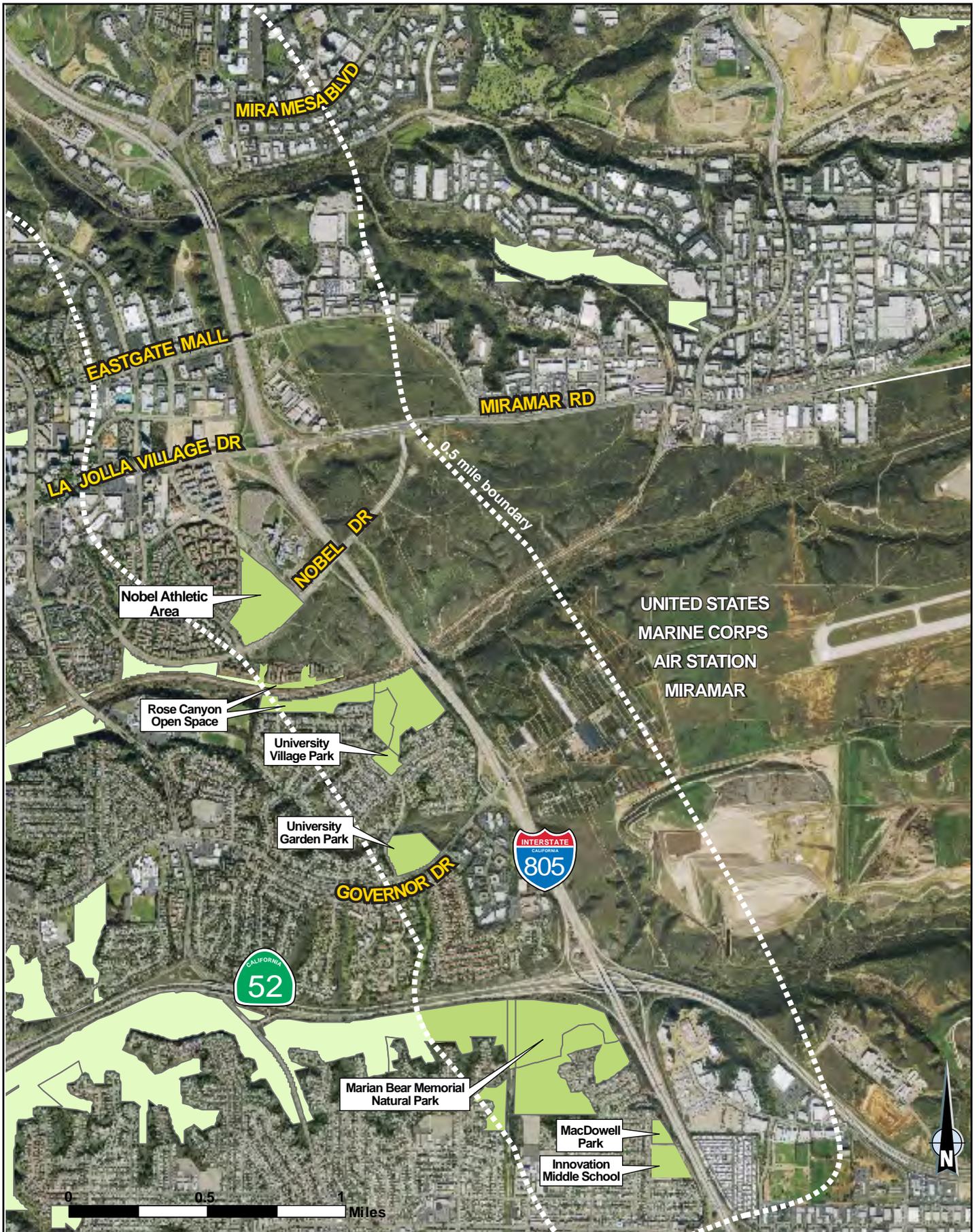


Figure A1
4(f) Resources

Appendix B. CEQA Checklist

Supporting documentation of all CEQA checklist determinations is provided in Chapter 2 of this Initial Study/Environmental Assessment. Documentation of “No Impact” determinations is provided at the beginning of Chapter 2. Discussion of all impacts, avoidance, minimization, and/or compensation measures under the appropriate topic headings in Chapter 2.

Project Title

Interstate 805 Managed Lanes North

Lead Agency name and address

California Department of Transportation
4050 Taylor Street
San Diego, CA 92110

Contact person and phone number

Dave Nagy
Senior Environmental Planner
Environmental Analysis, Branch A
(619) 688-0224

Project Location

Interstate 805, from postmile 23.2 to 27.7
State Route 52, from postmile 3.5-4.1
San Diego County, California

General Plan Designation

The project is consistent with the Mobility Element of the City of San Diego’s General Plan.

Land Uses

Land uses within the project area include a mixture of residential, commercial, open space, Military, and public facilities.

Description of Project

The project proposes to add four managed lanes (two in each direction) on Interstate 805 (I-805) from State Route 52 (SR-52) to La Jolla Village Drive and add two high occupancy vehicle (HOV) lanes (one in each direction) from La Village Drive to just north of Mira Mesa Boulevard (Blvd), construct a transit station and Direct Access Ramp (DAR) at Nobel Drive, a park-n-ride at Governor Drive, the southfacing portion of the Carroll Canyon DAR, and a direct connector from the SR-52 to the I-805 managed lanes.

Other public agencies whose approval is required

The City of San Diego

USFWS

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

<input type="checkbox"/>	Aesthetics	<input type="checkbox"/>	Agriculture Resources	<input type="checkbox"/>	Air Quality
<input checked="" type="checkbox"/>	Biological Resources	<input type="checkbox"/>	Cultural Resources	<input type="checkbox"/>	Geology/Soils
<input type="checkbox"/>	Hazards & Hazardous Materials	<input type="checkbox"/>	Hydrology/Water Quality	<input type="checkbox"/>	Land Use/Planning
<input type="checkbox"/>	Mineral Resources	<input type="checkbox"/>	Noise	<input type="checkbox"/>	Population/Housing
<input type="checkbox"/>	Public Services	<input type="checkbox"/>	Recreation	<input type="checkbox"/>	Transportation/Traffic
<input type="checkbox"/>	Utilities/Service Systems	<input type="checkbox"/>	Mandatory Findings of Significance		

DETERMINATION:

On the basis of this initial evaluation:

<input type="checkbox"/>	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION would be prepared.
<input checked="" type="checkbox"/>	I find that although the proposed project could have a significant effect on the environment, there would not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION would be prepared.
<input type="checkbox"/>	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
<input type="checkbox"/>	I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
<input type="checkbox"/>	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
I. AESTHETICS -- Would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
II. AGRICULTURE RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
III. AIR QUALITY -- Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
IV. BIOLOGICAL RESOURCES -- Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
V. CULTURAL RESOURCES -- Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
VI. GEOLOGY AND SOILS -- Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
VII. HAZARDS AND HAZARDOUS MATERIALS -- Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
VIII. HYDROLOGY AND WATER QUALITY -- Would the project:				
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
IX. LAND USE AND PLANNING - Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
X. MINERAL RESOURCES -- Would the project:				

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
XI. NOISE -- Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
XII. POPULATION AND HOUSING -- Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
XIII. PUBLIC SERVICES				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
XIV. RECREATION				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
XV. TRANSPORTATION/TRAFFIC -- Would the project:				
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Result in inadequate parking capacity?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
XVI. UTILITIES AND SERVICE SYSTEMS -- Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
XVII. MANDATORY FINDINGS OF SIGNIFICANCE				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects which would cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Appendix C: Title VI Policy Statement

DEPARTMENT OF TRANSPORTATION
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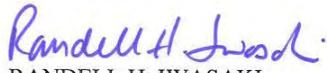


*Flex your power!
Be energy efficient!*

August 25, 2009

TITLE VI POLICY STATEMENT

The California State 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, or age, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity it administers.


RANDELL H. IWASAKI
Director

Appendix D:
Environmental Commitments Record

ENVIRONMENTAL COMMITMENTS RECORD (ECR)

Task and Brief Description	Responsible Branch / Staff	Timing / Phase	NSSP	Action Taken to Comply with Task	Task Completed	
					Initial	Date
DESIGN KICK-OFF	Project Manager	Beginning of 1 Phase				
PRE-LOG-IN REVIEW	Design	90% Plans				
ENVIRONMENTAL PS&E REVIEW	Environmental Coordinator	District PS&E Circulation				
IN-HOUSE PRECONSTRUCTION MEETING	Project Manager	Contract Award				
TRANSFER RESIDENT ENGINEER BOOK	Project Engineer (RE)	Preconst Meeting				
PREJOB MEETING WITH CONTRACTOR	Construction	Beginning of Construction				
ENVIRONMENTAL COMPLIANCE REVIEW	Construction	Safety Review				
DESIGN FEATURES MEMORANDUM	Construction / Design	Post Construction				
PERMITS						
Section 7 Threatened and Endangered Species	Permits R.E. Construction	PreConstruction Construction Postconstruction				
Section 404 Permit for filling or dredging waters of the United States.	Permits R.E. Construction	PreConstruction Construction Postconstruction				
1602 Agreement for Streambed Alteration	Permits R.E. Construction	PreConstruction Construction Postconstruction				
Section 401 Water Quality Certification	Permits R.E. Construction	PreConstruction Construction Postconstruction				
Coastal Development Permit	Permits R.E. Construction	PreConstruction Construction Postconstruction				
AIR QUALITY						
Minimize land disturbance.	R.E. Construction	Construction				
Use watering trucks to minimize dust; watering should be sufficient to confine dust plumes to the project work areas.	R.E. Construction	Construction				
Suspend grading and earth moving when wind gusts exceed 25 miles per hour unless the soil is wet enough to prevent dust plumes.	R.E. Construction	Construction				

ENVIRONMENTAL COMMITMENTS RECORD (ECR)

Task and Brief Description	Responsible Branch / Staff	Timing / Phase	NSSP	Action Taken to Comply with Task	Task Completed	
					Initial	Date
Cover all trucks hauling dirt when traveling at speeds greater than 15 miles per hour.	R.E. Construction	Construction				
Stabilize the surface of dirt piles if not removed within 2 days.	R.E. Construction	Construction				
Limit vehicular paths on unpaved surfaces and stabilize any temporary roads.	R.E. Construction	Construction				
Minimize unnecessary vehicular and machinery activities.	R.E. Construction	Construction				
Sweep paved streets at least once per day where there is evidence of dirt that has been carried on to the roadway.	R.E. Construction	Construction				
Revegetate disturbed land, including vehicular paths created during construction to avoid future off-road vehicular activities.	R.E. Construction	Construction				
Remove unused material.	R.E. Construction	Construction				
BIOLOGY						
Seeds from sensitive plant species removed during construction will be collected prior to brushing activities for use in revegetation efforts	R.E. Qualified Biologist Construction	PreConstruction Construction				
All native or sensitive habitats outside the permanent and temporary construction limits should be designated as Environmentally Sensitive Areas on project maps. Environmentally Sensitive Areas should be temporarily fenced during construction with orange plastic snow fence. No personnel, equipment, or debris will be allowed within the Environmentally Sensitive Areas.	R.E. Design Construction	PreConstruction Construction				
All native vegetation and non-native shrubs and trees within the impact areas will be removed outside of the breeding season (February 15 to September 15) to avoid impacts to nesting birds. Otherwise, a qualified biologist will thoroughly survey all vegetation prior to removal during the breeding season to ensure there are no nesting birds onsite. If nesting birds are identified onsite, vegetation removal will be delayed until the nest no longer supports eggs or chicks.	R.E. Qualified Biologist Construction	PreConstruction Construction				
All pile driving near the creeks that support Federally and State listed bird species will be completed outside the bird breeding season (February 15 to September 15) to minimize construction noise impacts to sensitive riparian-nesting bird species.	R.E. Construction	Construction				
All debris from the expansion of bridges will be contained so that it does not fall into rivers and creeks.	R.E. Construction	Construction				
Special care will be taken when transporting, use, and disposing of soils containing invasive weed seeds. All heavy equipment will be washed and cleaned of debris prior to entering a new area, to minimize spread of invasive weeds.	R.E. Construction	Construction				
A qualified biologist will be available for both the pre-construction and construction phases to review grading plans, address protection of special status biological resources, and monitor ongoing work. The biologist should be familiar with the habitats, plants, and wildlife of the Project area, and maintain communications with the resident engineer, to ensure that issues relating to biological resources are appropriately and lawfully managed.	R.E. Qualified Biologist Construction	PreConstruction Construction				

ENVIRONMENTAL COMMITMENTS RECORD (ECR)

Task and Brief Description	Responsible Branch / Staff	Timing / Phase	NSSP	Action Taken to Comply with Task	Task Completed	
					Initial	Date
Detention basins will be placed in many of the loop ramps, and bioswales will be placed on many of the slopes to treat runoff from the freeway.	R.E. Construction	PreConstruction Construction				
Appropriate best management practices (BMPs) will be used to control erosion and sedimentation. No sediment or debris will be allowed to enter the vernal pools, creeks, rivers,	R.E. Construction	PreConstruction Construction				
Exclusion devices will be installed on bridge drain holes and ledges during the non-breeding season (September 1 through February 15) to prevent swallows, swifts, and any other birds or bats from nesting on or within bridges to be demolished or expanded.	R.E. Construction	PreConstruction Construction				
Cut slopes will be revegetated with native upland habitats with similar composition to those within the Project study area. Fill slopes and areas adjacent to wetlands and drainages will be revegetated with appropriate native upland and wetland non-invasive species. The revegetated areas will have temporary irrigation and be planted with native container plants and seeds selected by the biologist. There will be at least three years of plant establishment/maintenance on these slopes to control invasive weeds. Bioswales and detention basins will be planted with appropriate native species as determined by the biologist and storm water pollution prevention professional. Slopes adjacent to developed urban areas will be vegetated with native and drought tolerant non-invasive species selected by the biologist and landscape architect. Interchanges located in urban areas will be landscaped with native or ornamental non-invasive species.	R.E. Qualified Biologist Construction Landscape Maintenance	Construction Postconstruction				
Duff (top soil) from areas with coastal sage scrub and chaparral will be saved to aid in revegetating slopes with native species.	R.E. Construction	PreConstruction Construction Postconstruction				
Salvaging of rare plants and/or soil supporting San Diego fairy shrimp prior to grading is recommended where practicable.	R.E. Construction	PreConstruction Construction				
All temporary impact areas will be revegetated and restored to pre-existing conditions. Plants salvaged from construction areas will be placed on created slopes or in an offsite mitigation area.	R.E. Construction	Construction Postconstruction				
Fueling of construction equipment should only occur at a designated area at a distance greater than 100 feet from drainages, and associated plant communities to preclude adverse water quality impacts. Fuel cans and fueling of tools will not occur within drainages.	R.E. Construction	Construction				
Lighting used at night for construction will be shielded away from environmentally sensitive areas.	R.E. Construction	Construction				
Dust generated by construction will be controlled as necessary.	R.E.	Construction				
Permanent impacts to sensitive upland vegetation will be mitigated by preservation offsite at Sage Hill Mitigation Site.	Qualified Biologist					
Permanent and temporary impacts to wetland/riparian habitats will be mitigated offsite at Deer Canyon Mitigation Site (Pardee).	Qualified Biologist					
Temporary impacts to 2.86 acres of California gnatcatcher occupied coastal sage scrub will be mitigated at a 1:1 ratio at the Sage Hill mitigation site.	Qualified Biologist					
Permanent and temporary impacts to "rut" pools and species will be mitigated at a 30-acre site on Del Mar Mesa.	Qualified Biologist					

ENVIRONMENTAL COMMITMENTS RECORD (ECR)

Task and Brief Description	Responsible Branch / Staff	Timing / Phase	NSSP	Action Taken to Comply with Task	Task Completed	
					Initial	Date
WATER QUALITY/NPDES						
Best Management Practices will be implemented to address potential water quality impacts during the planning and design, construction, and operational (maintenance) stages.	Design R.E. Construction Maintenance	PreConstruction Construction Postconstruction				
Comply with the State Wide Storm Water Management Plan. Short-term potential impacts to water quality during the construction phase are prevented/minimized with Construction Site BMPs while the long-term potential impacts during the facility operation and maintenance are prevented/minimized through the implementation of Design Pollution Prevention BMPs, Treatment BMPs and Maintenance BMPs.	Design R.E. Construction Maintenance	PreConstruction Construction Postconstruction				
PALEONTOLOGY						
A Paleontological Mitigation Plan (PMP) A qualified paleontologist will be at the pre-construction meeting to consult with the grading and excavation contractors concerning excavation schedules, paleontological field techniques, and safety issues.	R.E. Construction Paleontologist	PreConstruction				
Grading plans will be provided to the paleontologist at least one week prior to the initiation of earth-moving activities.	R.E. Construction Paleontologist	PreConstruction				
A paleontological monitor will be on-site on a full-time basis during the original cutting of previously undisturbed deposits of high or moderate paleontological resource potential, and on-site on a part-time basis during the original cutting of previously undisturbed deposits of low paleontological resource potential (sedimentary deposits of younger alluvium), to inspect exposures for contained fossils. As grading progresses, the qualified paleontologist and paleontological monitor will have the authority to reduce the scope of the monitoring program to an appropriate level if it is determined that the potential for impact to paleontological resources is lower than anticipated.	R.E. Construction Paleontologist	Construction				
When fossils are discovered, the paleontologist (or paleontological monitor) will recover them. In most cases, this fossil salvage can be completed in a short period of time. If necessary, the paleontologist (or paleontological monitor) will be allowed to briefly redirect, divert, or halt grading. However, some fossil specimens (such as a complete large mammal skeleton) may require an extended salvage period. In these instances, the paleontologist (or paleontological monitor) will be allowed to redirect, divert, or halt grading to allow recovery of fossil remains in a timely manner. Because of the potential for the recovery of small fossil remains, such as isolated mammal teeth, it may be necessary to set up a screen-washing operation on the site.	R.E. Construction Qualified Paleontologist	Construction				
During the monitoring and recovery phases of the PMP, the qualified paleontologist and/or the paleontological monitor will also routinely collect stratigraphic data (e.g., lithology, vertical thickness, lateral extent of strata, nature of upper and lower contacts, and taphonomic character of exposed strata.) Collection of such data is critical for providing a stratigraphic context for any recovered fossils.	R.E. Construction Paleontologist	Construction				

ENVIRONMENTAL COMMITMENTS RECORD (ECR)

Task and Brief Description	Responsible Branch / Staff	Timing / Phase	NSSP	Action Taken to Comply with Task	Task Completed	
					Initial	Date
Fossil remains collected during monitoring and salvage will be cleaned (removal of extraneous enclosing sedimentary rock material), repaired (consolidation of fragile fossils and gluing together of broken pieces), sorted (separating fossils of the different species), and cataloged (scientific identification of species, assignment of inventory tracking numbers, and recording of these numbers in a computerized collection database) as part of the mitigation program.	R.E. Construction Paleontologist	Construction				
Prepared fossils, along with copies of all pertinent field notes, photos, and maps, will be deposited (as a donation) in an accredited scientific institution with permanent paleontological collections, such as the San Diego Natural History Museum. Donation of the fossils will be accompanied by financial support for preparation, curation, and initial specimen storage, if this work has not already been completed.	R.E. Construction Paleontologist	Construction				
A final summary report will be completed. It will outline the results of the mitigation program. This report will include discussion of the methods used, stratigraphic section(s) exposed and documented, fossils collected, and significance of recovered fossils.	R.E. Construction Paleontologist	Construction				
Hazardous Waste						
Treated Wood Waste	R.E. Construction	Construction		Comply with Standard Special Specification (SSP) 14-010		
Earth Material containing lead	R.E. Construction	Construction		Comply with SSP 15-027		
Yellow paint stripe removal	R.E. Construction	Construction		Comply with SSP14-001		
Paint stripe removal other than yellow	R.E. Construction	Construction		Comply with SSP 15-301		
Demolition, renovation, or removal of Asbestos Containing Materials (ACMs)	R.E. Design Construction	Pre-Construction Construction	Yes	Sampling and Removal of Asbestos Containing Materials - Bridges and Open Structures		
CULTURAL						
If cultural materials should be discovered during construction, all earth-moving activity within and around the immediate discovery area will be diverted until qualified personnel could assess their nature and significance. Consultation with the City Archaeologist and Caltrans Archaeologist will ensure that if anything is discovered during construction that Section 106, CEQA, and City Guidelines will be followed. Should remains be discovered and further evaluation be necessary, construction will be diverted away from the find and sufficient time will be allowed for the proper professional recovery of the remains. Remains will be cleaned, catalogued, analyzed, reported, and curated in accordance with all appropriate professional archaeological standards.	R.E. Construction Archaeologist	Construction				
If human remains should be discovered, State Health and Safety Code §7050.5 states that further disturbances and activities will cease in any area or nearby area suspected to overlie remains, and the County Coroner contacted. Pursuant to PRC §5097.98, if remains are thought to be Native American, the coroner will notify the NAHC who will then notify the Most Likely Descendent (MLD). The party discovering the remains will contact the District Archaeologist, so that consultation may take place with the MLD to provide for the respectful treatment and disposition of the remains. Further provisions of PRC §5097.98 will be followed, as applicable.	R.E. Construction Archaeologist	Construction				

ENVIRONMENTAL COMMITMENTS RECORD (ECR)

Task and Brief Description	Responsible Branch / Staff	Timing / Phase	NSSP	Action Taken to Comply with Task	Task Completed	
					Initial	Date
NOISE						
All equipment should have sound-control devices no less effective than those provided on the original equipment. No equipment should have an unmuffled exhaust.	R.E. Construction	Construction				
Implement appropriate additional noise abatement measures including, but not limited to, changing the location of stationary construction equipment, turning off idling equipment, rescheduling construction activity, notifying adjacent residents in advance of construction work, or installing acoustic barriers around stationary construction noise sources.	R.E. Construction	Construction				
VISUAL						
Native California trees such as oaks and pines will be planted near the middle of cut slopes (at least 30' from traveled way) in grouped clusters. Trees will not be placed near the tops of cut slopes where vertical forms will diminish easterly views from neighborhoods and commercial properties.	Design Landscape Architect R.E.	Construction				
Native shrubs will be used on all disturbed slopes adjacent to natural areas.	Design Landscape Architect R.E.	Construction				
Open views to the east will be preserved by minimal tree planting at the base of fill slopes. Native shrub plantings will be used in these locations.	Design Landscape Architect R.E.	Construction				
Wildflower groundcover will be planted intermittently along the edges of the freeway corridor to add seasonal accent color and for compliance with Federal funding requirements.	Design Landscape Architect R.E.	Construction				
Drought tolerant ornamental trees, such as eucalyptus, will be planted at the vicinity of the structures to help visually diminish the scale.	Design Landscape Architect R.E.	Construction				
Riparian tree species, such as sycamores, will be planted where possible in the lowest areas to enhance the low valleys that cross the project and provide for a greater diversity of native tree species.	Design Landscape Architect R.E.	Construction				
Native landscape plantings will be provided on short slopes and at the base of walls at either side of wall structures. Native plantings may include shrubs, groundcover, and trees. Trees will be planted at mid slope (at least 30' from traveled way) or at lower levels to avoid blocking views to the east from the residential neighborhoods.	Design Landscape Architect R.E.	Construction				
Berms will be used in place of sound walls wherever possible, such as along the west side of the freeway approaching Governor Drive. The existing berm at this location will be relocated further to the west where space allows.	Design Landscape Architect R.E.	Construction				
Texture and color of walls will blend with surrounding landscape and indigenous soils.	Design Landscape Architect R.E.	Construction				
Provide screening of walls with tree, shrub, and vine plantings.	Design Landscape Architect R.E.	Construction				

ENVIRONMENTAL COMMITMENTS RECORD (ECR)

Task and Brief Description	Responsible Branch / Staff	Timing / Phase	NSSP	Action Taken to Comply with Task	Task Completed	
					Initial	Date
Employ measures to minimize graffiti, such as tree, shrub and vine plantings on walls.	Design Landscape Architect R.E.	Construction				
Use transparent barriers when possible to preserve views from homes immediately adjacent to or that overlook the freeway at several locations near the I-805 / SR-52 interchange.	Design Landscape Architect R.E.	Construction				
Retaining walls that follow the contours of the topography and maintain a constant elevation at the top of wall will be used where appropriate. Wall layouts and profiles will be composed of long radius curves, with no tangents or points of intersection. This type of wall will be visually compatible with surrounding terrain and provide room at the base for a slope that will contain landscape screening.	Design Landscape Architect R.E.	Construction				
In areas too narrow to place a planting pocket, retaining walls will be recessed behind the face of safety barriers at a sufficient distance to allow architectural features to be included on the face of the retaining walls.	Design Landscape Architect R.E.	Construction				
In areas where space for architectural detailing will not exist, vertical concrete safety barriers will be considered. Vertical barriers add 12in (301mm) of additional width in which architectural elements such as mechanically stabilized earth (MSE) wall panel relief, pilasters, and wall caps can be included.	Design Landscape Architect R.E.	Construction				
Architectural features, textures and integral concrete colors will be used to mitigate the appearance of retaining wall surfaces. Walls will incorporate architectural features such as pilasters and caps to provide shadow lines, provide relief from monolithic appearance, and reduce their apparent scale. Enhanced materials such as mosaic tile and weathering steel will also be used where appropriate to meet community context and design goals.	Design Landscape Architect R.E.	Construction				
Mechanically stabilized earth (MSE) walls will have custom designed panels that include integral color, and an enhanced surface texture.	Design Landscape Architect R.E.	Construction				
Retaining walls will be located at the top of slope wherever possible in road fill sections to provide a buffer area for landscape screening between the wall and the community.	Design Landscape Architect R.E.	Construction				
Grading will be designed using the techniques of contour grading that promote smooth transitions to existing landforms, eliminate appearance of engineered slopes and visually soften the contours. Stepped slopes in areas of cut will be considered.	Design Landscape Architect R.E.	Construction				
Placement of landscape slopes, noise walls, barriers, drainage conveyances, and other roadway features can require special design. MSE walls will have custom designed panels that include enhanced surface texture, and a 4" minimum pattern reveal on each panel.	Design Landscape Architect R.E.	Design / Construction				

ENVIRONMENTAL COMMITMENTS RECORD (ECR)

Task and Brief Description	Responsible Branch / Staff	Timing / Phase	NSSP	Action Taken to Comply with Task	Task Completed	
					Initial	Date
All visual mitigation features will be designed with the cooperation of the District Landscape Architect (DLA). The DLA will perform all visual mitigation monitoring.	Design Landscape Architect R.E.	Design / Construction				
All park-n-ride facilities will be designed in coordination with the DLA.	Design Landscape Architect R.E.	Design / Construction				
Landscape design guidelines will be implemented in consultation with the DLA.	Design Landscape Architect R.E.	Design / Construction				
DAR structure columns will match existing bridge columns supports when present. New DAR structures will feature smooth curved forms in profile and section to minimize stark shadow lines where possible. Retaining walls will have a maximum height of 10 feet to minimize the structure height and retain views from adjacent neighborhoods.	Design Landscape Architect R.E.	Construction				
Landscaping will be provided within the Nobel Drive transit station and on all slopes and transitions to roadways and streets. Landscaping will be compatible with local landscape standards, including guidelines for screening and shade. Parking will be compatible with local development standards.	Design Landscape Architect R.E.	Design / Construction				
New bridge columns will match the existing bridge columns. Undercrossing widening will use cast-in-place box girder construction to match existing structures wherever possible.	Design Landscape Architect R.E.	Construction				
Concrete lighting and signage pedestals will be designed in such a way that vertical barrier transitions are not required. Electrical and signal equipment at ramp termini will be placed in visually unobtrusive locations. Gore pavings will incorporate an enhanced architectural color and textural finish. Access control fencing will be placed in visually unobtrusive locations at interchanges and bridges, if possible. Retaining walls and noise walls near right-of-way boundaries will be designed in such a way that access control fencing will not be needed. The 'dead' spaces that occur between walls and fences will be avoided if at all possible. Fencing will abut proposed noise walls at ends of or at changes in direction of walls, if possible.	Design Landscape Architect R.E.	Design / Construction				
Concrete interceptor ditches will not be placed at the toe of slopes adjacent to residential property or pedestrian use areas. Alternatives such as subterranean drainage placed below finish grade or a planted geo-reinforced drainage surface will be used.	Design Landscape Architect R.E.	Construction				
Linear ditches or bio-swales will be designed for dual use as maintenance vehicle access facilities, wherever possible. Where possible, bio-swales will be located in non-obtrusive areas, be designed to appear as natural features, and incorporate applicable measures listed above for detention basins.	Design Landscape Architect R.E.	Construction				

ENVIRONMENTAL COMMITMENTS RECORD (ECR)

Task and Brief Description	Responsible Branch / Staff	Timing / Phase	NSSP	Action Taken to Comply with Task	Task Completed	
					Initial	Date
Maintenance access drives should be located in unobtrusive areas away from local streets and will consist of drivable inert materials with or without herbaceous groundcover that is visually compatible with the surrounding landscape.	Design Landscape Architect R.E.	Construction				
Soft surface alternatives to concrete ditches and rock slope protections will be utilized wherever possible.	Design Landscape Architect R.E.	Construction				
All visible concrete structures and surfaces will be of special design and adhere to the corridor design guidelines. Rock slope protection will consider use of aesthetically pleasing whole material of various sizes.	Design Landscape Architect R.E.	Construction				
Concrete drainage devices located in highly visible areas will be colored to match the surrounding soil.	Design Landscape Architect R.E.	Construction				
Detention basins located at freeway interchanges or in areas of high visibility will incorporate the following design features. Basins will be located at least 10ft from clear recovery zones whenever possible to allow landscape screening to be installed. Basins will appear to be natural landscape features, such as, dry streambeds or riparian areas. Where possible they should be shaped in an informal, curvilinear manner, incorporate slope rounding, variable gradients, and be similar to the surrounding topography to deemphasize a defined outer edge.	Design Landscape Architect R.E.	Construction				
Whenever feasible, standpipes and other vertical appurtenances will be placed in unobtrusive locations and be painted an unobtrusive color.	Design Landscape Architect R.E.	Construction				
The use of pervious concrete for storm water pollution prevention will be considered to avoid adverse visual impacts. Project features such as interceptor ditches, inlet aprons, gutters, maintenance access road, maintenance vehicle pullouts, and parking lots could consist of pervious concrete and perhaps serve a dual purpose.	Design Landscape Architect R.E.	Construction				
TRAFFIC						
A Transportation Management Plan (TMP) will be prepared to minimize the impact of construction activities on highway users. Preceding roadway design, a final TMP, will be prepared to reduce potential construction-related traffic conflicts, detours, and delays. The elements to be considered for the highway-widening project include, but are not limited to the following:	Design Traffic	Construction				

Appendix E:
Federally Listed or Candidate Species in the
Interstate-805 Managed Lanes North Project Area



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Ecological Services

Carlsbad Fish and Wildlife Office
6010 Hidden Valley Road, Suite 101
Carlsbad, California 92011



In Reply Refer To:
FWS-SDG-09B0274-09SL0802

MAY 29 2009

Chris White
Chief, Environmental Resource Studies
Department of Transportation, District 11
P.O. Box 85406, M.S. 25
San Diego, California 92110

Subject: Request for Candidate, Proposed, Threatened, or Endangered Species for the
Interstate 805 Widening Project – North Segment, San Diego, California

Attention: Sue Scatolini

Dear Mr. White:

The U.S. Fish and Wildlife Service has reviewed the information provided in your letter dated May 7, 2009, to assess and update potential presence of federally listed threatened, endangered, or proposed species at the proposed project site. 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 the list has not changed since our April 11, 2006, letter.

Should you have any questions regarding the species on the enclosed list or your responsibilities under the Endangered Species Act of 1973 (Act), as amended (16 U.S.C. 1531 *et seq.*), please call Kurt Roblek of my staff at (760) 431-9440, extension 308.

Sincerely,

Karen A. Goebel
Assistant Field Supervisor

Enclosure:

**Federally Listed or Candidate Species Which Occur or May Occur
on the Project Site of the Interstate 805 – North Segment Widening Project**

Common Name	Scientific Name	Status
BIRDS		
Coastal California gnatcatcher	<i>Polioptila californica californica</i>	T
Light-footed clapper rail	<i>Rallus longirostris levipes</i>	E
Least Bell's vireo	<i>Vireo bellii pusillus</i>	E
Southwestern willow flycatcher	<i>Epidonax traillii extimus</i>	E
INVERTEBRATES		
San Diego fairy shrimp	<i>Branchinecta sandiegonensis</i>	E
PLANTS		
San Diego thornmint	<i>Acanthomintha ilicifolia</i>	T
San Diego button-celery	<i>Eryngium aristulatum</i> var. <i>parishii</i>	E
Willowy monardella	<i>Monardella linoides</i> ssp. <i>viminea</i>	E
San Diego mesa mint	<i>Pogogyne abramsii</i>	E
Spreading navarretia	<i>Navarretia fossalis</i>	T
San Diego ambrosia	<i>Ambrosia pumila</i>	E

E: Endangered

T: Threatened

APPENDIX F
Utility Relocations

OWNER	FACILITY	<i>sdge OH pole</i>	LOCATION	Potential Utility Conflict	Conflict Resolution
AT&T	Telephone - 1P2C - UG		Transverse Sta. 1322+80	HOV lane Construction - Bridge Abutment Construction	Protect in Place
AT&T	Telephone - 6PC4C (bridge deck)		Transverse Sta. 1375+80	HOV lane Construction	Protect in Place
AT&T	Telephone - 4MCD (bridge deck)		Transverse Sta. 1400+00	HOV lane Construction/Bridge Widening	Protect in Place
AT&T	Telephone - 18" INVC (bridge deck)		Transverse Sta. 1421+75	HOV lane Construction/Bridge Widening	Protect in Place
AT&T	Telephone - 6PC4C - UG		Transverse Sta. 1461+40	Bridge Widening	Protect in Place
AT&T Legacy/Cox	Telephone - 6PC4C - UG		Transverse Sta. 1461+50	Bridge Widening	Protect in Place
City of San Diego	Water - 42" SCRW		Transverse Sta. 1322+00	HOV lane Construction - Bridge Abutment Construction	Protect in Place
City of San Diego	Reclaimed Water - 10" PVC		Transverse Sta. 1322+80	HOV lane Construction - Bridge Abutment Construction	Protect in Place
City of San Diego	Sewer - 12" PVC		Transverse Sta. 1350+00	Bridge Widening - Piers conflict with line	Protect in Place
City of San Diego	Sewer - 10" VCP		Transverse Sta. 1369+40	HOV lane Construction	Relocate/Protect in Place
City of San Diego	Sewer - 10" VC		Transverse Sta. 1383+90	HOV/Ramp Realignment	Protect in Place
City of San Diego	Sewer - 10" VC		Transverse Sta. 1394+00	HOV/Ramp Realignment	Protect in Place
City of San Diego	Sewer - 10" VC		Transverse Sta. 1409+15	HOV/Ramp Realignment	Protect in Place
City of San Diego	Reclaimed Water - 10" PVC		Transverse Sta. 1409+30	HOV/Ramp Realignment	Protect in Place
City of San Diego	Sewer - 84" AC Plastic Line RCP		Transverse Sta. 1409+40	HOV/Ramp Realignment	Protect in Place
City of San Diego	Water - 36" RCSC		Transverse Sta. 1422+55	Lane Widening	Relocate/Protect in Place
City of San Diego	Sewer - 30" VC		Transverse Sta. 1448+65	Bridge Widening	Relocate/Protect in Place
City of San Diego	Water - 15" AC		Transverse Sta. 1461+00	Bridge Widening	Protect in Place
MCI	Telephone - MFS Local U/G (bridge deck)		Transverse Sta. 1400+90	HOV lane Construction/Bridge Widening	Protect in Place
MCI	Telephone - LD UG		Transverse Sta. 1445+85	Bridge Widening	Relocate/Protect in Place
MCI	Telephone - MFS Local U/G		Transverse Sta. 1351+50	Bridge Widening - Piers conflict with line	Protect in Place
Qualcomm	Fiber Optic (bridge deck)		Transverse Sta. 1421+75	HOV lane Construction/Bridge Widening	Protect in Place
Qualcomm	Telephone - OH		Transverse Sta. 1481+70	HOV lane Construction	Relocate/Protect in Place
SDGE	Gas - 30" (595 PSI)		Transverse Sta. 1314+05	HOV lane/Road Widening	Protect in Place
SDGE	Gas - 30" (595 PSI)		Transverse Sta. 1316+75	HOV lane/Road Widening	Protect in Place
SDGE	Electric - 69 KV (OH crossing under freeway, S of RR track)	z96566, z96567	Transverse Sta. 1350+45	Bridge Widening	Relocate/ De-energize
SDGE	Electric - 69 KV (OH crossing under freeway, N of RR track)	z96571, z96570	Transverse Sta. 1352+15	Bridge Widening	Relocate/ De-energize

OWNER	FACILITY	<i>sdge OH pole</i>	LOCATION	Potential Utility Conflict	Conflict Resolution
SDGE	Electric - 230 KV (OH crossing before Governor Dr NB on-ramp)	z479040, z479041	Transverse Sta. 1312+65	No Conflict (Masts outside RW/Work limits)	No Conflict
SDGE	Electric - 138 KV (OH crossing before Governor Dr NB on-ramp)	z479569, z579682	Transverse Sta. 1313+23	No Conflict (Masts outside RW/Work limits)	No Conflict
SDGE	Electric - 12 KV (bridge deck)		Transverse Sta. 1375+65	HOV lane Construction/Bridge Widening	Protect in Place
SDGE	Electric - 12 KV (bridge deck)		Transverse Sta. 1400+00	HOV lane Construction/Bridge Widening	Protect in Place
SDGE	Electric - 12 KV (bridge deck)		Transverse Sta. 1421+75	HOV lane Construction/Bridge Widening	Protect in Place
SDGE	Electric - 12 KV (bridge deck)		Transverse Sta. 1421+75	HOV lane Construction/Bridge Widening	Protect in Place
SDGE	Gas - 10" (400 PSI)		Transverse Sta. 1422+75	Lane Widening	Relocate/Protect in Place
SDGE	Electric - 12 KV - OH	p164767, p579798	Transverse Sta. 1473+60	HOV lane Construction	Relocate/Protect in Place
SDGE	Electric - 12 KV - OH	p97228, z96506	Transverse Sta. 1481+70	HOV lane Construction	Relocate/Protect in Place
TelePacific/M Power	Cable (bridge deck)		Transverse Sta. 1421+75	HOV lane Construction/Bridge Widening	Protect in Place
Time Warner	Cable - 0.86 QR (bridge deck)		Transverse Sta. 1421+75	HOV lane Construction/Bridge Widening	Protect in Place
Time Warner	Cable - 0.75 STD (bridge deck)		Transverse Sta. 1421+75	HOV lane Construction/Bridge Widening	Protect in Place
Time Warner	Cable - 0.75 STD (bridge deck)		Transverse Sta. 1421+75	HOV lane Construction/Bridge Widening	Protect in Place
Time Warner	Cable - 750 P3 - UG		Transverse Sta. 1460+60	Bridge Widening	Protect in Place
Time Warner	Cable 0.75 STD - OH		Transverse Sta. 1493+40	HOV lane Construction	Protect in Place
Time Warner	Cable 0.75 STD - OH		Transverse Sta. 1493+40	HOV lane Construction	Protect in Place
Time Warner	Cable 0.75 STD - OH		Transverse Sta. 1493+40	HOV lane Construction	Protect in Place
XO Communication	Fiber Optic (bridge deck)		Transverse Sta. 1421+75	HOV lane Construction/Bridge Widening	Protect in Place

APPENDIX G

BIOLOGICAL OPINION

(This Appendix has been added since the public review of the Draft IS/EA)



United States Department of the Interior



FISH AND WILDLIFE SERVICE

Ecological Services
Carlsbad Fish and Wildlife Office
6010 Hidden Valley Road, Suite 101
Carlsbad, California 92011

In Reply Refer To:
FWS-SDG-09B0274-10F0485

Ms. Kim Smith, Chief
Environmental Resource Studies
California Department of Transportation - District 11
4050 Taylor Street
San Diego, California 92110

DEC 16 2010

Attention: Susan Scatolini, Associate Environmental Planner

Subject: Formal Section 7 Consultation for the Interstate 805 North Managed Lanes Project
in the City of San Diego, San Diego County, California

Dear Ms. Smith:

This document transmits the U.S. Fish and Wildlife Service's (Service) biological opinion based on our review of the Interstate 805 (I-805) North Managed Lanes Project and its effects on the federally endangered San Diego fairy shrimp (*Branchinecta sandiegonensis*), the federally threatened coastal California gnatcatcher (*Polioptila californica californica*, "gnatcatcher"), and designated critical habitat for the federally threatened spreading navarretia (*Navarretia fossalis*, "navarretia") in accordance with section 7 of the Endangered Species Act of 1973 (Act), as amended (16 U.S.C. 1531 *et seq.*). The project is receiving Federal funding through the Federal Highway Administration (FHWA), and the California Department of Transportation (Caltrans) has assumed FHWA's responsibilities under the Act for this consultation in accordance with Section 6005 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) 2005, as described in the National Environmental Policy Act (NEPA) Delegation Pilot Program Memorandum of Understanding between FHWA and Caltrans (effective July 1, 2007) and codified in 23USC327(a)(2)(A).

Based on conservation measures committed to by Caltrans and identified in our letter dated March 23, 2010, we concurred with your determination that the proposed project is not likely to adversely affect the federally endangered least Bell's vireo (*Vireo bellii pusillus*, "vireo") and concluded section 7 consultation for this species informally. Therefore, the vireo is not addressed by this formal consultation. Because the proposed project will affect habitat types that are used by the vireo, and project activities are not scheduled to commence until 2014, protocol surveys should be conducted for the vireo within 1 year prior to the commencement of vegetation clearing and construction activities for the proposed project. If vireos are observed within or

adjacent to the project impact area, this consultation should be reinitiated to address potential direct and/or indirect effects to this species.

Navarretia was documented in a vernal pool that is over 67 meters (m) [220 feet (ft)] southwest of the proposed park and ride/Bus Rapid Transit Station at the southwest quadrant of Nobel Drive and I-805 (Nobel Station). Caltrans will implement conservation measures identified in this biological opinion to minimize impacts to adjacent habitats occupied by gnatcatcher and San Diego fairy shrimp (i.e., install temporary construction fencing, implement dust control measures, shield and direct Nobel Station lighting away from adjacent habitats, permanently fence the Nobel Station to minimize unauthorized access of adjacent habitats, direct drainage away from adjacent habitats, and use non-invasive plants in landscaping). These conservation measures are also expected to avoid and minimize impacts to the vernal pool supporting the navarretia occurrence southwest of Nobel Station.

Navarretia seed will be collected in conjunction with restoration and enhancement efforts. Focused surveys for navarretia will be conducted on the Zamudio Parcel, and any adjacent habitat on Del Mar Mesa to which access can be obtained, during the spring of 2011 to determine the seed source closest to the proposed Zamudio Parcel restoration and enhancement site. Navarretia seed may also be collected from within conserved Multi-Habitat Planning Area (MHPA) lands associated with the City of San Diego's Multiple Species Conservation Program (MSCP), south of the Nobel Station (Nobel MHPA lands) and introduced into proposed restoration areas on these same lands. No more than 5 percent of the projected annual seed production of any individual plant or discrete population of plants will be collected. Collections will be made in such a manner to capture the majority of the genetic variation found in the sampled populations. Habitat restoration/enhancement plans will use seed collected from the seed source closest to the habitat restoration/enhancement site where access can be obtained and will be coordinated with the Carlsbad Fish and Wildlife Office (CFWO).

With incorporation of these proposed conservation measures, potential impacts to source populations resulting from seed collection or restoration/enhancement activities will be minimized to the point where such effects are insignificant. Based on the current survey information and the conservation measures proposed by Caltrans, the Service concurs with Caltrans' determination that the project, as proposed, is not likely to adversely affect navarretia, and with the exception of an analysis of project impacts to designated critical habitat for the species, navarretia is not addressed further in this formal consultation.

This biological opinion is based on information provided in: 1) *Biological Assessment, I-805 North Managed Lanes, City of San Diego, CA* (February 2010 "BA"); 2) *I-805 Managed Lanes North Project Initial Study with Proposed Mitigated Negative Declaration/Environmental Assessment* (February 2010); 3) a field meeting on March 18, 2010; and 4) other sources of information including survey reports and email correspondence. A complete project file of this consultation is maintained at the CFWO.

CONSULTATION HISTORY

On February 23, 2010, we received a letter from Caltrans requesting initiation of formal consultation on the proposed action, together with the BA. On March 18, 2010, representatives from Caltrans and the CFWO attended an onsite meeting to discuss the proposed project. We acknowledged the initiation of formal consultation in our response letter (FWS-SDG-09B0274-10TA0484) dated March 23, 2010. In our initiation letter, we included a list of information necessary to facilitate completion of the biological opinion. This information was provided between June 2, 2010, and November 5, 2010.

BIOLOGICAL OPINION

DESCRIPTION OF THE PROPOSED ACTION

Using Federal funds provided through the FHWA, Caltrans proposes to widen the existing I-805 freeway in the City of San Diego, San Diego County (Figure 1). The communities of Clairemont Mesa, Kearny Mesa, University, Mira Mesa, and Torrey Pines, as well as U.S. Marine Corps Air Station Miramar, are adjacent to the project. The project also crosses Rose Canyon and Carroll Canyon (Figure 2). The total project length is approximately 7.1 kilometers (km) [4.4 miles (mi)]. Construction is proposed to begin in 2014 and is anticipated to take 5 years. The project includes the following design features and elements:

- four managed lanes (two lanes in each direction) will be constructed in the existing freeway median from State Route 52 (SR-52) to just north of La Jolla Village Drive;
- two high occupancy vehicle (HOV) lanes (one in each direction) will be constructed from just north of La Jolla Village Drive to just north of Mira Mesa Boulevard;
- main lanes will be shifted to the outside of the freeway corridor to provide the needed 3.7-m (12-ft) lane width for the new managed and HOV lanes, which will result in the realignment of existing ramps and connectors within the project limits;
- auxiliary lanes are lanes that extend from the on-ramp of one interchange to the off-ramp of the next without continuing through the interchange. Auxiliary lanes will be added to I-805 at the following locations:
 - SR-52 / I-805 Junction to Governor Drive (northbound and southbound)
 - Governor Drive to Nobel Drive (northbound and southbound)
 - La Jolla Village Drive to Mira Mesa Boulevard (northbound and southbound);
- bridges will be widened at the following locations:
 - Rose Canyon Bridge will be widened up to 8.5 m (28 ft) in the median, up to 16.5 m (54 ft) on the northbound side, and up to 16.5 m (54 ft) on the southbound side, with 6 additional columns being added.

- Carroll Canyon Bridge will be widened up to 16.2 m (53 ft) in the southbound direction and up to 13.4 m (44 ft) in the northbound direction with 22 additional columns added at the Carroll Canyon Bridge and Carroll Canyon DAR locations;
- a direct connector ramp will be constructed to connect SR-52 to the proposed I-805 managed lanes. The direct connector will be a two-lane structure, with one lane in each direction, separated by a concrete barrier;
- a Direct Access Ramp (DAR) will be constructed at Carroll Canyon Road;
- a DAR, park and ride, and Bus Rapid Transit Station will be constructed at the southwest quadrant of Nobel Drive and I-805 (Nobel Station); and
- cut slopes, retaining walls, utility relocations, right-of-way easements, placement of biofiltration strips and swales, and surface runoff treatment best management practices (BMPs).

The project will permanently impact approximately 91.5 hectares (ha) [226 acres (ac)] and temporarily impact approximately 53.57 ha (132.38 ac) of land supporting the vegetation communities summarized in Table 1, below.

Table 1. Vegetation Community Impacts and Conservation (in acres unless otherwise specified)

Vegetation Community	Permanent	Conservation	Location	Temporary	Conservation**	Location
Bare Ground*	3.94*	1,052 ft ²	Zamudio/Nobel MHPA Lands	5.12	0	
Broom Baccharis	0.35	0.7	Sage Hill	0.27	0	
Chamise Chaparral	0.80	0.80	Zamudio	2.33	0	
Coast Live Oak Woodland	0.03	0.06	Pardee	0.26	0	
Coastal Sage Scrub (CSS)	8.90	17.80	Sage Hill/ Zamudio***	6.69	2.86	Sage Hill/ Zamudio***
CSS/Chaparral	1.48	2.96	Sage Hill/ Zamudio***	3.29	0	
Developed	119.77	0		36.16	0	
Disturbed Chamise Chaparral	0.76	0.76	Zamudio	0	0	
Disturbed CSS	10.90	21.80	Sage Hill/ Zamudio***	8.72	0	
Disturbed Habitat	37.15	0		19.37	0	
Disturbed Native Grassland	0.37	0.37	Pardee	0.01	0	
Disturbed Southern Mixed	1.25	1.25	Zamudio	1.28	0	

Chaparral						
Disturbed Southern Willow Scrub	0.12	0.24	Pardee	0.33	0.33	Pardee
Native Grassland	0.08	0.16	Pardee	0.58	0	
Non-Native Grassland	0.15	0.08	Pardee	0.99	0	
Oak****	0.12	0.24	Pardee	0.01	0	
Ornamental	32.32	0		42.28	0	
Riparian Woodland	0.41	1.23	Pardee	0.16	0.16	Pardee
Southern Mixed Chaparral	6.17	12.34	Zamudio	3.55	0	
Southern Willow Scrub	0.84	2.52	Pardee	0.55	0.55	Pardee
Sycamore	0	0		0.14	0.14	Pardee
Unvegetated Channel	0.09	0.09	Pardee	0.20	0.20	Pardee
Total	226.00			132.38		

* Bare Ground includes 263 ft² road-rut vernal pool habitat to be offset with 1,052 ft² vernal pool conservation and restoration/enhancement.

** Offsite conservation to offset temporary impacts in addition to revegetation of temporary impacts onsite.

*** 46.12 ac of impacts to sage scrub habitats will be offset with 17.25 ac of conservation at Zamudio and 28.87 ac of conservation at Sage Hill.

**** Oak impacts will be mitigated with oaks planted in the riparian.

The project will result in the permanent loss of one road-rut vernal pool, occupied by San Diego fairy shrimp, that is 24.4 square meters (m²) [263 square feet (ft²)] in size (included in Table 1 within the bare ground habitat category). The project will result in the loss of an additional road-rut vernal pool, occupied by San Diego fairy shrimp, at Carroll Canyon. However, formal consultation has already been completed to address impacts to the Carroll Canyon pool (FWS-SDG-08B0218-09F0555); therefore the impacts to this pool are not addressed in this biological opinion. The project will result in the permanent loss of 2.34 ha (5.78 ac) of designated critical habitat for navarretia and remove coastal sage scrub, chaparral, grassland, and other habitat types being used by gnatcatchers.

Conservation Measures

Caltrans has agreed to implement the following conservation measures as part of the proposed action to avoid, minimize, and offset impacts to fairy shrimp, gnatcatchers, and designated critical habitat for navarretia:

1. Permanent and temporary impacts to gnatcatcher, San Diego fairy shrimp, and navarretia critical habitat will be offset as documented in Table 1 and summarized by location in Table 2 below.

Table 2. Conservation and Restoration by Location

Location	Conservation
Zamudio	32.4 ac: conservation of chaparral and CSS habitats with some enhancement. 526 ft ² : vernal pool conservation and enhancement.
Pardee (Deer Canyon)	5.53 ac: conservation and creation of riparian habitats. 0.61 ac: conservation and creation of grassland habitats. 0.3 ac: conservation and creation of oaks in riparian.
Sage Hill	28.87 ac: conservation of CSS and CSS / chaparral habitats.
Nobel MHPA lands	526 ft ² vernal pool restoration.

2. Caltrans will enhance 48.9 m² (526 ft²) of vernal pool habitat and associated watershed within 13.11 ha (32.4 ac) of chaparral and CSS habitats on the Zamudio Parcel. Caltrans will also restore 48.9 m² (526 ft²) of vernal pool habitat within conserved Nobel MHPA lands. Draft restoration and enhancement plans for the two areas will be submitted to the Service's CFWO for review and approval prior to initiating project impacts. The draft plans will be revised in coordination with the CFWO, the revised plans will be submitted to the CFWO for final review and approval, and a copy of the final plans will be provided to the CFWO. The plans will include the following information and conditions:
 - a. Implementation of the restoration and enhancement will be conducted under the direction of a biologist with at least 3 years of vernal pool restoration experience; Caltrans will submit, in writing, the name, any relevant permit number, resume, and at least three references for the vernal pool restoration biologist to the CFWO for review and approval;
 - b. All restoration and enhancement activities will commence in the summer-fall season prior to or concurrently with the initiation of project impacts;
 - c. The restoration plan will include a textual description of proposed recontouring methods, as well as planting and watering plans;
 - d. Plant palettes (species, size and number/acre) and seed mix (species and pounds/acre) will be included in the restoration/enhancement plans. All plantings will be installed in a way that mimics natural plant distribution, and not in rows. The plant palette will include native species specifically associated with the on-site habitat type(s). If native plant species cannot be obtained from the site-specific location (Del Mar Mesa for Zamudio restoration/enhancement and Mira Mesa at Nobel for Nobel MHPA restoration), the CFWO must approve the donor site. The source and proof of local origin of all plant material and seed will be provided;
 - e. Native plants and animals will be established within the restored/enhanced pools, their watersheds and surrounding uplands. This can be accomplished by redistributing topsoil containing seeds, spores, bulbs, eggs, and other propagules from affected pools

and adjacent vernal pool and upland habitats; by the translocation of propagules of individual species from offsite habitats; and by the use of commercially available native plant species. Any vernal pool inoculum or plant material from an offsite source will be approved by the CFWO. Topsoil and plant materials from the native habitats to be affected on-site will be applied to the watersheds of the enhanced and restored pools to the maximum extent practicable. Exotic weed control will be implemented within the restoration/enhancement areas to protect and enhance habitat remaining on site;

- f. Introduction of San Diego fairy shrimp into the restored/enhanced pools will be coordinated with the CFWO. Restoration at the Nobel MHPA lands will occur within basins that do not currently support San Diego fairy shrimp, and salvaged shrimp will be introduced into the restored habitat (following iii. and v. below). Focused surveys for San Diego fairy shrimp will be conducted on the Zamudio Parcel during the 2011 or 2012 wet season. If San Diego fairy shrimp are extant within the basins, no introduction will be necessary. If San Diego fairy shrimp are not present in the Zamudio basins, they will be collected and introduced using the below guidelines:
 - i. Habitat restoration/enhancement plans will use inoculum or adult shrimp collected from the source closest to the habitat restoration/enhancement site where access can be obtained, within Del Mar Mesa for the Zamudio Parcel and Mira Mesa for the Nobel MHPA lands, and will be coordinated with the CFWO;
 - ii. Protocol surveys will be conducted in the proposed donor pools where inoculum or adult shrimp may be collected for restoration purposes. Inoculum and adult fairy shrimp will not be introduced into restored pools from pools where versatile fairy shrimp (*Branchinecta lindahli*) are documented during protocol surveys;
 - iii. Inoculum and/or adult shrimp will be collected in limited quantity, coordinated with the CFWO, from source pools, such that no appreciable damage occurs to source pools. No more than 10 percent of the basin area of any donor pool and/or no more than 20 adult shrimp per donor pool will be collected for restoration purposes;
 - iv. Inoculum will be collected when it is dry to avoid damaging or destroying fairy shrimp cysts which are fragile when wet. Use a hand trowel or similar instrument to collect the inoculum. Whenever possible, collect soil and cysts in chunks. Use the trowel to pry up intact chunks of soil rather than loosening the soil by raking and shoveling, which can damage cysts. Store the inoculum in labeled bags or boxes that are adequately ventilated and kept out of direct sunlight in order to prevent the occurrence of fungus or excessive heating of the soil, or transport them directly to the restored/enhanced pools;

- v. Inoculum and/or adult fairy shrimp will not be introduced into the restored/enhanced pools until after the pools have been demonstrated to retain water for the appropriate amount of time to support San Diego fairy shrimp [i.e., at least 30 days (Hathaway and Simovich 1996, Ripley et. al. 2004)]. Inoculum will be placed in a manner that preserves, to the maximum extent possible, the orientation of the fairy shrimp cysts within the surface layer of soil (e.g., collected inoculum will be shallowly distributed within the pond so that cysts have the potential to be brought into solution upon inundation);
- g. Any artificial watering of the restored/enhanced pool watersheds will be done in a manner that prevents water from entering into the pools. Any water to be used will be identified and documented to be free of contaminants that could harm the pools;
- h. All weeding within and immediately adjacent to the restored/enhanced pools will be performed by hand. If the use of herbicides is necessary in uplands adjacent to restored and preserved vernal pools, such usage will be limited to those products that are the least toxic to non-target organisms while providing sufficient efficacy to control the weeds and will be coordinated with the CFWO. All workers conducting weed removal activities will be educated to distinguish between native and non-native species so that local native plants are not inadvertently damaged or destroyed by weed removal activities;
- i. A final implementation schedule that indicates when all vernal pool impacts and vernal pool restoration/enhancement grading and planting will begin and end;
- j. Five years of monitoring and success criteria for vernal pool and upland habitat restoration/enhancement areas that include quantitative measurements of vernal pool hydrology, vegetation transects, and visual estimates of hatched fairy shrimp and gravid females (e.g., 10's, 100's, 1000's), complete floral and faunal inventories, and photographic documentation;
- k. The restored/enhanced vernal pools will support San Diego fairy shrimp. Restoration success for San Diego fairy shrimp will be determined by measuring the ponding of water and producing visual estimates of hatched fairy shrimp and gravid females (e.g., 10's, 100's, 1000's), within the restored pools. Water measurements will be taken in the restored pools to determine the depth, duration and quality (e.g., pH, temperature, total dissolved solids, and salinity) of ponding. The pools must pond for a period of time similar to reference vernal pools during an average rainfall year and at an appropriate depth and quality to support San Diego fairy shrimp. Approximated average densities of hatched San Diego fairy shrimp and gravid females in restored pools must not differ significantly (as confirmed by the CFWO based on visual estimates provided for source and reference pools) from reference pools for at least three wet seasons before a determination of success can be made. Vernal pools selected

as reference or control pools for evaluating restoration success will be identified and described in the restoration plan. Alternate methods of determining success may be used upon approval by the CFWO;

1. Monitoring and success criteria for vernal pool and upland restoration/enhancement areas will include: upland species richness and cover criteria for all 5 years of monitoring; 0 percent cover for weed species categorized as High or Moderate in the Cal-IPC Invasive Plant Inventory, and relative cover of all other weed species is no more than 5 percent coverage for other exotic/weed species for all 5 years of the monitoring period. Container plant survival will be 80 percent of the initial plantings for the first 5 years. At the first and second anniversary of plant installation, all dead plants will be replaced unless their function has been replaced by natural recruitment. The method used for monitoring will be described and a map of proposed sampling locations will be included. Photo points will be used for qualitative monitoring;
 - m. Verification that restoration/enhancement of San Diego fairy shrimp habitat is complete will require written sign-off by the CFWO. If a performance criterion is not met for any of the restored/enhanced vernal pools or upland habitat in any year, or if the final success criteria are not met, Caltrans will prepare an analysis of the cause(s) of failure and, if deemed necessary by the CFWO, propose remedial actions for approval. If any of the restored/enhanced vernal pools or upland habitat have not met a performance criterion during the initial 5-year period, Caltrans' maintenance and monitoring obligations will continue until the Service deems the restoration/enhancement successful, or contingency measures must be implemented. Restoration/enhancement will not be deemed successful until at least 2 years after any significant contingency measures are implemented, as determined by the CFWO;
 - n. Annual reports will be submitted to the CFWO by December 1 of each year that assess both the attainment of yearly success criteria and progress toward the final success criteria. The reports will also summarize implementation of all conservation measures integral to the project as identified in the biological opinion addressing the project and compliance with any additional reasonable and prudent measures and associated terms and conditions provided in the incidental take statement of the biological opinion.
3. The Sage Hill conservation parcel is owned and managed by the County of San Diego and has a conservation easement in place in favor of SANDAG, as well as a management endowment, which has been paid to the County. The City of San Diego has agreed to own and manage the Zamudio and Pardee conservation parcels with management endowments that will be paid by Caltrans in accordance with the endowment costs identified in the Transnet MOU. A perpetual biological conservation easement or other conservation mechanism acceptable to the Service will be recorded over the areas preserved, restored, and/or enhanced by the project at the Zamudio and Pardee conservation parcels. The conservation mechanism will specify that no easements or activities (e.g., fuel modification

zones, public trails, drainage facilities, walls, maintenance access roads) that will result in soil disturbance and/or vegetation removal will be allowed within the biological conservation easement areas, with the exception of limited public trails within the Zamudio Parcel, which will be delimited in the restoration and management plans in coordination with the CFWO. Caltrans anticipates that they will not be able to place the conservation easements or other conservation mechanisms, or transfer management endowments for the Zamudio and Pardee conservation parcels prior to initiating project impacts; however, annual reports will be provided on their status until the conservation mechanisms have been placed and the endowment funds have been transferred.

4. Caltrans will prepare perpetual long-term management, maintenance and monitoring plans (e.g., HMPs) for the Zamudio and Pardee conservation parcels. The HMPs will include, but not be limited to, the following: method of protecting the resources in perpetuity (e.g., conservation easement), monitoring schedule, measures to prevent human and exotic species encroachment, funding mechanism, and contingency measures should problems occur. Caltrans anticipates that they will not be able to prepare the HMPs prior to initiating project impacts; however, annual reports will be provided on their status until final HMPs have been provided.
5. The clearing and grubbing of native habitats will occur from September 1 to February 14 to avoid the gnatcatcher breeding season [or sooner than September 1 if a biologist approved by the CFWO ("Project Biologist") demonstrates to the satisfaction of the CFWO that all nesting is complete]. Caltrans will submit the biologist's name, address, telephone number, and work schedule on the project to the CFWO at least 5 working days prior to initiating project impacts.
6. All pile driving for the project that will occur near habitats that support gnatcatchers will be conducted between September 1 and February 14 to avoid the gnatcatcher breeding season (or sooner than September 1 if the Gnatcatcher Biologist demonstrates to the satisfaction of the CFWO that all nesting is complete) and to minimize construction noise impacts to nesting gnatcatchers.
7. A biologist approved by the CFWO ("Project Biologist") will be on site during: a) initial clearing and grubbing; and b) weekly during project construction within 152.4 m (500 ft) of offsite gnatcatcher habitat, vernal pool habitat, or navarretia critical habitat to ensure compliance with all conservation measures. The Project Biologist will be familiar with the habitats, plants, and wildlife in the project area to ensure that issues relating to biological resources are appropriately and lawfully managed¹. Caltrans will submit the biologist's name, address, telephone number, and work schedule on the project to the CFWO at least 5 working days prior to initiating project impacts. The biologist will perform the following duties:

¹ The designated project biologist for this measure should be experienced in gnatcatcher, San Diego fairy shrimp, and navarretia biology and ecology.

- a. Perform a minimum of three focused surveys, on separate days, to determine the presence of gnatcatchers in the project impact footprint. Surveys will begin a maximum of 30 days prior to performing vegetation clearing/grubbing and one survey will be conducted the day immediately prior to the initiation of remaining work. If any gnatcatchers are found within the project impact footprint, the Project Biologist will direct construction personnel to begin vegetation clearing/grubbing in an area away from the gnatcatchers. In addition, the Project Biologist will walk ahead of clearing/grubbing equipment to flush birds towards areas of coastal sage scrub to be avoided. It will be the responsibility of the Project Biologist to ensure that gnatcatchers will not be injured or killed by vegetation clearing/grubbing. The Project Biologist will also record the number and location of gnatcatchers disturbed by vegetation clearing/grubbing. Caltrans will notify the CFWO at least 7 days prior to vegetation clearing/grubbing to allow the CFWO to coordinate with the Project Biologist on bird flushing activities;
- b. Oversee installation of and inspect the construction fencing and erosion control measures within or up-slope of adjacent native habitat areas a minimum of once per week to ensure that any breaks in the fence or erosion control measures are repaired immediately;
- c. Periodically monitor the work area to ensure that work activities do not generate excessive amounts of dust;
- d. Train all contractors and construction personnel on the biological resources associated with the projects and ensure that training is implemented by construction personnel. At a minimum, training will include: 1) the purpose for resource protection; 2) a description of the sensitive resources and their habitats; 3) the conservation measures that should be implemented during project construction to conserve the sensitive resources, including strictly limiting activities, vehicles, equipment, and construction materials to the fenced project footprint to avoid sensitive resource areas in the field (i.e., avoided areas delineated on maps or on the project site by fencing); 4) environmentally responsible construction practices; 5) the protocol to resolve conflicts that may arise at any time during the construction process; and 6) the general provisions of the Act, the need to adhere to the provisions of the Act, and the penalties associated with violating the Act;
- e. Halt work, if necessary, and confer with the CFWO to ensure the proper implementation of species and habitat protection measures. The Project Biologist will report any violation to the CFWO within 24 hours of its occurrence;
- f. Submit monthly email reports (including photographs of impact areas) to Caltrans and the CFWO during clearing of gnatcatcher habitat and project construction. The

9. Erosion and sediment control devices used for the proposed project, including fiber rolls and bonded fiber matrix, will be made from biodegradable materials such as jute, with no plastic mesh, to avoid creating a wildlife entanglement hazard.
10. Caltrans will temporarily fence (with silt barriers at Nobel Station and with orange plastic snow fence for the rest of the project) the limits of project impacts (including construction staging areas and access routes) to prevent additional habitat impacts. Fencing will be installed in a manner that does not impact habitats to be avoided and such that it is clearly visible to personnel on foot and operating heavy equipment. Caltrans will submit to the CFWO for approval, at least 5 days prior to initiating project impacts (except for impacts resulting from clearing to install temporary fencing), the final plans for initial clearing and grubbing of habitat and project construction. These final plans will include photographs that show the fenced limits of impact and all areas to be impacted or avoided. If work occurs beyond the fenced or demarcated limits of impact, all work will cease until the problem has been remedied to the satisfaction of the CFWO. Any impacts that occur beyond the approved fenced area will be offset in consultation with the CFWO. Temporary construction fencing will be removed upon project completion.
11. Appropriate best management practices (BMPs) will be used to control erosion and sedimentation. No sediment or debris will be allowed to enter vernal pools, creeks, rivers, or other drainages. All debris from the expansion of bridges will be contained so that it does not fall into rivers and creeks.
12. The project will construct detention basins in some of the loop ramps, and bioswales will be placed on many of the slopes to treat runoff from the freeway.
13. Caltrans will ensure that the following conditions will be implemented with regard to project landscaping:
 - a. Caltrans will ensure that project landscaping does not include exotic plant species listed on the California Invasive Plant Council's (Cal-IPC) "Invasive Plant Inventory" list. A copy of the complete list can be obtained from Cal-IPC's web site at <http://www.cal-ipc.org>;
 - b. There are several invasive weed species already growing within the right-of-way along I-805. Special care will be taken during transport, use, and disposal of soils containing invasive weed seeds to ensure that invasive weeds are not spread into new areas by the project. All heavy equipment will be washed and cleaned of debris prior to entering a new area to minimize the spread of invasive weeds;
 - c. Cut slopes will be revegetated with native upland habitats with similar composition to those within the project study area. Fill slopes and areas adjacent to wetlands and drainages will be revegetated with appropriate native upland and wetland non-invasive

species. The revegetated areas will have temporary irrigation and will be planted with native container plants and seeds selected by the Project Biologist. There will be at least 3 years of plant establishment / maintenance on these slopes to control invasive weeds. Bioswales and detention basins will be planted with appropriate species as determined by the Project Biologist and storm water pollution prevention professional. Slopes adjacent to developed urban areas will be vegetated with native and drought tolerant non-invasive species selected by the Project Biologist and landscape architect. Interchanges located in urban areas will be landscaped with native or ornamental non-invasive species;

- d. Duff from areas with coastal sage scrub and chaparral will be saved to aid in revegetating slopes with native species;
 - e. Rare plants will be salvaged where practicable for use in revegetation efforts;
 - f. All temporary impact areas will be revegetated and restored to pre-existing conditions. Prior to initiating project impacts, a restoration plan will be developed for the temporary impact areas. The plan will be submitted to the CFWO for review and approval. This plan will include a detailed description of restoration methods, slope stabilization, and erosion control, criteria for restoration to be considered successful, and monitoring protocol(s). Following the completion of construction activities, the restoration plan will be implemented for a minimum of 5 years, unless success criteria are met earlier and all artificial water has been off for at least 2 years;
 - g. Landscaping should not use plants that require intensive irrigation, fertilizers, or pesticides adjacent to preserve areas, and water runoff from landscaped areas should be directed away from adjacent native habitats and contained and/or treated within the development footprint;
 - h. Caltrans will submit a draft list of species to be included in the landscaping to the CFWO for approval. Caltrans will submit to the CFWO the final list of species to be included in the landscaping within 30 days of receiving approval of the draft list of species.
14. Caltrans will ensure that the following conditions will be implemented to maintain wildlife connectivity at San Clemente Canyon, Rose Canyon, and Soledad/Carroll Canyon, the three main east/west wildlife corridors in the project area (to help to maintain ecosystem functions for the benefit of listed species):
- a. Night work under the bridges is anticipated to be limited. Lighting for night work will be focused on the work area and shielded from the corridors;

- b. Wildlife fencing will be placed around bridges to direct wildlife to the crossings and away from I-805;
 - c. Wildlife fencing will tie in to a logical location to the greatest extent feasible, such as steep, impassable terrain, a property fence, or developed land that may not be attractive to animals;
 - d. Wildlife fencing plans will be submitted to the CFWO for approval at least 5 days prior to initiating project impacts. Fencing will be installed prior to completion of project construction.
15. Caltrans will ensure that the following conditions will be implemented during project construction.
- a. Contractors and construction personnel will strictly limit their activities, vehicles, equipment, and construction materials to the fenced project footprint;
 - b. The project site will be kept as clean of debris as possible. All food-related trash items will be enclosed in sealed containers and regularly removed from the site;
 - c. Pets of project personnel will not be allowed on the project site;
 - d. All equipment maintenance, staging, and dispensing of fuel, oil, coolant, or any other such activities will occur within the fenced project impacts limits;
 - e. Impacts from fugitive dust will be avoided and minimized through watering and other appropriate measures;
 - f. If night work is necessary, night lighting will be of the lowest illumination necessary for human safety, selectively placed, shielded and directed away from natural habitats;
 - g. Cut and fill will be balanced within the project or the construction contractor will identify the source or disposal location. All spoils and material disposal will be disposed of properly.

Action Area

According to 50 CFR § 402.02 pursuant to section 7 of the Act, the “action area” means all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action. Subsequent analyses of the environmental baseline, effects of the action, and levels of incidental take are based upon the action area. For this project, we have defined the action area to include the 91.46-ha (226.00-ac) permanent and 53.57-ha (132.38-ac) temporary impact areas, and the surrounding habitat within about 500 ft (150 m), which may be exposed to

project-related effects such as increased noise, light, and dust levels and human activity during project construction and operation of the facilities. In addition, the action area includes the Zamudio (Figure 3), Pardee (Figure 4), and Sage Hill (Figure 5) conservation areas and the Nobel MHPA lands where restoration will occur, all in San Diego County, California.

STATUS OF THE SPECIES/CRITICAL HABITAT

The status of the San Diego fairy shrimp is described in detail in the 5-year review for this species (Service 2008). Additional information for this species can be found in the *Recovery Plan for Vernal Pools of Southern California* ("vernal pool recovery plan") (Service 1998). The status of the gnatcatcher was described in detail in a biological opinion for the Caltrans-sponsored State Route 76 Melrose Drive to South Mission Highway Improvement Project, San Diego County, California (FWS-SDG-08B0136-08F0900, dated October 1, 2008); new information since that time is provided in the 5-year review for gnatcatcher (Service 2010). Please refer to these documents for detailed information on the life history requirements of these species, threats to the species, and conservation needs of the species.

Summary of Species' Distribution and Numbers Rangewide

San Diego Fairy Shrimp

San Diego fairy shrimp occur in an estimated 137 complexes (series of vernal pool groups that are hydrologically connected with similar species compositions) throughout the species range from southern Orange County to northern Baja California, Mexico (Service 2008). A total of 23 complexes are reported from Kearny Mesa, including the pools on the Nobel MHPA lands adjacent to the project site (Service 2008). Within the City of San Diego on the Nobel MHPA lands, seven basins totaling approximately 344 m² (3,702 ft²) were inventoried in 2002-2003, and six of these basins were reported to be occupied by San Diego fairy shrimp (City of San Diego 2004). This inventory did not include the 24.4 m² (263 ft²) road-rut pool within the project footprint. The road-rut pool and the occupied basins on the Nobel MHPA lands are considered within the same complex.

Coastal California Gnatcatcher

The gnatcatcher occurs in CSS and associated habitats from southern Ventura County to Baja California, Mexico. In 1993, the Service estimated that about 2,562 gnatcatcher pairs remained in the United States, with the highest densities occurring in Orange and San Diego counties (Service 1993). In a recent study using more rigorous sampling techniques, Winchell and Doherty (2008) estimated there were 1,324 (95 percent confidence interval: 976–1,673) gnatcatcher pairs over a 44,923-hectare (111,006-acre) area on public and quasi-public lands of Orange and San Diego Counties. Their sampling frame covered only a portion of the U.S. range, focusing on the coast, and was limited to 1 year. Although it is not valid to extrapolate beyond the sampling frame, especially in light of known differences in population densities across the

range of the gnatcatcher (Atwood 1992, p. 2), it is likely there are more gnatcatchers in the U.S. portion of the range than was suggested by earlier estimates; Winchell and Doherty (2008) estimated nearly as many gnatcatchers in the portion of the U.S. range sampled in their study as was originally estimated for the entire U.S. range. We are not aware of any recent estimates of gnatcatcher populations in Baja California.

Navarretia Critical Habitat

Six critical habitat units have been designated for navarretia on 2,720 ha (6,720 ac) in Los Angeles, San Diego, and Riverside counties, California (75 FR 62192). Primary Constituent Elements (PCEs) are the physical and biological features essential to the conservation of the species that may require special management considerations or protection. PCEs of navarretia critical habitat are: (1) PCE 1—Ephemeral wetland habitat. Vernal pools [up to 4 ha (10 ac)] and seasonally flooded alkali vernal plains that become inundated by winter rains and hold water or have saturated soils for 2 weeks to 6 months during a year with average rainfall [i.e., years where average rainfall amounts for a particular area are reached during the rainy season (between October and May)]. This period of inundation is long enough to promote germination, flowering, and seed production for navarretia and other native species typical of vernal pool and seasonally flooded alkali vernal plain habitat, but not so long that true wetland species inhabit the areas; (2) PCE 2—Intermixed wetland and upland habitats that act as the local watershed. Areas characterized by mounds, swales, and depressions within a matrix of upland habitat that result in intermittently flowing surface and subsurface water in swales, drainages, and pools described in PCE 1; (3) PCE 3—Soils that support ponding during winter and spring. Soils found in areas characterized in PCEs 1 and 2 that have a clay component or other property that creates an impermeable surface or subsurface layer. These soil types include, but are not limited to: Cieneba- Pismo-Caperton soils in Los Angeles County; Domino, Traver, Waukena, Chino, and Willows soils in Riverside County; and Huerhuero, Placentia, Olivenhain, Stockpen, and Redding soils in San Diego County. Please refer to the recent final critical habitat rule (75 FR 62192) for detailed information on the units, including their sizes, locations, and special management considerations.

ENVIRONMENTAL BASELINE

Regulations implementing the Act (50 CFR §402.02) define the environmental baseline as the past and present impacts of all Federal, State, or private actions and other human activities in the action area. Also included in the environmental baseline are the anticipated impacts of all proposed Federal projects in the action area that have undergone section 7 consultation and the impacts of State and private actions that are contemporaneous with the consultation in progress.

The vegetation types within the boundaries of the project are shown above in Table 1. Additional explanation regarding the amount of occupied habitat and number of individuals within the project footprint is provided in the text below.

San Diego Fairy Shrimp

Wet season protocol surveys were conducted for fairy shrimp during the 2005/2006, 2006/2007, and 2007/2008 wet seasons (URS 2006a, URS 2007, URS 2008) with negative results (with the exception of the pool at Carroll Canyon for which consultation has already been conducted). Dry season surveys were conducted in 2006 (URS 2006b) with positive results for San Diego fairy shrimp in a single road-rut pool within the project footprint of the proposed Nobel Station. The occupied pool is a disturbed road-rut pool 24.4 m² (263 ft²) in size (Figure 6). Additional occupied pools are located south of the proposed Nobel Station.

The proposed restoration of 48.9 m² (526 ft²) of San Diego fairy shrimp habitat will occur within Nobel MHPA lands (i.e., within MHPA lands south of the Nobel Station). The project will restore disturbed vernal pools at this location that are currently not occupied by San Diego fairy shrimp.

The Zamudio Parcel includes 404 m² (4,350 ft²) of vernal pool habitat for which protocol fairy shrimp surveys have not yet been completed. On December 6, 2010, Caltrans biologists documented San Diego fairy shrimp at three locations on the Zamudio Parcel. Surveys are ongoing to determine the extent of the habitat occupied by San Diego fairy shrimp on the Zamudio Parcel.

Coastal California Gnatcatcher

The proposed project area contains areas of native upland habitat, including habitats that are suitable for the gnatcatcher. Twenty gnatcatcher territories were documented within the Biological Study Area for the project during protocol surveys conducted by URS in 2006 (URS 2006c). Portions of two gnatcatcher territories are located within the permanent impact area of the proposed project, and portions of two additional territories are located within the project's temporary impact area.

Spreading Navarretia Critical Habitat

Spreading navarretia critical habitat Subunit 3C is 15 ha (37 ac) in size, and most of the proposed Nobel Station project footprint is located within the subunit. The project will result in the permanent loss of 2.34 ha (5.78 ac) of designated critical habitat for navarretia; however, only 1.20 ha (2.96 ac) of the site contain PCEs of navarretia critical habitat. This subunit encompasses a group of vernal pools on a mesa-top north of Rose Canyon and is loosely bounded by I-805 on the northeast, train tracks on the south, and Nobel Drive on the northwest. Much of the critical habitat within this subunit is conserved within MHPA lands associated with the City of San Diego's MSCP (Figure 6). The function of Subunit 3C is to support a stable occurrence of navarretia and provide potential connectivity between occurrences in Subunit 3B (Carroll Canyon) and Subunit 3D (Montgomery Field).

Special status plant surveys were conducted within the proposed project site of the Nobel Station in 2006 and 2007 with negative results (Caltrans 2010); although surveys were conducted during appropriate blooming periods, 2006 and 2007 were relatively dry years. Surveys in 2009 documented 87 navarretia plants in a vernal pool located approximately 220 ft (67 m) southwest of the proposed Nobel Station site, and at the same vernal pool location, approximately 60 navarretia individuals were documented during surveys conducted in the spring of 2010.

In consideration of the past survey results in relatively dry years, the presence of navarretia just southwest and in proximity to the project site, and the presence of a road-rut pool within the Nobel Station project footprint, we requested additional surveys of the Nobel Station project site. Caltrans complied with this request, and the surveys, which were conducted in 2010, were negative. Based on this information, we consider the navarretia designated critical habitat within the Nobel Station project footprint to be unoccupied.

Restoration actions have been conducted within designated critical habitat south of the Nobel Station, including dethatching, weeding, recontouring of pools, seeding, and access control, with funding from a grant from the Transnet Environmental Mitigation Program (EMP) (AECOM 2010) (EMP Management Polygons, Figure 6).

The proposed vernal pool restoration site within Nobel MHPA lands is located southwest of the Nobel Station footprint within Subunit 3C of navarretia designated critical habitat. There is a historic record for navarretia on the Del Mar Mesa/Zamudio Parcel from 1986 (CNDDDB 2010), and this parcel is located in proximity to Subunit Unit 3C. However, the parcel is outside of designated critical habitat for navarretia.

EFFECTS OF THE ACTION

Effects of the action refer to the direct and indirect effects of an action on the species, together with the effects of other activities that are interrelated and interdependent with that action, which will be added to the environmental baseline. Interrelated actions are those that are part of a larger action and depend on the larger action for their justification. Interdependent actions are those that have no independent utility apart from the action under consideration. Indirect effects are those that are caused by the proposed action, are later in time, and still reasonably certain to occur.

San Diego Fairy Shrimp

Habitat Loss and Destruction of Cysts

Construction of the Nobel Station will destroy one road-rut pool occupied by San Diego fairy shrimp with about 24.4 m² (263 ft²) of basin surface area². This disturbed basin lacks the

² The Nobel Station was redesigned and minimized in size to avoid impacts to additional occupied habitat on the mesa-top north of Rose Canyon by Nobel Drive within the Nobel MHPA lands. A second vernal pool occupied by

biodiversity that is typically associated with vernal pool habitat. Ongoing vehicle travel and disturbance occurring on the dirt road may be responsible for compacting soils to the point where they pond water long enough to support San Diego fairy shrimp; however, this continuing disturbance produces poor quality habitat that is lacking in biodiversity and functions to some degree as a sink, where cysts and shrimp may be crushed by vehicles and habitat quality may continue to degrade over time. Due to continuing disturbance, the onsite basin is not expected to contribute to the long-term viability of San Diego fairy shrimp within the Kearny Mesa area or rangewide. Loss of the road-rut pool will reduce the number of occupied basins within only 1 of the 23 complexes in the Kearny Mesa area and represents a relatively small portion of the occupied San Diego fairy shrimp habitat in this area and a fraction of the habitat rangewide.

San Diego fairy shrimp cysts will be salvaged from the road-rut pool within the Nobel Station impact area and will be used to "seed" 48.9 m² (526 ft²) of pools selected for restoration within the Nobel MHPA lands. The precise location of the pools to be restored is not known but will be specified in the restoration plan submitted to the CFWO for review and approval. Inoculum will be collected when it is dry to avoid damaging or destroying fairy shrimp cysts which are fragile when wet. Inoculum will be collected with a hand trowel or similar instrument to pry up intact chunks of soil rather than loosening the soil by raking and shoveling, which can damage cysts. Inoculum will be stored in labeled bags or boxes that are adequately ventilated and kept out of direct sunlight in order to prevent the occurrence of fungus or excessive heating of the soil. Despite these efforts, we expect at least some cysts to be destroyed during the collection, translocation, and seeding process. Any cysts not salvaged for use in the restoration effort will be destroyed during project clearing, grading, and construction activities.

In addition to the restoration efforts on the Nobel MHPA lands, Caltrans will enhance 48.9 m² (526 ft²) of vernal pool habitat on the Zamudio Parcel. This enhancement is part of a larger restoration and enhancement effort on the Zamudio Parcel that will result in the restoration and enhancement of a total of 404 m² (4,350 ft²) of vernal pool basin surface area of which 48.9 m² (526 ft²) will be acknowledged as conservation to offset the impacts of the proposed project, and the remainder will be reserved for a local transportation bank. Some restoration and enhancement actions may occur on adjacent parcels to improve the success of the restoration/enhancement on the Zamudio Parcel. Introduction of San Diego fairy shrimp into the restored/enhanced pools will be coordinated with the CFWO. Focused surveys for San Diego fairy shrimp will be conducted on the Zamudio Parcel during the 2011 or 2012 wet season. If San Diego fairy shrimp are extant within the basins, no introduction will be necessary. If San Diego fairy shrimp are not present in the Zamudio basins, they will be collected and introduced using inoculum or adult shrimp collected from the source closest to the habitat restoration/enhancement site where access can be obtained, within Del Mar Mesa. Inoculum for the Zamudio restoration/enhancement will be collected when it is dry, in limited quantity, such that no appreciable

San Diego fairy shrimp would have been impacted by the Nobel Station, but the project redesign avoids impacts to this pool.

damage occurs to source pools. Despite these efforts, we expect at least some cysts to be destroyed during the collection, translocation, and seeding process.

The restored habitat will be vegetated and represent higher quality habitat for San Diego fairy shrimp by providing the soils and hydrology necessary to support viable San Diego fairy shrimp occurrences. In addition, the restored habitat will be located on the Nobel MHPA lands and Zamudio Parcel in areas that are, or will be, permanently conserved and managed. Since Caltrans has had success within recent years in restoring highly degraded pools on the Johnson Canyon restoration area, we believe the restoration proposed as a part of this project has a high likelihood of success and that the restored pools will support viable occurrences of San Diego fairy shrimp.

In summary, project construction will result in the loss of one occupied San Diego fairy shrimp basin within only one of the 23 complexes supporting San Diego fairy shrimp in the Kearney Mesa area. The impacted basins represent poor quality habitat that lacks biodiversity and has limited potential to contribute to the survival of the species. Cysts will be salvaged from the impacted pool and used in a restoration effort that will provide four times as much high quality San Diego fairy shrimp habitat than was impacted. Overall, we expect the occurrence of San Diego fairy shrimp impacted to be fully offset by newly established occurrences within the restored/enhanced habitat. The newly established occurrences within the restored/enhanced habitat are expected to have greater long-term viability than the impacted occurrences. Thus, we do not expect the habitat loss and destruction of cysts associated with the project to appreciably reduce the number of individuals, reproduction, or distribution of San Diego fairy shrimp in the action area or across its range.

Indirect Effects

The construction of the Nobel Station adjacent to the vernal pool habitat on the mesa-top north of Rose Canyon by Nobel Drive has the potential to result in indirect effects to San Diego fairy shrimp. Adjacent occupied pools could be subject to siltation, non-seasonal irrigation flows, contaminated run-off, an increased presence of human and domesticated animals, and the introduction of invasive plants from landscaping areas. Avoidance and minimization measures have been incorporated into the proposed project to reduce the indirect effects of the project on San Diego fairy shrimp.

The proposed Nobel Station is at an elevation below adjacent vernal pool avoidance areas and conserved MHPA lands to the south, therefore grading activities for the Nobel Station should not result in siltation impacts to the adjacent habitat, and all drainage for the Nobel Station will be directed away from the avoided pools and conserved MHPA lands. Permanent protective fencing will be installed, prior to completion of project construction, along the interface between the Nobel Station and the adjacent vernal pool avoidance areas and conserved MHPA lands to deter human and domestic animal entrance into these adjacent habitat areas. Signage will be posted and maintained at conspicuous locations to inform people that the adjacent lands are protected

and are restricted to public access. No invasive plants will be used in Nobel Station landscaping. Any nonnative non-invasive plants used in Nobel Station landscaping will be limited to small islands within the Nobel Station and will not be planted directly adjacent to native habitat. These measures will reduce the potential for indirect effects to San Diego fairy shrimp and their habitat to a level of insignificance.

Effect on Recovery

To support the recovery of the San Diego fairy shrimp, the vernal pool recovery plan calls for the conservation of vernal pools in the project area to be secured from further loss and degradation in a configuration that maintains habitat functions and species viability. The road-rut pool on the site was not known when the vernal pool recovery plan was written, and the site is north of areas proposed for conservation in the MHPA of the City of San Diego's MSCP Subarea Plan. Due to continuing disturbance, the onsite basin is not expected to contribute to the long-term viability of the San Diego fairy shrimp or its habitat in the Kearny Mesa area or rangewide.

Caltrans will offset the loss of the basin through the restoration/enhancement of four times as much San Diego fairy shrimp occupied vernal pool habitat within the Nobel MHPA lands and Zamudio Parcel; we expect the restored habitat to be higher quality than the habitat destroyed. In addition, some of this restoration will occur in the adjacent conserved lands and will contribute to regional planning efforts that support the conservation of vernal pool species, including the San Diego fairy shrimp. For these reasons, we do not expect the project to impede recovery of the San Diego fairy shrimp.

Coastal California Gnatcatcher

Habitat Loss

Construction activities are not anticipated to result in the death or injury of any gnatcatchers or nests. A Project Biologist will be present to ensure that gnatcatchers are not directly killed or injured during vegetation removal and other construction activities. The clearing and grubbing of coastal sage scrub will be conducted outside of the breeding season (February 15 to August 31).

The project footprint will result in the permanent removal of coastal sage scrub, chaparral, grassland, and other habitat types (Table 1) used by gnatcatchers. To summarize impacts to the habitat types favored most by the gnatcatcher, the project footprint will result in the permanent removal of about 3.60 ha (8.90 ac) of coastal sage scrub, 4.41 ha (10.90 ac) of disturbed coastal sage scrub, and 0.60 ha (1.48 ac) of coastal sage scrub/chaparral [a total of 8.61 ha (21.28 ac)]; however, gnatcatchers were not observed to be using this entire habitat area. The permanent impact area includes two gnatcatcher territories (Caltrans 2010).

Additionally, the project will result in temporary impacts to about 2.70 ha (6.69 ac) of coastal sage scrub, 3.53 ha (8.72 ac) of disturbed coastal sage scrub, and 1.33 ha (3.29 ac) of coastal sage

scrub/chaparral [a total of 7.57 ha (18.7 ac)]; however, gnatcatchers were observed to be using only approximately 1.16 ha (2.86 ac) of the temporary impact area. The project will result in temporary impacts to two additional gnatcatcher territories (Caltrans 2010).

Although habitat removal will be conducted outside the gnatcatcher nesting season, gnatcatchers are non-migratory territorial birds, and so removal of a substantial portion of a gnatcatcher pairs breeding territory will force the pair to expand their existing territory or establish a new territory, particularly during the breeding season, when territorial boundaries are better defined (Preston et al. 1998). Gnatcatchers are distributed throughout much of the suitable habitat in the project area (Caltrans 2010); therefore, it is likely that displaced gnatcatchers will be forced to compete with resident gnatcatchers when attempting to expand an existing territory or establish a new territory.

If displaced birds cannot find suitable habitat to forage and shelter in, we anticipate they will be more vulnerable to predation and otherwise may die or be injured. Gnatcatchers that successfully establish territories in adjacent habitat are expected to experience reduced productivity (e.g., delayed initiation or prevention of nest building, fewer nesting attempts per season, and/or overall reduction in reproductive output) due to reduced availability of foraging and breeding habitat and increased territorial interactions.

Two gnatcatcher territories are within habitat that will be permanently impacted by the project and two additional territories are within habitat that will be temporarily impacted by the project. Over the short term, the effects to pairs will be similar (i.e., they will be displaced and experience increased mortality and/or reduced reproductive output). Over the longer term, however, the temporarily impacted habitat will be restored and expected to be re-occupied by gnatcatchers, as described below.

Following construction, all temporarily impacted habitats, including coastal sage scrub, will be restored. Since restored coastal sage scrub usually takes a minimum of 4 to 5 years of growth before it is suitable for occupation by gnatcatchers (O'Connell and Erickson 1998, Miner et al. 1998), there will be a temporal loss of coastal sage scrub available to gnatcatchers in the project area, which will reduce the number and reproductive fitness of gnatcatchers in the project area. However, because large numbers of gnatcatcher pairs will be breeding in the intact habitat adjacent to the impact area, we do not anticipate that the temporary impacts will increase the risk of gnatcatcher extirpation in the area, and we expect that the temporarily impacted habitat will be re-occupied as soon as it is mature enough to support gnatcatcher breeding.

Overall, the loss of habitat for four gnatcatcher pairs over the short-term and the permanent loss of habitat for two of these pairs will reduce the number of gnatcatchers that can be supported in the general project area. Impacts to four gnatcatcher pairs represents less than 1 percent of the rangewide estimate of gnatcatcher pairs, and gnatcatcher will continue to occupy the general project area; thus, the project is not expected to result in an appreciable reduction in the numbers, reproduction, or distribution of the species rangewide.

Caltrans will offset the permanent loss of gnatcatcher habitat [8.61 ha (21.28 ac)], as well as additional upland habitats such as grassland (as summarized in Table 1) that may be used to some degree by gnatcatchers, through the preservation of 11.68 ha (28.87 ac) of occupied coastal sage scrub and coastal sage scrub/chaparral at the Sage Hill conservation parcel, and through the preservation of 13.11 ha (32.4 ac) of chaparral and coastal sage scrub at the Zamudio Parcel. While the Zamudio Parcel is not occupied by gnatcatchers, and consists primarily of chaparral, some enhancement actions will occur on the parcel, which may make the habitat more desirable to gnatcatchers.

Although conservation of gnatcatcher and upland habitat offsite will not avoid or minimize impacts to the individual gnatcatchers impacted at the project site, it will permanently protect a total of 24.80 ha (61.27 ac) of coastal sage scrub and chaparral and contribute to the conservation and recovery of the species.

Indirect Effects

Indirect effects include lighting associated with the project that will impact the adjacent gnatcatcher habitat. Light that alters natural light patterns in ecosystems can lead to increased predation, disorientation, and disruption of inter-specific interactions (Longcore and Rich 2004). If night work is necessary, night lighting will be of the lowest illumination necessary for human safety, selectively placed, shielded and directed away from natural habitats. The permanent lighting associated with the proposed Nobel Station will be shielded and directed away from adjacent open space. These actions will minimize the impact of lighting on gnatcatcher behavior in adjacent habitat to the point where such effects are insignificant.

Noise and vibrations associated with the use of heavy equipment during construction and operations of the proposed facilities have the potential to disrupt gnatcatcher behaviors in adjacent habitat by masking intraspecific communication and startling birds (e.g., see Dooling and Popper 2007 for a discussion of observed effects of highway noise on birds). However, gnatcatchers that occupy habitats adjacent to the existing I-805 freeway are subjected to existing noise and vibration and continue to occupy the habitat. Pile driving for the project that will occur near habitats that support gnatcatchers will be conducted outside of the gnatcatcher breeding season to minimize construction noise impacts to nesting gnatcatchers.

Additional indirect effects include an increase of erosion and sedimentation, introduction of invasive species, wildfire, and human encroachment. I-805 is an existing facility, so with the proposed conservation measures, any increase in habitat degradation associated with these factors is likely to be insignificant.

Effect on Recovery

The project is not anticipated to impede recovery of the gnatcatcher. As described above, the project will result in impacts to gnatcatchers and their habitats. However, the impacts are small

relative to the amount of habitat and gnatcatcher territories rangewide (roughly 2,562 pairs). Furthermore, because substantial areas of occupied habitat will remain adjacent to the impact areas, and habitat restoration will be initiated immediately following construction, there will be little risk that the project will extirpate any gnatcatcher populations in the project area. Permanent impacts to gnatcatchers and their habitat will be offset through the conservation of a total of 61.27 ac (24.80 ha) of CSS and chaparral habitats that will support the recovery of the species.

Spreading Navarretia Critical Habitat

The project will result in the permanent loss of 2.34 ha (5.78 ac) of unoccupied designated critical habitat for navarretia. The area of critical habitat that will be impacted is located in the northern corner of designated navarretia critical habitat Subunit 3C and is within the proposed Nobel Station development footprint. Critical habitat Subunit 3C consists of 15 ha (37 ac) of land.

The permanent loss of 2.34 ha (5.78 ac) of designated critical habitat along the northern edge of Subunit 3C represents 15.6 percent of the designated critical habitat within Subunit 3C and 0.08 percent of the critical habitat designated for this species. The function of Subunit 3C is to support a stable occurrence of navarretia and provide potential connectivity between occurrences in Subunit 3B (Carroll Canyon) and Subunit 3D (Montgomery Field).

Only 1.20 ha (2.96 ac) of the navarretia critical habitat that will be impacted contain the PCEs essential to the conservation of the species (Figure 7). The PCEs within the proposed impact area do not support an occurrence of navarretia and represent degraded habitat that would require restoration to support a navarretia occurrence. The loss of this small amount of critical habitat supporting only a limited amount of degraded PCEs will not affect the function of Subunit 3C to support a stable occurrence of navarretia or to provide potential connectivity between occurrences in Subunit 3B (Carroll Canyon) and Subunit 3D (Montgomery Field). Within the subunit, navarretia was documented in a vernal pool that is over 67 m (220 ft) southwest of the Nobel Station, and at an elevation above the Nobel Station; therefore, the project will not affect the function of this unit to support the existing occurrence of navarretia.

Conservation and enhancement actions for navarretia will occur at the Zamudio Parcel on the Del Mar Mesa, which is not within designated critical habitat for navarretia, and on the Nobel MHPA lands, which are within Subunit 3C of navarretia designated critical habitat. While not within navarretia designated critical habitat, the Zamudio Parcel is in proximity to Subunit 3C, supports PCEs of navarretia critical habitat, and has a historic record for navarretia. Pools on the Zamudio Parcel will be enhanced for navarretia through actions that will be defined in the restoration and enhancement plan for the parcel, such as weeding, minor recontouring, and reducing trampling impacts by reducing the number of trails on the parcel. Navarretia seeds will be introduced into the enhanced habitat.

In addition, 48.9 m² (526 ft²) of degraded habitat within navarretia critical habitat Subunit 3C within the conserved Nobel MHPA lands will be restored to high-quality navarretia occupied habitat. This restoration is expected to increase the amount of high-quality ephemeral wetland habitat within the subunit. Ephemeral wetland habitat is one of the PCEs of navarretia critical habitat, and the restoration of high-quality ephemeral wetland habitat within the existing subunit will benefit the function of the subunit and the designation as a whole.

Indirect Effects

According to the final critical habitat rule (75 *Federal Register* 62192), the physical and biological features essential to the conservation of the species in Subunit 3C may require special management considerations or protection to address threats from nonnative plant species and activities (such as unauthorized recreational use) that occur in the vernal pool basins.

The construction of the Nobel Station adjacent to designated critical habitat on the mesa-top north of Rose Canyon by Nobel Drive has the potential to result in indirect effects to the PCEs within the Subunit 3C. Adjacent habitat could be subject to siltation, non-seasonal irrigation flows, and contaminated run-off, which could affect the duration of ponding and water quality within ephemeral wetlands. Development of the station could also increase the presence of human and domesticated animals and introduce invasive plants from landscaped areas into the adjacent habitat.

However, the following avoidance and minimization measures have been incorporated into the proposed project to reduce the potential for degradation of the adjacent areas of designated critical habitat for navarretia to a level where such effects are insignificant. The proposed Nobel Station is at an elevation below adjacent critical habitat avoidance areas and designated critical habitat within conserved MHPA lands to the south; therefore, grading activities for the Nobel Station should not result in siltation impacts to critical habitat adjacent and to the south of these activities. In addition, all drainage for the Nobel Station will be directed away from the avoided and conserved critical habitat areas. Permanent protective fencing will be installed, prior to completion of project construction, along the interface between the Nobel Station and the adjacent and conserved critical habitat areas to deter human and domestic animal entrance into these areas. Signage will be posted and maintained at conspicuous locations to inform people that the adjacent and conserved lands are protected and are restricted to public access. No invasive plants will be used in Nobel Station landscaping. Any nonnative non-invasive plants used in Nobel Station landscaping will be limited to small islands within the Nobel Station and will not be planted directly adjacent to native habitat.

CUMULATIVE EFFECTS

Cumulative effects include the effects of future State, Tribal, local, or private actions that are reasonably certain to occur in the action area considered in this biological opinion. Future Federal actions that are unrelated to the proposed action are not considered in this section

because they require separate consultation pursuant to section 7 of the Act. We are unaware of any future non-Federal actions that are reasonably certain to occur within the action area and may affect San Diego fairy shrimp, gnatcatchers, or designated critical habitat for navarretia.

CONCLUSION

After reviewing the current status of the San Diego fairy shrimp, gnatcatcher, and navarretia critical habitat, the environmental baseline for the action area, effects of the proposed action, and the cumulative effects, it is our biological opinion that the proposed action is not likely to jeopardize the continued existence of the San Diego fairy shrimp or the gnatcatcher and is not likely to result in the destruction or adverse modification of designated critical habitat for navarretia. We reached these conclusions by considering the following:

All Species

- Adverse effects to all federally listed species will be reduced by implementation of the avoidance and minimization measures identified in the “Project Description” of this biological opinion.

San Diego Fairy Shrimp

- The project will permanently impact one road-rut pool occupied by San Diego fairy shrimp totaling about 24.4 m² (263 ft²) of basin surface area in association with the construction of the Nobel Station. This road-rut pool is considered to be relatively degraded and is only one of several occupied basins within one of the 23 complexes supporting San Diego fairy shrimp within the Kearney Mesa area. The impact represents only a fraction of the number and surface area of the basins occupied by San Diego fairy shrimp with the 137 known complexes rangewide.
- The project was redesigned to avoid impacts to additional occupied habitat on the mesa-top north of Rose Canyon by Nobel Drive within the Nobel MHPA lands.
- Impacts to San Diego fairy shrimp habitat will be offset through the restoration of 48.9 m² (526 ft²) of high quality San Diego fairy shrimp habitat within the Nobel MHPA lands, and the enhancement and conservation of 48.9 m² (526 ft²) of high quality San Diego fairy shrimp occupied habitat on the Zamudio Parcel, restoring/enhancing four times the amount of habitat than will be destroyed.
- Cysts from the impacted basin will be collected to establish new occurrences of San Diego fairy shrimp within the adjacent conserved lands to offset the loss of the impacted occurrence at the project site.

- With the proposed conservation measures, the project will have a minor effect on the species and its habitat within the Kearney Mesa area and rangewide and is not anticipated to impede recovery of the species.

Coastal California Gnatcatcher

- The project will permanently impact only 8.61 ha (21.28 ac) of coastal sage scrub out of the tens of thousands of hectares (acres) of gnatcatcher habitat rangewide.
- The project will result in the temporary impact to only 7.57 ha (18.7 ac) of coastal sage scrub, but this habitat will be restored, and within 4 to 5 years will again be suitable for gnatcatcher breeding and foraging.
- Permanent and temporary project-related habitat loss will impact up to four gnatcatcher pairs, which represents less than 1 percent of the roughly 2,562 pairs rangewide.
- Impacts to occupied gnatcatcher habitat will be offset by conserving 11.68 ha (28.87 ac) of occupied coastal sage scrub and coastal sage scrub/chaparral at Sage Hill and 13.11 ha (32.4 ac) of chaparral and coastal sage scrub with some enhancement at the Zamudio Parcel. Enhancement within the Zamudio Parcel may improve the unoccupied habitat for gnatcatchers.
- With the proposed conservation measures, the project is not expected to have a long-term effect on the gnatcatcher or its habitat in the project area or rangewide and is not anticipated to impede recovery of the species.

Spreading Navarretia Critical Habitat

- The project will not affect the function of Subunit 3C to support a stable occurrence of navarretia and provide potential connectivity between occurrences in Subunits 3B (Carroll Canyon) and Subunit 3D (Montgomery Field). The occupied portion of the subunit is over 67 m (220 ft) away from the Nobel Station, and at an elevation above the Nobel Station. Measures have been incorporated into the project to reduce indirect effects of the project to a level of insignificance. The project includes restoration within Subunit 3C, which will increase the amount of occupied habitat within the subunit, thereby enhancing the stability of the occurrence.
- The project will result in the restoration of 48.9 m² (526 ft²) of degraded vernal pool habitat within navarretia critical habitat Subunit 3C. This restoration will increase the amount of high-quality ephemeral wetland habitat within the subunit. Ephemeral wetland habitat is one of the PCEs of spreading navarretia critical habitat. This will benefit the function of the subunit and the designation as a whole.

- The project will result in the conservation, with some enhancement, of 13.11 (32.4 ac) of chaparral and coastal sage scrub upland habitats adjacent to vernal pools, and the conservation and enhancement of 48.9 m² (526 ft²) of vernal pool habitat at the Zamudio Parcel on the Del Mar Mesa. While the Zamudio Parcel is located outside of the designated critical habitat polygons, it is in proximity to Unit 3 of navarretia critical habitat, supports PCEs of navarretia critical habitat, and has a historic record for navarretia. Further, navarretia will be introduced into the restored/enhanced habitat at the Zamudio Parcel, which will increase the amount of occupied habitat with PCEs for navarretia in the Unit 3 area.

INCIDENTAL TAKE STATEMENT

Section 9 of the Act and Federal regulation pursuant to section 4(d) of the Act prohibit the take of endangered and threatened species, respectively, without special exemption. Take is defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or attempt to engage in any such conduct. Harm is further defined to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing essential behavior patterns, including breeding, feeding, or sheltering. Harass is defined as intentional or negligent actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns which include, but are not limited to, breeding, feeding, or sheltering. Incidental take is defined as take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity. Under the terms of Section 7(b)(4) and 7(o)(2) of the Act, taking that is incidental to and not intended as part of the proposed action is not considered to be prohibited taking under the Act provided that such taking is in compliance with the terms and conditions of this incidental take statement.

The measures described below are non-discretionary, and must be undertaken by Caltrans for the exemption in section 7(o)(2) to apply. If Caltrans fails to implement the terms and conditions, the protective coverage of section 7(o)(2) may lapse. To monitor the impact of the incidental take, Caltrans must report the progress of the action and its impact on the species to the CFWO as specified in the incidental take statement [50 CFR §402.14(i)(3)].

AMOUNT OR EXTENT OF TAKE

San Diego Fairy Shrimp

We anticipate that San Diego fairy shrimp cysts will be killed or otherwise harmed during grading and construction work that destroys the basins (i.e., habitat) they occupy. However, it is not possible to determine the number of San Diego fairy shrimp cysts that will be impacted by the project because populations of fairy shrimp vary dramatically over time depending on environmental conditions, and it is impractical to count the number of cysts directly.

Because the precise number of individual San Diego fairy shrimp cysts that will be taken cannot be determined, we have established take thresholds based on the area of habitat impacted. If any take threshold is exceeded, it will trigger reinitiation of consultation.

Take of San Diego fairy shrimp is authorized as follows:

- Destruction of one road-rut pool occupied by San Diego fairy shrimp totaling about 24.4 m² (263 ft²) of basin surface area in association with the construction of the Nobel Station. The take threshold will be exceeded if more than one road-rut-pool occupied by San Diego fairy shrimp is impacted; the take threshold will also be exceeded if more than 24.4 m² (263 ft²) of basin surface area is impacted in association the construction of the Nobel Station.
- Collection and translocation of San Diego fairy shrimp cysts in one-road-rut pool to “seed” restored pools on the Nobel MHPA lands. We anticipate that some of the translocated cysts will survive in the restored pools, but many will be destroyed during the process of collecting and transferring them to the restored pools. The pools from which cysts will be collected will be in proximity to the restored pools and will be identified in the vernal pool restoration plan submitted to the CFWO for review and approval. The take threshold will be met if cysts from more than one road-rut pool are required to meet the expected restoration and enhancement commitments.

Coastal California Gnatcatcher

The take threshold for gnatcatchers is based on the number of gnatcatcher pairs and the amount of occupied habitat impacted. If the take threshold is exceeded, it will trigger reinitiation of consultation. Take of gnatcatcher is authorized as follows:

- Take in the form of harm of up to 4 gnatcatcher pairs is authorized due to the permanent removal of 8.61 ha (21.28 ac) of coastal sage scrub and the temporary removal of 7.57 ha (18.7 ac) of coastal sage scrub. The take threshold will be met if more than the specified amount of habitat or more than four gnatcatcher territories are impacted.

EFFECT OF TAKE

In the accompanying biological opinion, we determined that these levels of anticipated take are not likely to result in jeopardy to the San Diego fairy shrimp and gnatcatcher.

REASONABLE AND PRUDENT MEASURES

Caltrans will implement conservation measures as part of the proposed action to minimize the incidental take of San Diego fairy shrimp and gnatcatchers. In addition to these conservation

measures, the following reasonable and prudent measures are necessary to monitor and report the effects of the incidental take on San Diego fairy shrimp and gnatcatchers:

1. Caltrans will monitor and report on compliance with established take thresholds for San Diego fairy shrimp associated with the proposed action.
2. Caltrans will monitor and report on compliance with established take thresholds for gnatcatchers associated with the proposed action.

TERMS AND CONDITIONS

To be exempt from the prohibitions of section 9 of the Act, Caltrans must comply with the following terms and conditions which implement the reasonable and prudent measures described above.

San Diego Fairy Shrimp

- 1.1 Caltrans will notify the CFWO in writing within 30 days of completing construction-related impacts to San Diego fairy shrimp habitat associated with the proposed project. This notification will include the number and area of San Diego fairy shrimp basins that were impacted by the project and whether San Diego fairy shrimp cysts were collected from the basins prior to impacts.
- 1.2 Prior to initiating restoration/enhancement of San Diego fairy shrimp habitat, Caltrans will submit to the CFWO a map showing the area that will be restored/enhanced. This submittal will include the number and basin surface area of San Diego fairy shrimp pools that will be restored/enhanced.
- 1.3 Consistent with the future restoration/enhancement plan, Caltrans will submit annual reports to the CFWO documenting restoration/enhancement activities until the restored/enhanced habitat has met success criteria and been approved by the CFWO.

Coastal California Gnatcatcher

- 2.1 Prior to initiating the proposed project, the Project Biologist will conduct a single-pass survey of the project site to verify that no more than four gnatcatcher territories (total) will be substantially impacted by the project. Three preconstruction surveys will be conducted within all suitable gnatcatcher habitat within the footprint for the project, within 30 days prior to initiation of vegetation removal activities. Prior to initiating the project, Caltrans will provide to the CFWO a map showing the distribution of gnatcatchers relative to the project footprint, an estimate of the number of gnatcatcher territories that will be impacted by the project, and the cumulative total of gnatcatcher territories impacted by the project, or confirm in writing that maps, distribution

information, and the number of territories that will be impacted by the project as shown in the BA remain correct.

- 2.2 Caltrans will notify the CFWO within 30 days of completing removal of gnatcatcher occupied habitat. The purpose of this notification is to ensure that impacts to gnatcatcher-occupied habitat from the proposed project do not exceed the take thresholds.

DISPOSITION OF SICK, INJURED, OR DEAD SPECIMENS

Upon locating dead, injured, or sick individuals of threatened or endangered species, initial notification must be made to our Division of Law Enforcement in either San Diego, California, at (619) 557-5063 or in Torrance, California, at (310) 328-6307 within 3 working days. Notification should also be sent by telephone and writing to this office in Carlsbad, California, at 6010 Hidden Valley Road, Suite 101, Carlsbad, California 92011, (760) 431-9440. Written notification must be made within 5 calendar days and include the collection date and time, the location of the animal, and any other pertinent information. Care must be taken in handling sick or injured animals to ensure effective treatment and care, and in handling dead specimens to preserve biological material in the best possible state. The remains of intact specimens shall be placed with educational or research institutions holding the appropriate State and Federal permits. Remains shall be placed with the San Diego Natural History Museum, San Diego. Arrangements regarding proper disposition of potential museum specimens shall be made with the institution by the authorized biologist prior to implementation of the action.

CONSERVATION RECOMMENDATIONS

Section 7(a)(1) of the Act directs Federal agencies to utilize their authorities to further the purposes of the Act by carrying out conservation programs for the benefit of endangered and threatened species. Conservation recommendations are discretionary agency activities to minimize or avoid adverse effects of a proposed action on listed species or critical habitat, to help implement recovery plans, or to develop information.

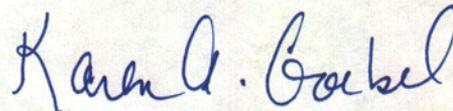
It has come to our attention that numerous Park and Ride facilities are proposed within areas of existing and proposed conservation associated with regional habitat conservation plans within San Diego County. We recommend that Caltrans avoid and minimize these impacts to the greatest extent feasible. We recommend that conservation be provided to offset unavoidable impacts of Park and Rides to areas of existing and proposed conservation associated with regional habitat conservation plans. In addition to the loss of habitat that results from paving reserve areas, these facilities can result in an increase in edge effects that are not compatible with reserve design, such as night lighting, siltation, non-seasonal irrigation flows, contaminated runoff, an increased presence of human and domesticated animals, and the introduction of invasive plants from landscaping areas.

REINITIATION NOTICE

This concludes formal consultation regarding the I-805 North Managed Lanes Project as outlined in materials submitted to us. As provided in 50 CFR §402.16, reinitiation of formal consultation is required where discretionary Federal agency involvement or control over the action has been retained (or is authorized by law) and if (1) the amount or extent of incidental take is exceeded; (2) new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not considered in this opinion; and (3) the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat not considered in this opinion; or (4) a new species is listed or critical habitat designated that may be affected by the action. In instances where the amount or extent of incidental take is exceeded, any operations causing such take must cease pending reinitiation.

If you have any questions regarding this biological opinion, please contact Sally Brown of this office at (760) 431-9440, extension 278.

Sincerely,



Jim A. Bartel
Field Supervisor



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Figure 1
 Project Location Map

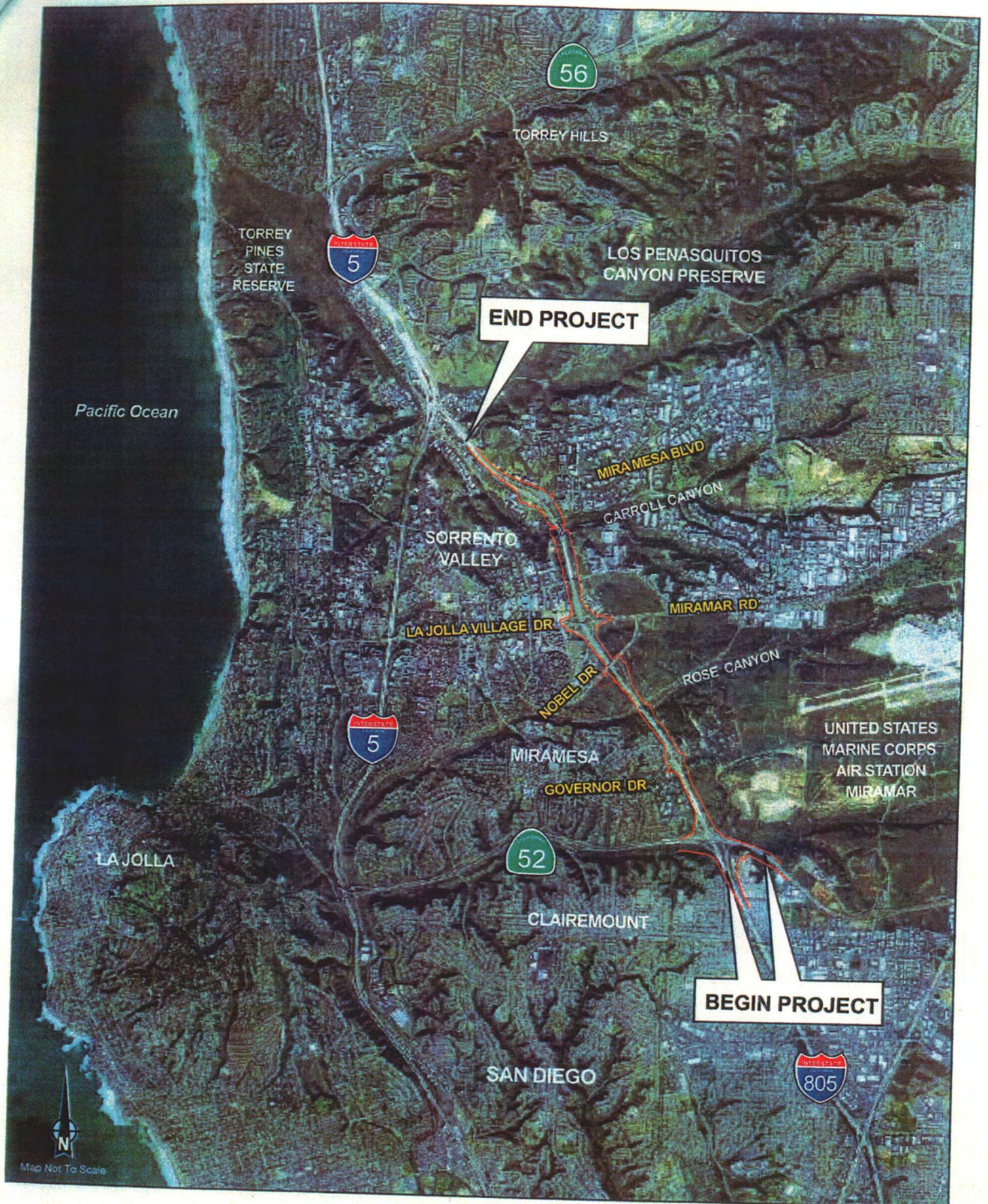


Figure 2
Project Vicinity Map



- Ownership**
- Private Property
 - City of San Diego
 - County of San Diego
 - CDFG
 - USFWS
 - Other Conserved Lands

- Parcels used for mitigation**
- 1 - Metropolitan Waste Water Division
 - 2 - The Environmental Trust (TET)
 - 3 - Mira Mesa Market Center
 - 4 - Environmental Services
 - 5 - Deer Canyon Mitigation

Figure 3

Ownership and Parcels Used for Mitigation on Del Mar Mesa Preserve



Pardee Parcel

Figure 4



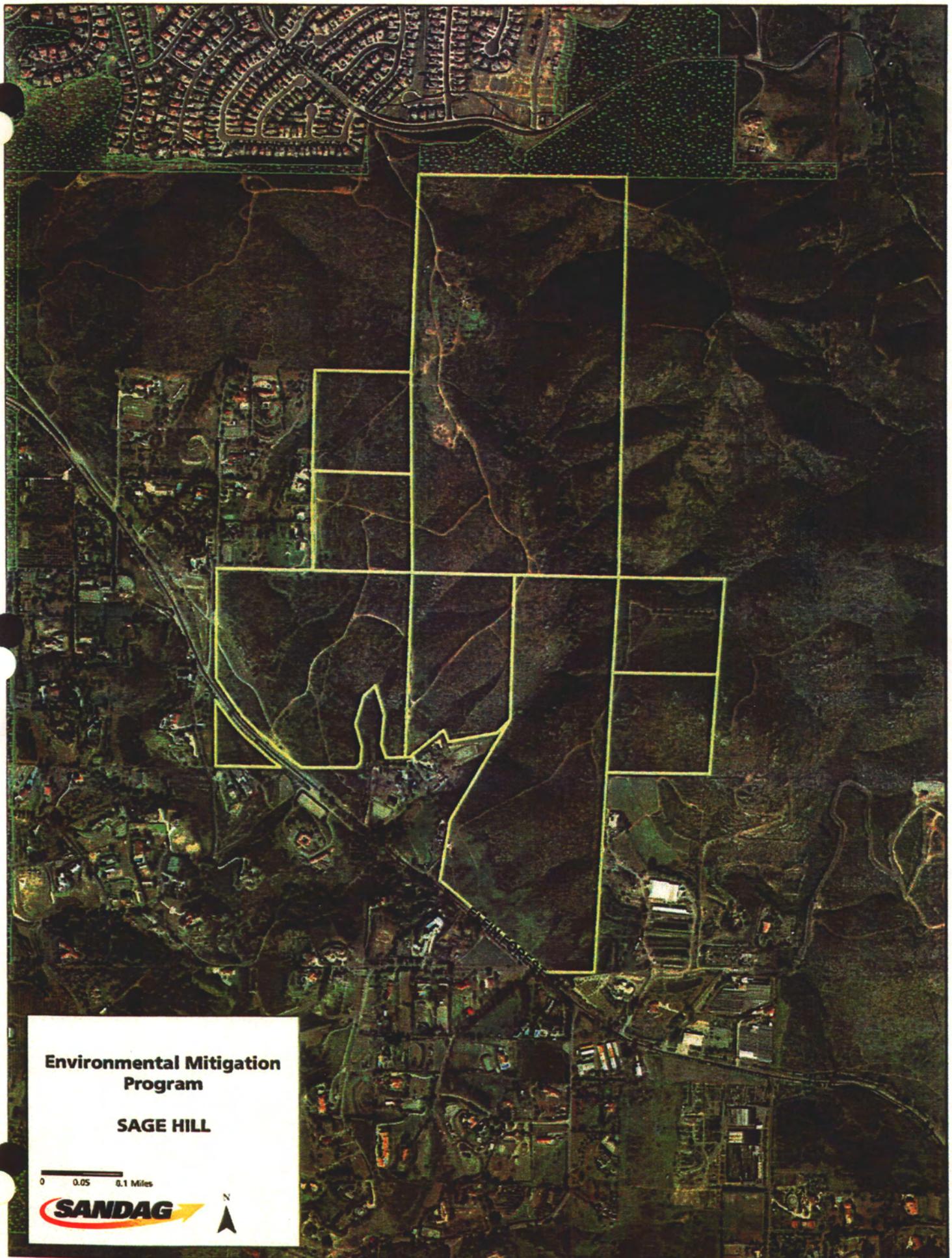


Figure 5

Legend

-  805N Revised Footprint at Nobel
-  805N draft IS/EA footprint
-  City of San Diego vernal pool complex
-  Vernal Pools
-  Conserved Area
-  EMP Management Polygons
-  MHPA
-  Proposed Critical Habitat for Navarretia f.

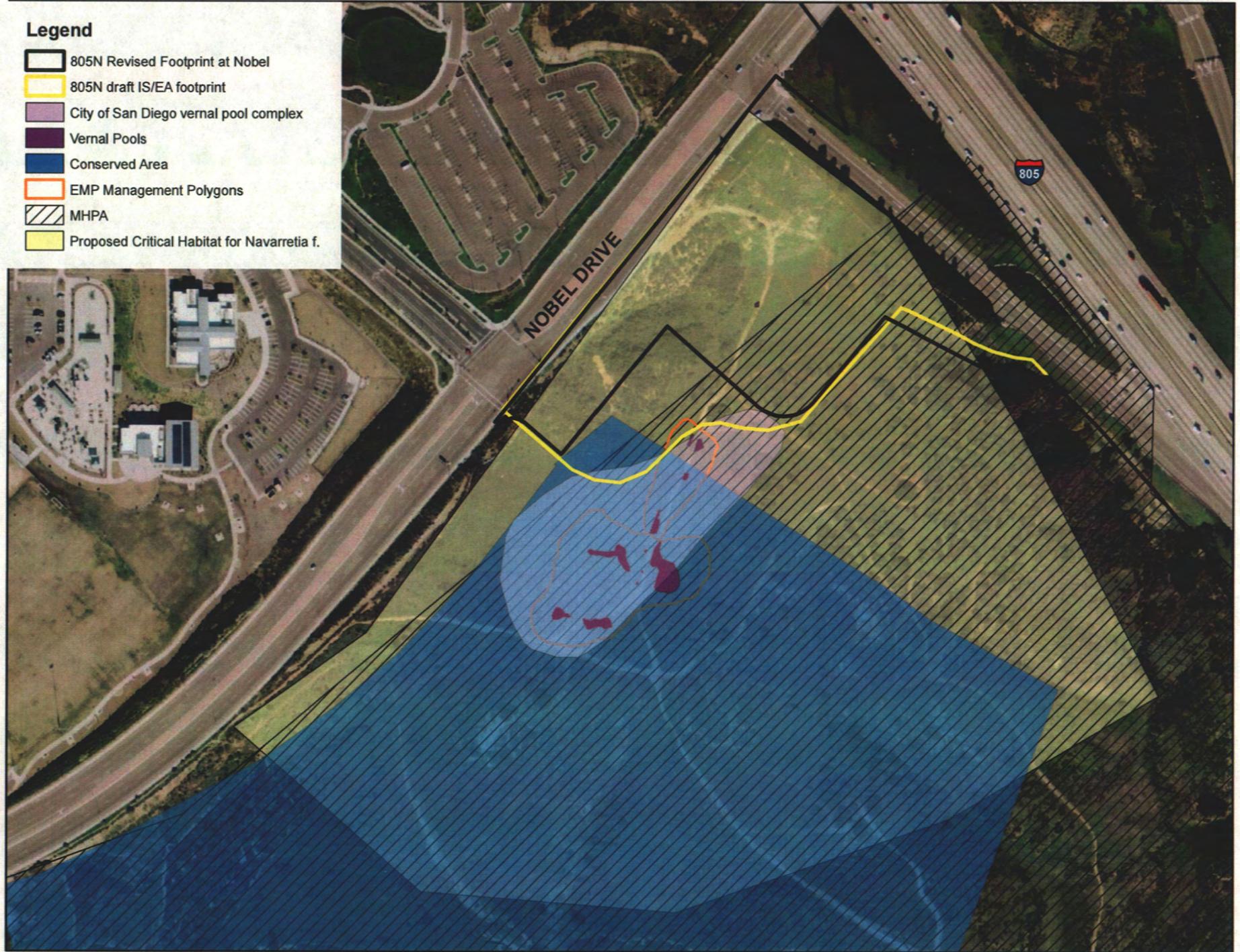


Figure 6 **Map 1. I-805 N Revised Footprint at Nobel and draft IS/EA footprint at Nobel**



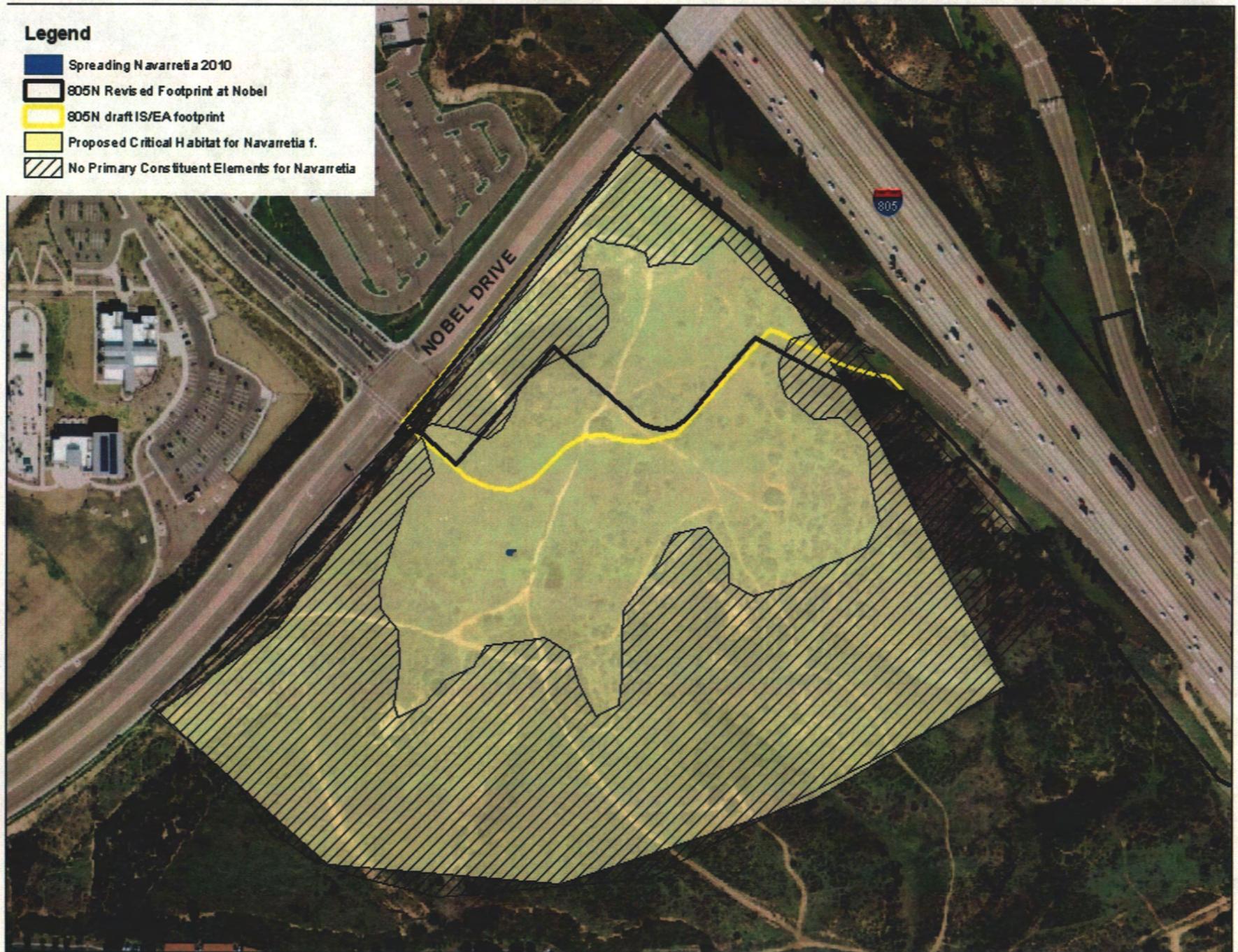


Figure 7

I-805 N Revised Footprint at Nobel and draft IS/EA footprint with the Proposed Critical Habitat for Navarretia and Area with no Primary Constituent Elements

