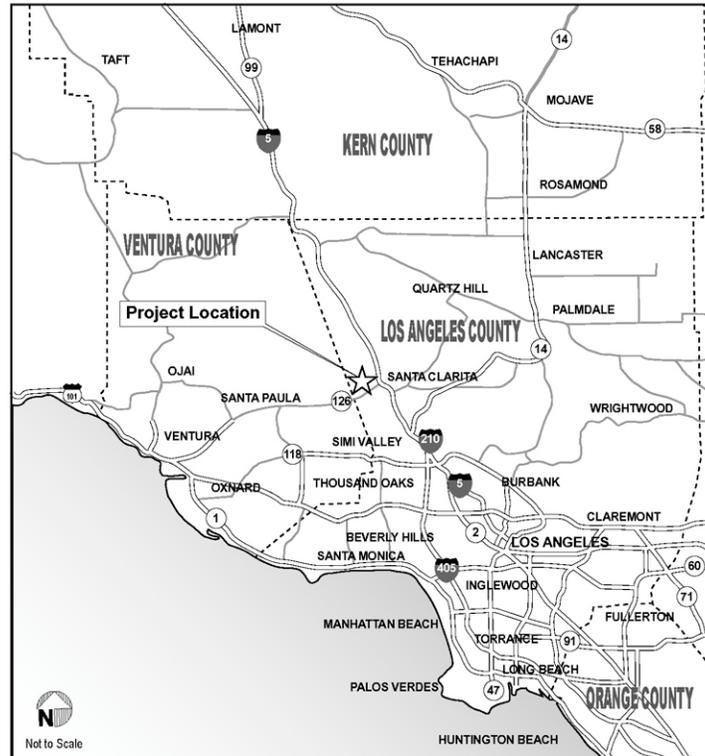


SR 126/COMMERCE CENTER DRIVE INTERCHANGE PROJECT



DRAFT INITIAL STUDY/ENVIRONMENTAL ASSESSMENT

State Route 126 and Commerce Center Drive
County of Los Angeles, State of California

07-LA-126-KP R6.8 – R9.2

(PM R4.2 – R5.7)

EA: 187220

SCH: 2003101127

May 2005



General Information About This Document

What's in this document?

This document is a combined Initial Study/Environmental Assessment (IS/EA) that examines the potential environmental impacts of SR 126/Commerce Center Drive Interchange Project alternatives located in unincorporated County of Los Angeles, California. The document describes why the project is being proposed, alternative methods for constructing the project, the existing environment that could be affected by the project, and potential impacts from each of the alternatives.

What should you do?

- Please read this IS/EA.
- We welcome your comments. If you have any concerns regarding the proposed project, please attend the Public Hearing and/or send your written comments to the California Department of Transportation (Caltrans) by the deadline. Submit comments via regular mail to:

California Department of Transportation (Caltrans)
Attn: Chris Benz-Blumberg, Environmental Planner
Division of Environmental Planning, District 7 – Los Angeles
120 South Spring Street
Los Angeles, California 90012

Submit comments via email to: chris.benz-blumberg@dot.ca.gov

- Submit comments by the deadline: July 8, 2005

What happens after this?

After comments are received from the public and reviewing agencies, Caltrans may (1) give environmental approval to the proposed project, (2) undertake additional environmental studies, or (3) abandon the project. If the project were given environmental approval and funding were appropriated, Caltrans could design and construct all or part of the project.

07-LA-126 KP R6.8 – R9.2
(PM R4.2 – R5.7)
EA: 187220
SCH: 2003101127

SR 126/COMMERCE CENTER DRIVE INTERCHANGE PROJECT
KP R6.8 – R9.2 (PM R4.2 – R5.7)

**INITIAL STUDY/
ENVIRONMENTAL ASSESSMENT**

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

U.S. DEPARTMENT OF TRANSPORTATION
Federal Highway Administration, and
THE STATE OF CALIFORNIA
Department of Transportation

Date of Approval

Ronald J. Kosinski
Deputy District Director
California Department of Transportation

Date of Approval

Gene K. Fong
Division Administrator
Federal Highway Administration

Negative Declaration

Pursuant to: Division 13, Public Resources Code

Project Description

The California Department of Transportation (Caltrans), in coordination with the Federal Highway Administration (FHWA), Los Angeles County, and the Newhall Land and Farming Company (Newhall Land), proposes to construct a grade-separated interchange at the existing, signalized intersection of State Route 126 (SR 126) and Commerce Center Drive. The proposed project is located northwest of the City of Santa Clarita in unincorporated Los Angeles County. As part of this proposed interchange project, SR 126 would be realigned to the south over a recently constructed embankment. The project would also result in the reconfiguration of the existing Commerce Center Drive/Henry Mayo Drive intersection to the south.

Determination

Caltrans has prepared an Initial Study/Environmental Assessment (IS/EA), and determines from this study that the proposed project would not have an adverse effect on the environment for the following reasons:

- There would be no adverse amount of siltation by wind or water, or erosion as a result of this project.
- Air quality, noise, and use of natural resources would not be adversely affected by this project.
- No adverse changes to existing lighting or glare conditions would result from this project.
- With adherence to appropriate measures to minimize harm, fish and wildlife such as endangered species, habitat, and vegetation would not be adversely impacted by this project.
- With adherence to measures to minimize harm outlined in the Natural River Management Plan (NRMP), floodplains, wetlands, and water quality would not be adversely impacted by this project.
- No effect on agricultural lands, land use, or growth would originate from this project.
- With adherence to appropriate measures to minimize harm, no public or recreational facilities, historic or archaeological sites, structures of architectural significance, or important agricultural or scenic resources would be affected by this project.
- No adverse effects on employment, industry, or economic stability of the area would result from this project.

Ronald J. Kosinski
District Deputy Director, District 7
Division of Environmental Planning
California Department of Transportation

Date

Summary

The California Department of Transportation (Caltrans), in coordination with the Federal Highway Administration (FHWA), Los Angeles County, and the Newhall Land and Farming Company (Newhall Land), propose to construct a grade-separated interchange at the existing, signalized intersection of State Route 126 (SR 126) and Commerce Center Drive. The proposed project is located northwest of the City of Santa Clarita in unincorporated Los Angeles County. As part of the proposed project, SR 126 would be realigned to the south over a recently constructed embankment and would include three lanes in each direction, for a total of six lanes. In addition, the existing Commerce Center Drive/Henry Mayo Drive intersection would be reconfigured to the south.

The project is intended to achieve the following objectives:

- Improve local access and traffic circulation
- Mitigate traffic impacts from the approved Valencia Commerce Center project
- Incorporate planned infrastructure improvements consistent with local and regional planning efforts
- Enhance driver safety
- Accommodate planned growth within the study area

Four alternatives for the SR 126/Commerce Center Drive interchange project were studied in the Project Study Report (PSR), including the No Build Alternative and three build alternatives (CH2M HILL, 1999a). Each of the build alternatives included designs for an SR 126/Commerce Center Drive interchange. The alternatives analyzed in this document include the No Build Alternative and Alternative C, also known as the Locally Preferred Alternative (Build Alternative). The Build Alternative is essentially a full-access, partial-cloverleaf interchange. The two eliminated build alternatives include a Buttonhook Ramp Concept (Alternative A) and a Single-Point Diamond Concept (Alternative B).

Without implementation of the Build Alternative, roadway and intersection levels of service (LOS) in the vicinity of SR 126/Commerce Center Drive would worsen to an unacceptable LOS F, thereby increasing the potential for accidents. Approved developments such as the Valencia Commerce Center and the Newhall Ranch will add high volumes of new traffic to the region. Construction of the Build Alternative, however, would reduce vehicular weaving conflicts; increase roadway and intersection capacity; and improve overall highway operations, thereby reducing the potential for accidents and unacceptable delays on SR 126.

The final selection of an alternative would not be made until after receipt of agency comments and public hearing comments.

Implementation of the Build Alternative would impact sensitive biological resources within and adjacent to the project site; and appropriate measures to minimize harm would be employed to reduce these impacts. Potentially adverse impacts to these resources would thereby be mitigated to a level of insignificance. The project would be required to adhere to the measures to minimize harm provided in the approved Natural River Management Plan (NRMP) developed for projects in the Newhall Ranch area. This Initial Study/Environmental Assessment (IS/EA) demonstrates that the proposed project would be consistent with the NRMP, and thus would cause no adverse and unmitigable impacts.

Consultation and coordination with a variety of other agencies are required. Among these are:

- U.S. Army Corps of Engineers (USACE)
- California Regional Water Quality Control Board (RWQCB)
- California Office of Historic Preservation
- Native American Heritage Commission
- U.S. Fish and Wildlife Service (USFWS)
- California Department of Fish and Game (CDFG)
- Southern California Association of Governments (SCAG)
- South Coast Air Quality Management District (SCAQMD)
- County of Los Angeles Department of Regional Planning (DRP)
- City of Santa Clarita Planning and Building Services

Construction of the Build Alternative may require state or federal permits, reviews, or approvals in addition to those required by local jurisdictions. These additional requirements fall mainly under the following statutes:

- Federal Endangered Species Act (FESA)
- Clean Water Act
- National Historic Preservation Act
- Fish and Game Code
- California Endangered Species Act (CESA)
- Native Plant Protection Act (NPPA)
- Federal Migratory Bird Treaty Act (MBTA)

Table S-1 provides a summary of impacts and measures to minimize harm derived from the environmental analyses of the project.

TABLE S-1 - SUMMARY OF ALTERNATIVES CONSIDERED AND MEASURES TO MINIMIZE HARM

IMPROVEMENT PROJECT AND ENVIRONMENTAL EVALUATION: SUMMARY OF EFFECTS*

Alternatives with Design Variations	Beneficial Effects	Potential Impact	Measures to Minimize Harm
3.1 Hydrology, Water Quality, Stormwater Runoff			
Build Alternative		<u>Permanent Impacts:</u> <ul style="list-style-type: none"> An increase of impervious surface area of approximately 8.5 hectares (21 acres). 	<ul style="list-style-type: none"> Compliance with Caltrans' SWMP and Caltrans NPDES permits and implementation BMPs to the maximum extent practicable.
		<ul style="list-style-type: none"> Increased runoff and the potential for increased erosion and scour within the riverbed is assumed to be directly proportional to the increase in impervious surface area; the increase in runoff would be negligible. 	<ul style="list-style-type: none"> No measures are required.
		<u>Temporary Impacts:</u> <ul style="list-style-type: none"> Fine-grain particles solids entering the Santa Clara River may potentially contaminate aquatic and/or wetland habitats. 	<ul style="list-style-type: none"> Implementation of SWPPP and BMPs and erosion control measures. Adherence to NRMP to minimize water quality impacts as listed.
		<ul style="list-style-type: none"> Small increase in runoff to the Santa Clara River. 	<ul style="list-style-type: none"> Adherence to standard construction methods and BMPs.
No Build Alternative		<ul style="list-style-type: none"> No impact to Santa Clara River. 	<ul style="list-style-type: none"> No measures are required.
3.3 Air Quality			
Build Alternative	<u>Cumulative Impacts:</u> <ul style="list-style-type: none"> Congestion reduction would result from this project and would have a beneficial effect on air quality. 	<u>Permanent Impacts:</u> <ul style="list-style-type: none"> Proposed project can cause a increase in the regional air quality impact; however, this has been included in the 2004 RTIP. 	<ul style="list-style-type: none"> No measures are required.

IMPROVEMENT PROJECT AND ENVIRONMENTAL EVALUATION: SUMMARY OF EFFECTS*

Alternatives with Design Variations	Beneficial Effects	Potential Impact	Measures to Minimize Harm
		<ul style="list-style-type: none"> Proposed project would not contribute to any carbon monoxide (CO) violations or cause an increase in any existing violations. 	<ul style="list-style-type: none"> No measures are required.
		<ul style="list-style-type: none"> Proposed project would not contribute to a violation of the PM₁₀ National Ambient Air Quality Standard. 	<ul style="list-style-type: none"> No measures are required.
		<p><u>Temporary Impacts:</u></p> <ul style="list-style-type: none"> Construction activities related to the build alternative. 	<ul style="list-style-type: none"> Implementation of BMPs such as fugitive dust control and vehicular emissions control.
No Build Alternative		<ul style="list-style-type: none"> No air quality impacts. 	<ul style="list-style-type: none"> No measures are required.
3.4 Noise			
Build Alternative		<p><u>Permanent Impacts:</u></p> <ul style="list-style-type: none"> Traffic noise level conditions exceed the 66 dBA criterion at all selected receiver locations within the Valencia Travel Village. 	<ul style="list-style-type: none"> Abatement measures will be considered for the proposed project and may include construction of a noise wall along SR 126.
		<p><u>Temporary Impacts:</u></p> <ul style="list-style-type: none"> Construction activities would increase noise levels in the immediate project area. 	<ul style="list-style-type: none"> Equipment operation at the project site will conform to specifications requiring the contractor to comply with all Caltrans and local noise control rules, regulations, and ordinances.
No Build Alternative		<ul style="list-style-type: none"> No noise impacts. 	<ul style="list-style-type: none"> No measures are required.
3.6 Wetlands and Other Waters of the United States			
Build Alternative		<p><u>Permanent and Temporary Impacts:</u></p> <ul style="list-style-type: none"> Detailed project-level limits of the riverbed and jurisdictional Waters of the U.S. were determined and certified by the USACE. USACE acknowledges that the riverbed 	<ul style="list-style-type: none"> Compliance with measures to minimize harm. Refer to Section 3.6.5.

IMPROVEMENT PROJECT AND ENVIRONMENTAL EVALUATION: SUMMARY OF EFFECTS*

Alternatives with Design Variations	Beneficial Effects	Potential Impact	Measures to Minimize Harm
		area defined in the NRMP was conservative and contained areas that are not considered jurisdictional waters or wetlands.	
No Build Alternative		<ul style="list-style-type: none"> No impact on wetlands. 	<ul style="list-style-type: none"> No measures are required.
3.7 Vegetation			
Build Alternative		<p><u>Permanent Impacts:</u></p> <ul style="list-style-type: none"> The proposed project would result in a loss of approximately 4.12 hectares (10.2 acres) of native habitat and 20.77 (51.3 acres) hectares of non-native habitat. No adverse impacts on wildlife movement and habitat fragmentation are expected. <p><u>Temporary Impacts:</u></p> <ul style="list-style-type: none"> Grading activities would disturb soils and result in the accumulation of dust on the surface of leaves of trees, shrubs, and herbs, but would not reduce plant populations below self-sustaining levels. 	<ul style="list-style-type: none"> Compliance with measures from the NRMP BIO-5. (Removal of exotic plant species from the project location and implementation of a monitoring program.) No measures are required. Compliance with measures from the NRMP BIO-5. (Removal of exotic plant species from the project location and implementation of a monitoring program.)
No Build Alternative		<ul style="list-style-type: none"> No impact on vegetation. 	<ul style="list-style-type: none"> No measures are required.
3.8 Wildlife			
Build Alternative		<p><u>Permanent Impacts:</u></p> <ul style="list-style-type: none"> The proposed project would result in a loss of approximately 4.12 hectares (10.2 acres) of native habitat and 20.77 (51.3 acres) hectares of non-native habitat. 	<ul style="list-style-type: none"> Compliance with measures from the NRMP BIO-5. (Removal of exotic plant species from the project location and implementation of a monitoring program.)

IMPROVEMENT PROJECT AND ENVIRONMENTAL EVALUATION: SUMMARY OF EFFECTS*

Alternatives with Design Variations	Beneficial Effects	Potential Impact	Measures to Minimize Harm
		<ul style="list-style-type: none"> Impacts from human activity due to the high biological value of native habitat areas in the study area may occur. 	<ul style="list-style-type: none"> Compliance with measures from the NRMP BIO-5. (Removal of exotic plant species from the project location and implementation of a monitoring program.)
		<p><u>Temporary Impacts:</u></p> <ul style="list-style-type: none"> Temporary short-term impacts from construction noise may result in the temporary displacement of birds. Noise may disturb nesting activity of birds. Habitat remaining on the site adjacent to development would be disturbed due to increased traffic. Water quality could be affected by runoff of nutrients from project landscape features. 	<ul style="list-style-type: none"> Compliance with measures from the NRMP BIO-5. (Removal of exotic plant species from the project location and implementation of a monitoring program.) Compliance with measures from the NRMP BIO-5. (Removal of exotic plant species from the project location and implementation of a monitoring program.) Compliance with measures from the NRMP BIO-5. (Removal of exotic plant species from the project location and implementation of a monitoring program.) Standard BMPs implemented through the SWPPP and NPDES permit.
No Build Alternative		<ul style="list-style-type: none"> No impact on wildlife. 	<ul style="list-style-type: none"> No measures are required.

IMPROVEMENT PROJECT AND ENVIRONMENTAL EVALUATION: SUMMARY OF EFFECTS*

Alternatives with Design Variations	Beneficial Effects	Potential Impact	Measures to Minimize Harm
<p>3.9 Special-Status Species</p>			
		<p><u>Permanent Impacts:</u></p> <ul style="list-style-type: none"> Impacts to special-status plants are limited to Peirson's morning glory. 	<ul style="list-style-type: none"> Compliance with measures from the NRMP BIO-4 or BIO-5. (Restoration of temporarily disturbed area and removal of exotic plant species from the project location and implementation of a monitoring program, respectively.) Restoration shall include replanting of Peirson's morning glory as described under Section 3.9.4 of this document.
		<ul style="list-style-type: none"> Proposed project would not result in the loss of habitat for Quino checkerspot. 	<ul style="list-style-type: none"> No measures are required.
		<ul style="list-style-type: none"> Indirect impacts on Santa Ana sucker, unarmored three-spine stickleback, arroyo chub, and steel head trout. 	<ul style="list-style-type: none"> (1) preconstruction surveys and temporary fish relocation by the USFWS or its agents; (2) restoration of adversely affected streams after construction; (3) diversion of streamflow around active construction sites in the river; and (4) use of sedimentation retention ponds, where needed.
		<ul style="list-style-type: none"> The proposed project would impact 4.12 hectares (10.2 acres) of potential estivating habitat for the arroyo toad and western spadefoot. 	<ul style="list-style-type: none"> Compliance with measures from the NRMP BIO-1 and NRMP BIO-2. (Construction activities will be limited to disturbance and construction sites, and access roads within the riverbed will be inspected by a qualified biologist.)
		<ul style="list-style-type: none"> The proposed project would not result in any impacts on the California red-legged frog. 	<ul style="list-style-type: none"> No measures are required.

IMPROVEMENT PROJECT AND ENVIRONMENTAL EVALUATION: SUMMARY OF EFFECTS*

Alternatives with Design Variations	Beneficial Effects	Potential Impact	Measures to Minimize Harm
		<ul style="list-style-type: none"> The proposed project would not impact any native upland habitat; project implementation would not impact the coastal western whiptail, coast horned lizard, coast patch nose snake, and the coastal rosy boa. 	<ul style="list-style-type: none"> No measures are required.
		<ul style="list-style-type: none"> The proposed project would impact the western pond turtle and two-striped garter snake. 	<ul style="list-style-type: none"> Compliance with measures from the NRMP BIO-1 and NRMP BIO-2. (Construction activities will be limited to disturbance and construction sites, and access roads within the riverbed will be inspected by a qualified biologist.)
		<ul style="list-style-type: none"> The proposed project would result in a loss of 13.21 hectares (32.6 acres) of disturbed/ ruderal, and agricultural land that would be used by the tricolored blackbird, California horned lark, and loggerhead shrike. 	<ul style="list-style-type: none"> Compliance with measures from the NRMP BIO-3 and NRMP BIO-21. (Construction sites and access roads within the riverbed will be inspected by a qualified biologist and through removal of exotic species.)
		<ul style="list-style-type: none"> The proposed project would result in the loss of 4.12 hectares (10.2 acres) of riparian habitat for the summer tanager, tricolored blackbird, western yellow warbler, and yellow-breasted chat. Impacts to these species would not be considered to be adverse. 	<ul style="list-style-type: none"> No measures are required.

IMPROVEMENT PROJECT AND ENVIRONMENTAL EVALUATION: SUMMARY OF EFFECTS*

Alternatives with Design Variations	Beneficial Effects	Potential Impact	Measures to Minimize Harm
		<ul style="list-style-type: none"> The project implementation would not impact the western yellow-billed cuckoo, southwester willow flycatcher, coastal California gnatcatcher, and least Bell's vireo. 	<ul style="list-style-type: none"> Compliance with measures from the NRMP BIO-3. (Removal of exotic species.)
		<ul style="list-style-type: none"> The proposed project would impact approximately 4.12 hectares (10.2 acres) of riparian habitat that could be occupied by western yellow-billed cuckoo, southwestern willow flycatcher, and least Bell's; could discourage or disrupt nesting. 	<ul style="list-style-type: none"> Compliance with measures from the NRMP BIO-3 and NRMP BIO-21. (Removal of exotic species and a survey of all the riparian areas within or adjacent to the riverbed shall be conducted by a qualified biologist.)
		<ul style="list-style-type: none"> The proposed project would result in the loss of suitable foraging and/or nesting habitat for Cooper's hawk, sharp-shinned hawk, golden eagle, long-eared owl, ferruginous hawk, Swainson's hawk, northern harrier, white tailed kite, merlin, prairie falcon, and burrowing owl. 	<ul style="list-style-type: none"> Compliance with measures BIO-3, BIO-20, and BIO-22 from the NMRP. Construction sites and access roads within the riverbed will be inspected by a qualified biologist; a qualified biologist shall conduct a survey to determine if the burrowing owl is present at the site, and the nesting status of the individuals at the site. Construction activities in all riparian areas within or adjacent to the riverbed shall be surveyed to determine if raptors are nesting in large trees.
		<ul style="list-style-type: none"> The project implementation would not result in any impacts on the pallid bat, pale Townsend's big-eared bat, spotted bat, California mastiff bat, san Diego black-tailed jackrabbit, small-footed myotis, Yuma myotis, southern grasshopper mouse, and American badger. 	<ul style="list-style-type: none"> No measures are required.

IMPROVEMENT PROJECT AND ENVIRONMENTAL EVALUATION: SUMMARY OF EFFECTS*

Alternatives with Design Variations	Beneficial Effects	Potential Impact	Measures to Minimize Harm
		<ul style="list-style-type: none"> The proposed project would result in the loss of upland habitat for the San Diego black-tailed jackrabbit, southern grasshopper mouse, and American badger. 	<ul style="list-style-type: none"> Compliance with measures from the NRMP BIO-3. (Construction sites and access roads within the riverbed will be inspected by a qualified biologist.)
		<ul style="list-style-type: none"> The proposed project would impact foraging habitat for the pallid bat, pale Townsend's big-eared bat, spotted bat, California mastiff bat, small-footed myotis, and Yuma myotis. 	<ul style="list-style-type: none"> Compliance with measures from the NRMP BIO-3. (Construction sites and access roads within the riverbed will be inspected by a qualified biologist.)
		<p><u>Temporary Impacts:</u></p> <ul style="list-style-type: none"> Temporary noise impacts have the potential to disrupt foraging, nesting, roosting, and denying activities for a variety of wildlife species. 	<ul style="list-style-type: none"> Compliance with measures from the NRMP BIO-5. See Section 3.6.5.
		<ul style="list-style-type: none"> Grading activities would disturb soils and result in the accumulation of dust on the surface of leaves of trees, shrubs, and herbs, but would not reduce plant populations below self-sustaining levels. 	<ul style="list-style-type: none"> Compliance with measures from the NRMP BIO-5. See Section 3.6.5.
		<ul style="list-style-type: none"> Additional impacts to biological resources in the area could occur as a result of changes in water quality. 	<ul style="list-style-type: none"> Implementation of standard BMPs through the SWPPP and NPDES permit.
No Build Alternative		<ul style="list-style-type: none"> No impact on threatened and endangered species. 	<ul style="list-style-type: none"> No measures are required.
3.10 Floodplains			
Build Alternative		<p><u>Permanent Impacts:</u></p> <ul style="list-style-type: none"> Construction of the proposed project would impact the natural and beneficial floodplain values. 	<ul style="list-style-type: none"> BMPs would be implemented during construction to minimize impacts to the floodplain.

IMPROVEMENT PROJECT AND ENVIRONMENTAL EVALUATION: SUMMARY OF EFFECTS*

Alternatives with Design Variations	Beneficial Effects	Potential Impact	Measures to Minimize Harm
		<p><u>Temporary Impacts:</u></p> <ul style="list-style-type: none"> Approximately 3.79 hectares (9.4 acres) of the floodplain would be affected by components of the project. Construction-related impacts to the natural and beneficial floodplain values. 	<ul style="list-style-type: none"> BMPs would be implemented during construction to minimize impacts to the floodplain.
No Build Alternative		<ul style="list-style-type: none"> No impact on floodplains. 	<ul style="list-style-type: none"> No measures are required.
3.13 Land Use, Planning and Growth			
Build Alternative		<p><u>Permanent Impacts:</u></p> <ul style="list-style-type: none"> The proposed project would be consistent with the existing land uses in the project area. The proposed interchange would be compatible with the planned developments in the area and local land use plans and policies. <p><u>Temporary Impacts:</u></p> <ul style="list-style-type: none"> The majority of the project area is vacant; construction staging would be temporary; substantial compatibility impacts or direct impacts are not anticipated. 	<ul style="list-style-type: none"> No measures are required. No measures are required. No measures are required.
No Build Alternative		<ul style="list-style-type: none"> No impact of land use, planning, and growth. 	<ul style="list-style-type: none"> No measures are required.
3.14 Farmlands/ Agriculture Lands			
Build Alternative		<p><u>Permanent and Temporary Impacts:</u></p> <ul style="list-style-type: none"> The acquisition of farmland within the project boundaries would not be considered an impact. 	<ul style="list-style-type: none"> No measures are required.
No Build Alternative		<ul style="list-style-type: none"> No impact on farmlands/ agricultural lands. 	<ul style="list-style-type: none"> No measures are required.

IMPROVEMENT PROJECT AND ENVIRONMENTAL EVALUATION: SUMMARY OF EFFECTS*

Alternatives with Design Variations	Beneficial Effects	Potential Impact	Measures to Minimize Harm
3.15 Community Impacts (Social, Economic) and Environmental Justice			
Build Alternative	<p><u>Permanent Impacts:</u></p> <ul style="list-style-type: none"> • Positive effect for local and regional businesses because it would result in improved and safer access to businesses. • Project would be consistent with planned growth within the Valencia Commerce Center. • Acquisition of 15 RV spaces in Valencia Travel Village 	<p><u>Permanent Impacts:</u></p> <ul style="list-style-type: none"> • The proposed project would not negatively affect local or regional employment, industry, or commerce or require the displacement of businesses. • Project impacts to low-income and minority populations would not be adverse. • Reconstruction and realignment of the eastbound SR-126 off-ramp and Travel Village Frontage Road will require the permanent acquisition of approximately 15 recreational vehicle campsites or spaces within Valencia Travel Village. <p><u>Temporary Impacts:</u></p> <ul style="list-style-type: none"> • No adverse effects on local population and housing are expected to result. 	<ul style="list-style-type: none"> • No measures are required. • No measures are required. • CI-1 For right-of-way and acquisition of the 15 recreational vehicle spaces impacts, relocation assistance payments and counseling will be provided to persons and businesses in accordance with the Federal Uniform Relocation Assistance and Real Properties acquisition Policies Act (as amended) and the California Government Code Chapter 16, Section 7260, et seq. (State Uniform Relocation Act) to ensure adequate relocation and a decent, safe, and sanitary home for displaced residents. All eligible displacees will be entitled to moving expenses, and all benefits and services will be provided equitable to all residential and business relocatees without regard to race, color, religion, age, national origins and disability as specified under Title VI of the Civil Rights Act of 1964. • No measures are required.
No Build Alternative		<ul style="list-style-type: none"> • No impact on social, economic, and environmental justice issues. 	<ul style="list-style-type: none"> • No measures are required.

IMPROVEMENT PROJECT AND ENVIRONMENTAL EVALUATION: SUMMARY OF EFFECTS*

Alternatives with Design Variations	Beneficial Effects	Potential Impact	Measures to Minimize Harm
3.16 Utilities/ Emergency Services			
Build Alternative		<u>Permanent Impacts:</u> <ul style="list-style-type: none"> Proposed project will not displace any existing utilities, and no emergency facilities would be directly affected. <u>Temporary Impacts:</u> <ul style="list-style-type: none"> Emergency services could experience temporary, short-term traffic delays during construction. 	<ul style="list-style-type: none"> No measures are required. A TMP will be implemented to minimize impacts to emergency services.
No Build Alternative		<ul style="list-style-type: none"> No utilities/ emergency services impact. 	<ul style="list-style-type: none"> No measures are required.
3.17 Traffic Transportation/ Pedestrians and Bicycle Facilities			
Build Alternative	<u>Permanent Impacts:</u> <ul style="list-style-type: none"> Project would prevent deficient roadway and intersection operations that would result from the buildout of planned development. 	<u>Permanent Impacts:</u> <ul style="list-style-type: none"> Proposed project would not pose any impacts. <u>Temporary Impacts:</u> <ul style="list-style-type: none"> Sections of SR 126, Commerce Center Drive, and Henry Mayo Drive may be temporarily closed to allow specific construction activities to occur. 	<ul style="list-style-type: none"> No measures are required. A TMP will be implemented to mitigate the impact construction activities will have on freeway and roadway users.
No Build Alternative		<ul style="list-style-type: none"> Existing roadway network cannot accommodate the buildout of the planned development based upon the forecasted traffic volumes. 	<ul style="list-style-type: none"> No measures are required.

IMPROVEMENT PROJECT AND ENVIRONMENTAL EVALUATION: SUMMARY OF EFFECTS*

Alternatives with Design Variations	Beneficial Effects	Potential Impact	Measures to Minimize Harm
3.18 Visual/ Aesthetics			
Build Alternative		<u>Permanent Impact:</u> <ul style="list-style-type: none"> The proposed project would not change the scenic environment, would not obstruct the view of any scenic vista, or create an aesthetically offensive site, and is not within a visually sensitive setting. 	<ul style="list-style-type: none"> No measures are required.
		<u>Temporary Impacts:</u> <ul style="list-style-type: none"> Disruption of the natural environment surrounding the project area. 	<ul style="list-style-type: none"> Area would be revegetated.
No Build Alternative		<ul style="list-style-type: none"> No visual/ aesthetic impacts. 	<ul style="list-style-type: none"> No measures are required.
3.20 Archaeological Resources			
Build Alternative		<u>Permanent Impacts:</u> <ul style="list-style-type: none"> No cultural and historical resources exist in the project area. 	<ul style="list-style-type: none"> No measures are required.
		<u>Temporary Impacts:</u> <ul style="list-style-type: none"> Project related construction activities may unearth cultural remains and/or artifacts. 	<ul style="list-style-type: none"> Site will be protected until it can be evaluated by a qualified archeologist.
No Build Alternative		<ul style="list-style-type: none"> No archaeological resource impacts. 	<ul style="list-style-type: none"> No measures are required.

* None found for Sections: 3.2 Hazardous Materials; 3.5 Energy; 3.11 Coastal Zone; 3.12 Wild and Scenic Rivers; and 3.19 Historical

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List of Technical Studies that are Bound Separately

Air Quality Report

Noise Study Report

Natural Environment Study

Location Hydraulic Study

Historical Property Survey Report

- Historic Study Report
- Historic Resource Evaluation Report
- Historic Architectural Survey Report
- Archaeological Survey Report

Hazardous Waste Reports

- Initial Site Assessment
- Preliminary Site Investigation

Traffic Study

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List of Abbreviated Terms

ACM	asbestos-containing material
ADT	average daily traffic
APE	Area of Potential Effects
BACM	Best Available Control Measures
BMP	Best Management Practice
BO	Biological Opinion
CAAA	Clean Air Act Amendments
CAAQS	California Ambient Air Quality Standards
Caltrans	California Department of Transportation
CCA	California Coastal Act
CCR	California Code of Regulations
CDFG	California Department of Fish and Game
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
cfs	cubic feet per second
cms	cubic meters per second
CNDDB	California Natural Diversity Data Base
CNPS	California Native Plant Society
CO	carbon monoxide
dB	decibel
dBA	decibel A-rated
dm	decimeter
DOA/NRCS	Department of Agriculture/Natural Resources Conservation Service
DRP	County of Los Angeles Department of Regional Planning
DTSC	State of California Department of Toxic Substances Control
EA	Environmental Assessment
EIR/EA	Environmental Impact Report/Environmental Assessment
EIS/EIR	Environmental Impact Statement/Environmental Impact Report
EPA	U.S. Environmental Protection Agency
EMFAC	Emission Factor Program for California
ESA	Endangered Species Act
ESU	Evolutionary Significant Unit
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map
FPPA	Farmland Protection Policy Act
FTIP	Federal Transportation Improvement Program
HASR	Historic Architectural Survey Report
HCM	Highway Capacity Manual
HCP	Habitat Conservation Plan
HGM	hydrogeomorphic method
HHS	U.S. Department of Health and Human Services
HPSR	Historic Property Survey Report

List of Abbreviated Terms

I	Interstate
ICU	intersection capacity utilization
IS	Initial Study
ISA	Initial Site Assessment
IS/EA	Initial Study/Environmental Assessment
km	kilometer
KP	kilometer post
LACDPW	Los Angeles County Department of Public Works
LACMTA	Los Angeles County Metropolitan Transportation Authority
Ldn	day-night noise level
Leq	equivalent steady-state sound level (which in a stated period of time would contain the same acoustical energy as the time-varying sound level during the same period)
LESA	Land Evaluation and Site Assessment
LOS	Level of Service
MEP	maximum extent practicable
mg/L	milligrams per liter
Mi	Mile(s)
mm	millimeter
MOU	Memorandum of Understanding
msl	mean sea level
MTA	Los Angeles Metropolitan Transportation Authority
MVM	million vehicle miles
NAAQS	National Ambient Air Quality Standards
ND/FONSI	Negative Declaration/Finding of No Significant Impact
NEPA	National Environmental Policy Act
NES	Natural Environment Study
Newhall Land	Newhall Land and Farming Company
NHS	National Highway System
NMFS	National Marine Fisheries Service
NO _x	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
NPPA	Native Plant Protection Act
NPS	National Park Service
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NRMP	Natural River Management Plan
NWS	National Weather Service
O ₃	ozone
OSHA	Occupational Safety and Health Act
PDT	Project Development Team
PEER	Preliminary Environmental Evaluation Report
PM	post mile
PM ₁₀	respirable particulate matter with a diameter less than 10 micrometers
ppm	parts per million
PS&E	plans, specifications, and estimates
PSI	Preliminary Site Investigation
PSR	Project Study Report

RCPG	Regional Comprehensive Plan and Guide
ROC	reactive organic compounds
ROG	reactive organic gas
ROW	right-of-way
RTIP	Regional Transportation Improvement Program
RTP	Regional Transportation Plan
RV	recreational vehicle
RWQCB	Regional Water Quality Control Board
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison
SCVCTM	Santa Clarita Valley Consolidated Transportation Model
SEA	Significant Ecological Area
SHELL	State Highway Extra Legal Load
SHPO	State Historic Preservation Officer
SI	Site Investigation
SIP	State Implementation Plan
SNA	Significant Natural Area
SO ₂	sulfur dioxide
SR	State Route
SSP	Standard Special Provisions
STIP	State Transportation Improvement Program
SCVCTM	Santa Clarita Valley Consolidated Transportation Model
SWDR	Storm Water Data Report
SWMP	Storm Water Management Plan
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TASAS	Traffic Accident Surveillance and Analysis System
TDS	total dissolved solids
TIP	Transportation Improvement Program
TMP	Traffic Management Plan
TSM	Transportation Systems Management
µg/m ³	micrograms per cubic meter
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
UST	underground storage tank
v/c	volume-to-capacity ratio
vphpl	vehicles per hour per lane
VRL	Verification Request Letter
WPCP	Water Pollution Control Program

Chapter 1 Purpose and Need

1.1 Project Purpose

The Newhall Land and Farming Company (Newhall Land, formerly the Valencia Company), in conjunction with the Federal Highway Administration (FHWA), the California Department of Transportation (Caltrans), and the County of Los Angeles, proposes to construct a grade-separated interchange at the existing, signalized intersection of State Route (SR) 126 and Commerce Center Drive. The proposed project is located northwest of the City of Santa Clarita in Los Angeles County (Figure 1.1-1). The project is between kilometer post (KP) R6.8 and R9.2 (post mile [PM] R4.2 to R5.7) on SR 126 (Figure 1.1-2).

As part of the Build Alternative, SR 126 would be realigned to the south over a recently constructed embankment; and full access on- and off-ramps would be constructed on both sides of the freeway. An overpass structure for SR 126 would be constructed over Commerce Center Drive on an existing embankment. In addition, the Build Alternative would also result in the reconfiguration of the Commerce Center Drive/Henry Mayo Drive intersection to the south of its existing location to meet the Caltrans intersection spacing standards. All associated river bank protection measures (i.e., rip-rap and soil slope stabilization) to the Santa Clara River would be provided consistent with the approved Natural River Management Plan (NRMP) (John M. Tetteimer & Associates, March 1997).

The project is intended to achieve the following objectives:

- Improve local access and traffic circulation
- Mitigate traffic impacts from the approved Valencia Commerce Center project
- Incorporate planned infrastructure improvements consistent with local and regional planning efforts
- Enhance driver safety
- Accommodate planned growth within the study area

Specifically, implementation of the project would improve levels of service (LOS) at SR 126/Commerce Center Drive, reduce vehicular travel time in the project vicinity, and meet the economic demand for access to the Valencia Commerce Center.

The project is located within Segment 3 of the NRMP and the Draft Environmental Impact Statement/Environmental Impact Report (EIS/EIR) for the 404 Permit and 1603 Streambed

Alteration Agreement for Portions of the Santa Clara River and its Tributaries (USACE, 1997). Segment 3 is also known as the “Magic Mountain” segment and includes a 5.6 kilometers (km) (3.5-mile) -long reach of the Santa Clara River, from Interstate 5 (I-5) to the confluence of the river with Castaic Creek, and a 0.5 km (0.3-mile)-long reach of Castaic Creek from its confluence with the river to SR 126.

Nine new bridges have been analyzed in the NRMP and the EIS/EIR for its 404 Permit and 1603 Streambed Alteration Agreement. One of the new bridges is the Commerce Center Drive Bridge across the Santa Clara River. This new bridge would connect Commerce Center Drive at its terminus with Henry Mayo Drive, to Magic Mountain Parkway on the south side of the river. Although the Commerce Center Drive Bridge over the Santa Clara River is not a part of this project, the proposed interchange would eventually facilitate traffic from future planned land uses in the project vicinity that would cross the Santa Clara River.

1.2 Project Need

The discussion below focuses on the deficiencies of the existing conditions, constraints in the capacity of the existing signalized intersection, accident rates in the project vicinity, and the potential traffic impacts of future planned land use projects.

1.2.1 Operational Deficiencies

SR 126 is part of the State Freeway and Expressway system. SR 126 extends west from its interchange with I-5 and terminates at U.S. 101 in the City of Ventura. This highway is a major access route between I-5 and coastal Ventura County. The westernmost end of SR 126 (from SR 150 to U.S. 101) is constructed as a fully functional freeway with grade-separated interchanges, but the remainder of the route consists of a four-lane highway in semirural terrain. Caltrans recently upgraded and widened this section of SR 126 to a four-lane facility (from I-5 to the Ventura County line).

Prior to November 2002, SR 126 continued east of I-5 at the Magic Mountain Parkway interchange. This portion of then SR 126 was commonly known as Magic Mountain Parkway and originated from the I-5/Magic Mountain Parkway interchange approximately 3.2 km (2.0 miles) south of the I-5/SR 126 interchange (Figure 1.1-2). The City of Santa Clarita has plans to construct Newhall Ranch Road east of the I-5/SR 126 interchange as an arterial roadway, as described in Section 2.4.

The following is a list of some of the recently constructed Caltrans improvements to SR 126 in the project vicinity:

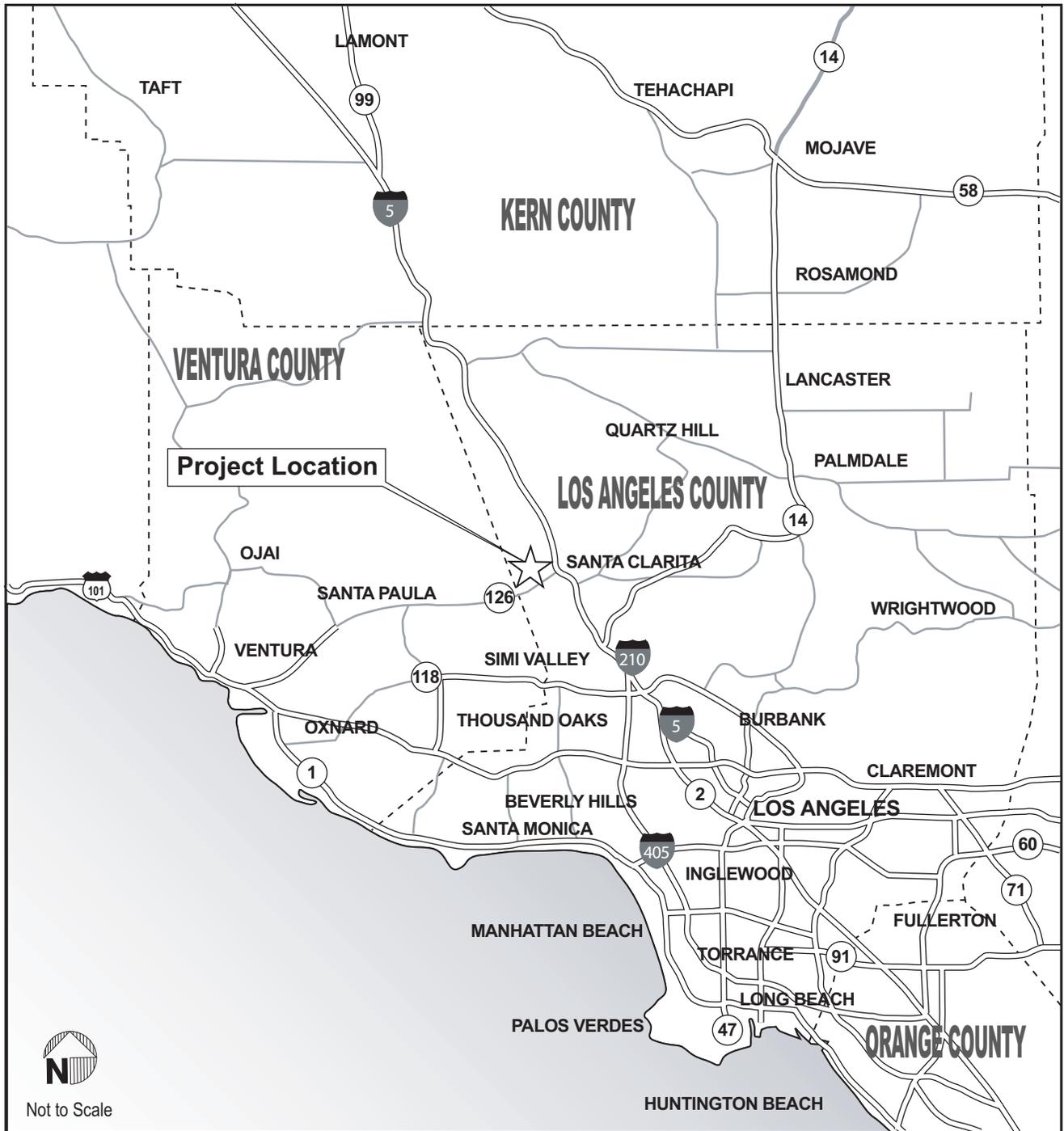
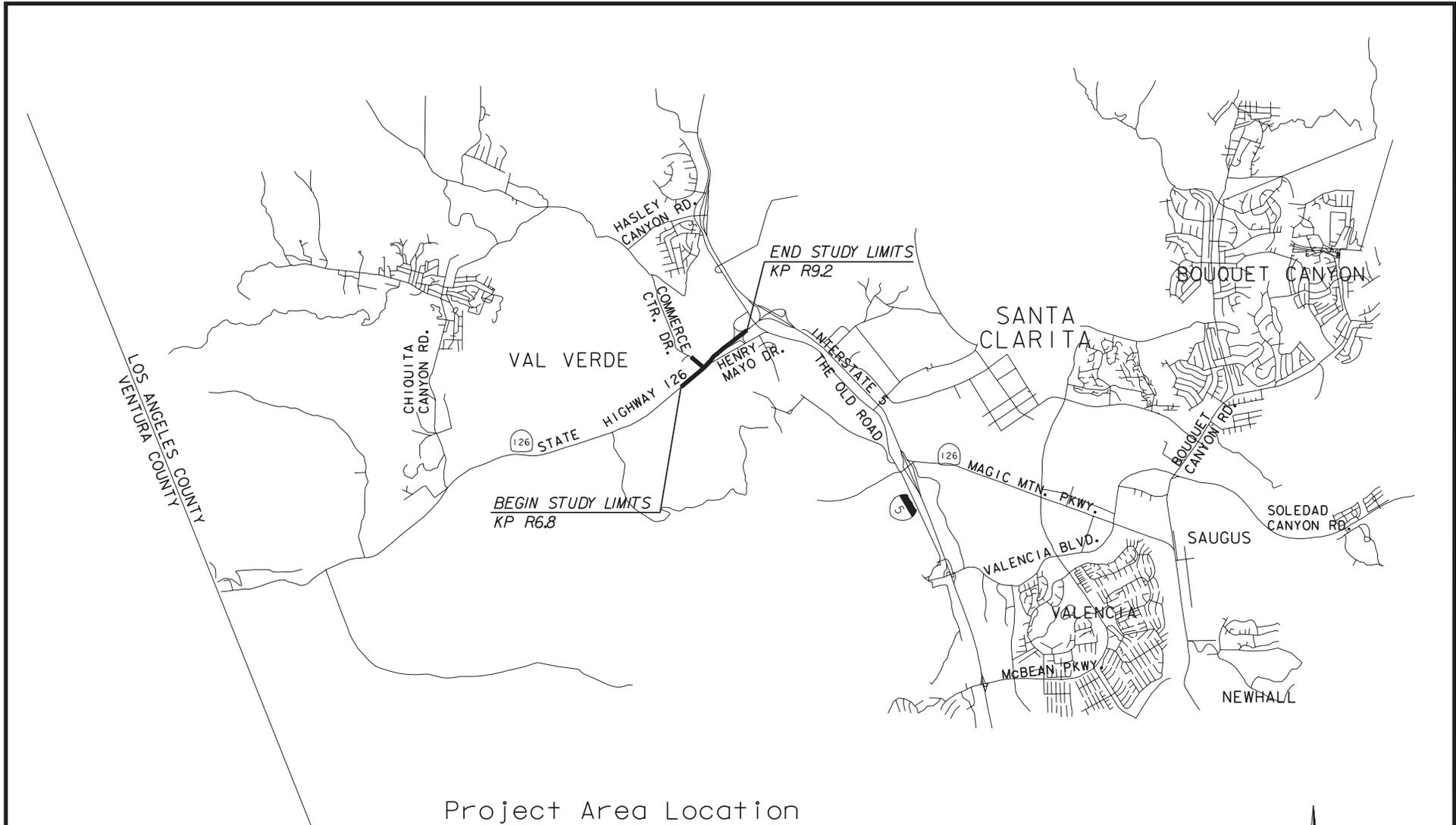


Figure 1.1-1
Regional Location Map
 SR 126/Commerce Center Drive Interchange
 07-LA-126 KP R6.8-R9.2 (PM R4.2-R5.7)



Project Area Location

Improvements on SR-126/Commerce Center Drive
and Widening of SR-126
07-LA-126 KP R6.8-R9.2 (PM R4.2-R5.7)



Figure 1.1-2
Project Vicinity
SR 126/Commerce Center Drive Interchange
07-LA-126 KP R6.8-R9.2 (PM R4.2-R5.7)



- Realignment of SR 126 to the north and the construction of an embankment to the south of the existing SR 126/Commerce Center Drive intersection to accommodate a future grade-separated interchange at Commerce Center Drive.
- The extension of Commerce Center Drive southward to intersect with SR 126 at a signalized “T” intersection.
- Realignment of both SR 126 and Henry Mayo Drive. Not only was this necessary to minimize impacts to the environmentally sensitive areas of Castaic Creek to the north and Santa Clara River to the south, but it also allows for appropriate spacing between the intersections along Commerce Center Drive at Hancock Lane (future intersection), SR 126 westbound ramps (part of Build Alternative), and Henry Mayo Drive.

These improvements have temporarily rectified the existing design and operational deficiencies experienced by SR 126. However, by 2025, the Santa Clarita Valley is anticipated to experience a considerable increase in traffic from both regional and inter-regional growth, as well as buildout of local developments. Such developments include the Valencia Commerce Center (Section 2.4.1) and the Newhall Ranch development (Section 2.4.3).

At its buildout, the Valencia Commerce Center will be a 1.2 million-square-meter (12 million-square-foot) employment center north of SR 126 at Commerce Center Drive. This development would add approximately 110,000 trips per day, a majority of which would be served by SR 126 and the SR 126/Commerce Center Drive intersection. The Newhall Ranch development would be constructed as a master-planned community. This project would add approximately 350,000 trips per day, with many of those using the SR 126 corridor and the SR 126/Commerce Center Drive intersection.

Due to the increase in local development and regional and inter-regional growth, the future operations of SR 126 and the SR 126/Commerce Center Drive intersection will be deficient.

1.2.2 Capacity Constraints

The capacity constraints of the SR 126 corridor and adjacent arterials, particularly the SR 126/Commerce Center Drive intersection, are detailed in this section. Existing (2002) average daily traffic (ADT), a.m. and p.m. peak-hour volumes¹ for the SR 126 corridor, adjacent arterials, and the SR 126/Commerce Center Drive intersection are shown in Figure 1.2-1.

¹ Peak-hour traffic volumes are generally collected during the 7:00 a.m. to 9:00 a.m. peak commute period, and the 3:00 p.m. to 6:00 p.m. peak commute period.

An intersection capacity utilization (ICU) analysis was conducted for the SR 126/Commerce Center Drive intersection. ICU values are typically expressed as volume-to-capacity ratios (v/c), and reported in grades of LOS. Table 1.2-1 provides a description of the various LOS values and v/c ratios.

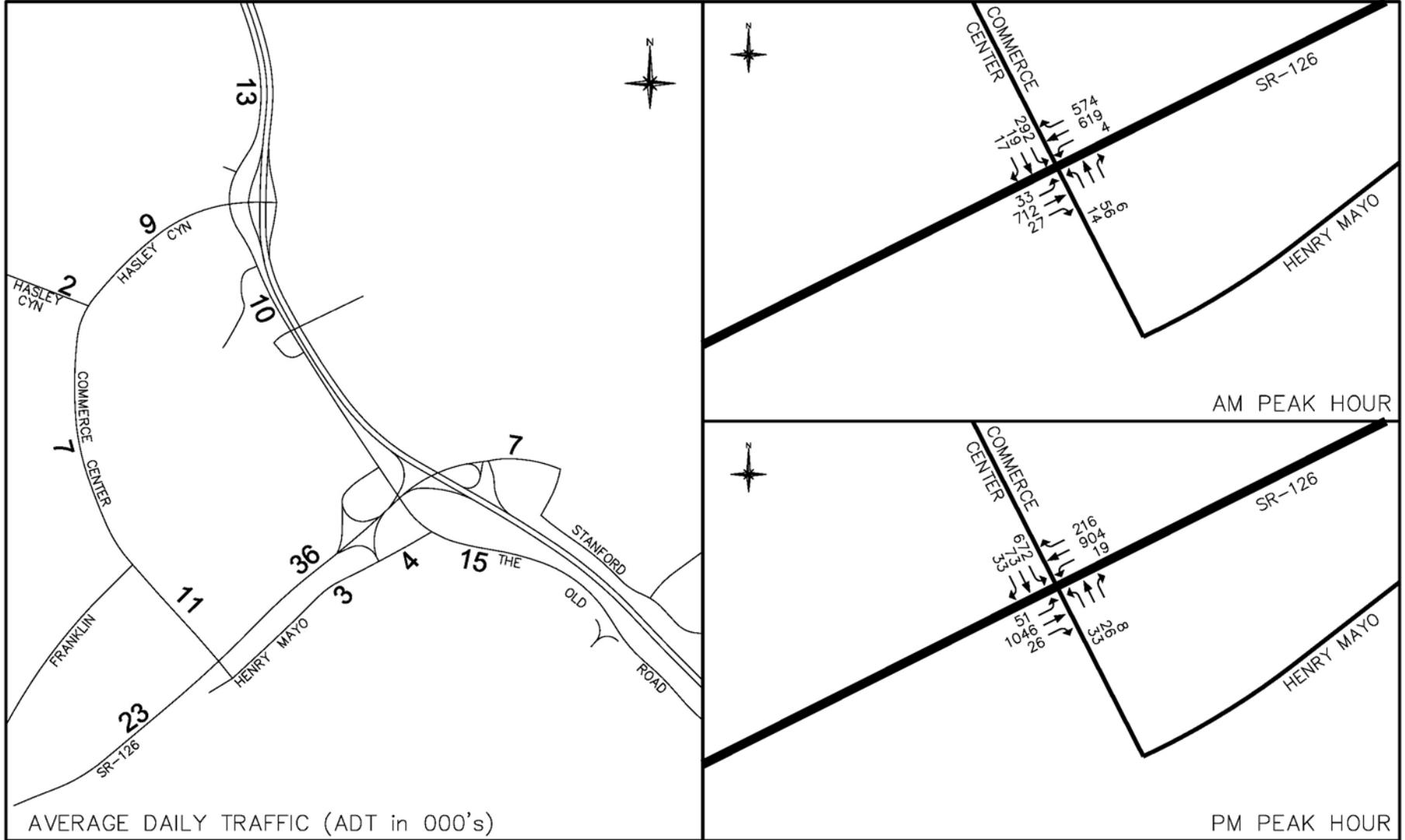
Table 1.2-1. Levels of Service

LOS	Volume/Capacity (V/C) Ratio	Maximum Density (Cars/Mile/Lane)	Description
A	0.00 to 0.60	10	Free flow operation. The ability to maneuver is almost completely unimpeded.
B	0.61 to 0.70	16	Reasonably free-flow operation. The ability to maneuver is only slightly restricted.
C	0.71 to 0.80	24	Near free-flow operation. The freedom to maneuver is noticeably restricted.
D	0.81 to 0.90	32	Speeds begin to decline. The freedom to maneuver is more noticeably limited.
E	0.91 to 1.00	39.3	Operation is at capacity. There is very limited room to maneuver.
F	Above 1.00	---	Breakdown in vehicular flow.

Source: Austin-Foust Associates, 2003

Based on the ICU analysis, SR 126/Commerce Center Drive currently operates with acceptable levels of service in both peak hours (LOS A, 0.46 v/c, in the a.m. peak hour, and LOS B, 0.68 v/c, in the p.m. peak hour).

However, build out of land uses planned along Commerce Center Drive and other area developments is scheduled to occur by 2025. This would dramatically increase the traffic volumes in the study area. Traffic-volume forecasts for the 2025 horizon year were extracted from the most current and approved traffic model runs from the Santa Clarita Valley Consolidated Traffic Model (SCVCTM), managed jointly by the County of Los Angeles Public Works Department and the City of Santa Clarita. Model volumes from the 2025 No Build Alternative (Figure 1.2-2) indicate that the p.m. peak-hour traffic volumes on southbound Commerce Center Drive approaching SR 126 are forecast to be approximately 2,200 vehicles. The a.m. peak-hour volume on westbound SR 126 to northbound Commerce Center Drive is forecast to be approximately 1,400 vehicles, with a p.m. peak-hour volume of approximately 400 vehicles at the same location.



Source: Austin-Foust Associates, Inc., January 2003

Figure 1.2-1
Existing (2002) Traffic Volumes
 SR 126/Commerce Center Drive Interchange
 07-LA-126 KP R6.8-R9.2 (PM R4.2-R5.7)



Future 2025 without-project ICU values for the Commerce Center Drive intersections at the future Hancock Lane, the SR 126 westbound ramps, and Henry Mayo Drive have been calculated. This ICU analysis indicates that SR 126/Commerce Center Drive is forecast to operate at LOS F in the a.m. peak hour (1.31 v/c), and LOS F in the p.m. peak hour (1.40 v/c) (See Table 1.2-2 below). In addition, the forecast p.m. peak-hour eastbound directional volume on SR 126 between Commerce Center Drive and I-5 is approximately 3,900 vehicles, which is almost the capacity of the two eastbound lanes (4,000 vehicle capacity for two lanes). The configuration of the existing roadway network would not be able to accommodate the buildout of the planned developments based upon the forecast traffic volumes.

Table 1.2-2 ICU Summary

Intersection	Existing		Year 2025 No-Project		Year 2025 With-Project	
	AM	PM	AM	PM	AM	PM
Commerce Ctr & Henry Mayo	NA	NA	0.78	0.62	0.81	0.73
Commerce Ctr & SR-126 WB Ramp	NA	NA	NA	NA	0.83	0.65
Commerce Ctr & Hancock	NA	NA	0.90	0.74	0.90	0.74
Commerce Ctr & SR-126	0.46	0.68	1.31	1.40	N/A	N/A

Level of Service Ranges: .00 - .60 A
 .61 - .70 B
 .71 - .80 C
 .81 - .90 D
 .91 - 1.00 E
 Above 1.00 F

NA = Not Applicable, Intersection does not exist for that scenario

Source: Austin-Foust Associates, 2003

1.2.3 Accident Analysis

Caltrans Traffic Accident Surveillance and Analysis System (TASAS) accident rates within the project area were compared to the statewide average (expected) accident rates for similar facility types. These data include accidents from the most recent available 3-year period (April 1, 1999 to March 31, 2002). These rates were taken from the TASAS data, and are summarized in Table 1.2-3. As shown below, the actual rate of injurious and fatal accidents along SR 126 is higher than what is expected for a similar type of facility.

Construction of the proposed improvements along SR 126 would be expected to reduce vehicular weaving conflicts between vehicles merging to and from SR 126 between Commerce Center Drive and I-5 and improve mainline operations, thereby reducing the potential for accidents on SR 126.

Table 1.2-3. Accident Rates for Selected Locations of the Study Area

Route Segment	Actual Total		Actual Fatality (F)		Injury and Fatality (F+1)	
	Actual	Statewide Average	Actual	Statewide Average	Actual	Statewide Average
SR 126 from Commerce Center Drive to the I-5 interchange	0.75	0.64	0	0.022	0.19	0.29

* Fatality rates are per 100 million vehicle miles (MVM). The top line represents actual accident rates in the project area, while the bottom line represents statewide average statistics.

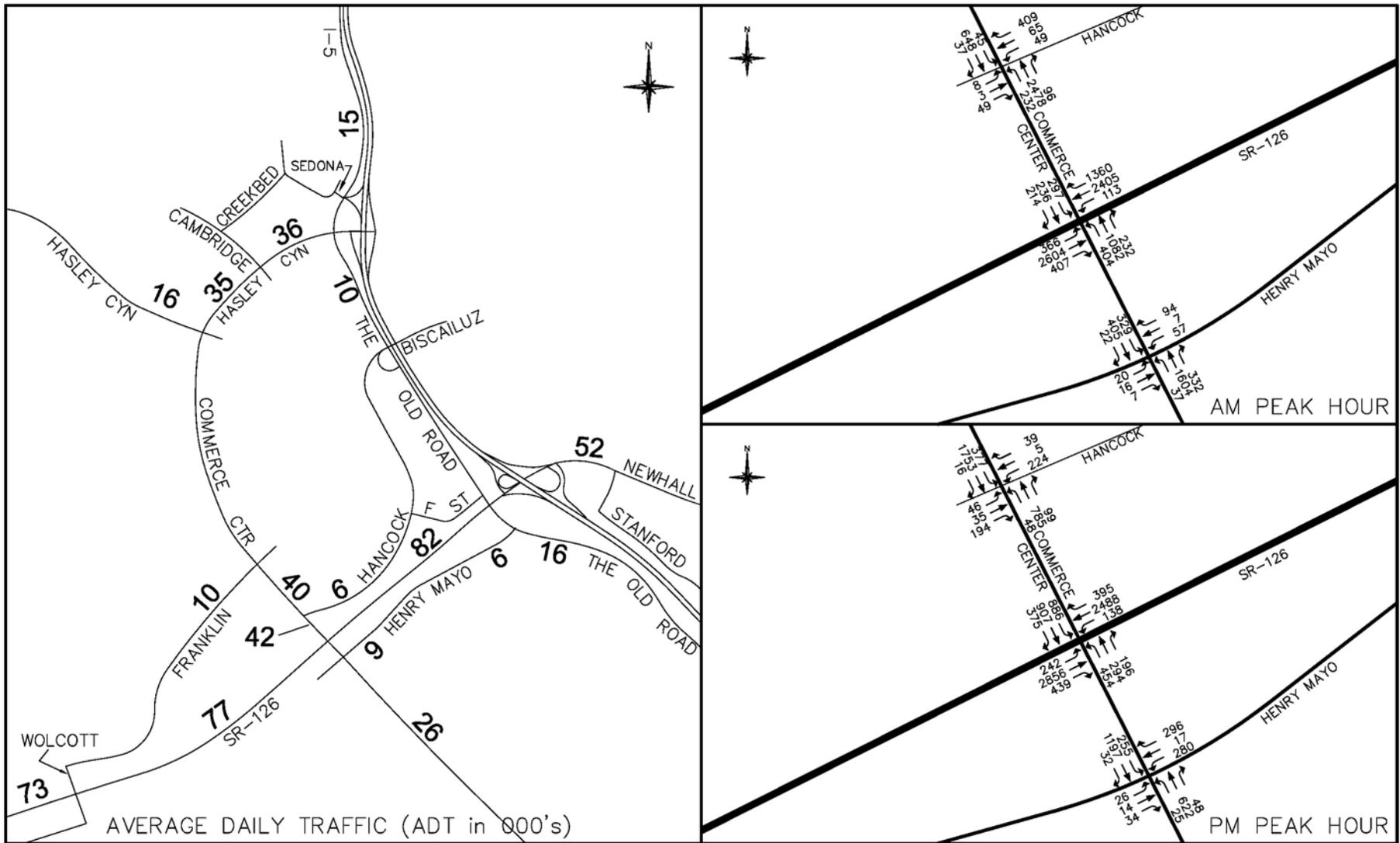
Source: TASAS Table "B" dated January 22, 2003

1.3 Project Background

1.3.1 History of the Planning Process

The SR 126/Commerce Center Drive interchange project was initiated with a Project Study Report (PSR) (CH2M HILL, 1999a). The PSR is a project initiation document that is required for all major projects before they are included in a state or local programming document such as the State Transportation Improvement Program (STIP). The outcome of the project initiation process is a project scope tied to a preliminary cost estimate and schedule, which are necessary for proceeding to the environmental evaluation and project alternative selection phase.

A combined PSR, which also included the I-5/SR 126 interchange, was approved by Caltrans on May 5, 1999. A Preliminary Environmental Evaluation Report (PEER) (CH2M HILL, 1999b) and hazardous waste Initial Site Assessment (ISA) (CH2M HILL, 1999c) were prepared concurrently with the PSR to identify the environmental issues and anticipated environmental impacts of the Build Alternative. Since that document was approved, the interchange projects were separated into two projects, I-5/SR 126 Interchange and SR 126/Commerce Center Drive Interchange because each project has distinct logical termini and each has independent utility from the other. In addition, the interchange projects were separated into two projects for funding purposes, to be consistent with adjacent land use development (Valencia Commerce Center and Newhall Ranch residential development), and so both projects would have independent utility.



Source: Austin-Foust Associates, Inc., January 2003



Figure 1.2-2
Year 2025 No-Build Traffic Volumes
SR 126/Commerce Center Drive Interchange
07-LA-126 KP R6.8-R9.2 (PM R4.2-R5.7)

SR 126 (now Magic Mountain Parkway-San Fernando Road, between Tourney Road and SR 14) was relinquished on October 17, 2002. Magic Mountain Parkway, between I-5 and Tourney Road, will be relinquished upon completion of Phase III of the Magic Mountain Parkway/I-5 Interchange project.

1.3.2 Other Relevant Documents

There are several planned and ongoing projects within the vicinity of the proposed project. These projects, described in Section 2.4, have separate environmental documents that evaluate the environmental impacts affecting the same general area as the proposed project. These studies were reviewed, and relevant information has been incorporated into this document. All relevant documents are listed in Chapter 8 (References).

1.3.3 Natural River Management Plan

In an effort to streamline the 404/1603 permitting process for the Santa Clara River and San Francisquito Creek, the U.S. Army Corps of Engineers (USACE) and California Department of Fish and Game (CDFG) met with the major landowner in the area, Newhall Land, to write a plan that would address cumulative impacts on these drainages for the next 20 years. The NRMP was written to develop standard measures to minimize harm for all work that would occur in these drainages. The NRMP analyzed impacts that would result from the proposed development of Newhall Land's projects and similar projects. Any project that is consistent with the mitigation measures in the NRMP can operate under the 404/1603 permit issued to Valencia Company, now Newhall Land. The project construction boundaries would be consistent with the projects considered under the NRMP. The following is a summary of the Record of Decision for the 404 permit issued to Newhall Land on December 17, 1998 (USACE, 1998).

Approval of the NRMP included conditions that require each individual project component constructed over the life of the permit to pass through a preconstruction verification process prior to project implementation. A Verification Request Letter (VRL) must be submitted to the USACE that contains: vegetation type boundaries at the project site; anticipated biological impacts; limits of construction disturbance; need for stream diversions; any pertinent environmental protection measures; statement on the consistency with the NRMP and 404 permit; and compliance with environmental protection measures for threatened and endangered species, water quality, and riparian habitats.

The NRMP covers approximately 485.6 hectares (1,200 acres) and includes the South Fork of the Santa Clara River, the mouth of Bouquet Creek, San Francisquito Creek, and the

mainstream of the Santa Clara River from the Los Angeles Aqueduct crossing to the Castaic Creek confluence. The NRMP was proposed by Newhall Land, and most elements of this plan will be carried out on land owned primarily by Newhall Land. However, other private entities or public agencies may use the 404 permit issued to Newhall Land, and may construct elements of the NRMP. The 404 permit also includes routine maintenance activities to be carried out by the Los Angeles County Department of Public Works (LACDPW) and/or the City of Santa Clarita under the permit issued to Newhall Land. The SR 126/ Commerce Center Bridge project would be covered by the 404 permit as long as the proposed project and mitigation are consistent with the measures outlined in the NRMP.

Under the NRMP, eight new bridges, one replacement bridge, and six widened bridges will be completed over the next 15 to 20 years to accommodate existing and future traffic associated with continued development of the region. The total permanent effect on the riverbed areas associated with the installation and widening of the bridges is estimated to be approximately 8.9 hectares (22 acres). This acreage includes the “shadow” of the bridges. The actual riverbed habitat that would be permanently removed by the piers of the new and widened bridges will be approximately 0.4-hectares (1 acre).

The permit also covers bank protection features that will be installed along portions of the Santa Clara River, South Fork, and San Francisquito Creek for bridge abutments and various development projects under the NRMP, including commercial and industrial projects, to prevent bank erosion and flooding. A total of 24,735 meters (81,150 feet) of bank protection will be installed over the life of the permit. Bank protection features have been located to avoid encroachment into the riverbed wherever possible. Installation of bank protection will result in the loss of approximately 11.33 hectares (28 acres) of riverbed area. However, the NRMP will also result in a gain of about 39.3 hectares (97 acres) of potential new riverbed because 39.3 hectares (97 acres) of uplands will be lowered to the elevation of the riverbed and used to create new riverbed habitat for mitigation purposes. Hence, the NRMP could result in a net gain of 27.9 hectares (69 acres) of riverbed.

The alignment of the buried bank protection features has been designed to provide a buffer zone between future upland development and the riverbed habitats, to maintain an upland-riverine connection and shield fish and wildlife using the riverine habitats from indirect effects of adjacent land development. The buffer zone will be planted with upland species and managed for habitat and open space. Public trails will be located in the buffer zone along the landward edge. The width of the buffer zone will vary from 23 meters (75 feet) to 69 meters (225 feet), depending upon location. The buffer zone would encompass approximately 66.8 hectares (165 acres) over the entire project.

Newhall Land has also prepared a Drainage Water Quality Management Plan (Drainage Plan) for the NRMP. The Drainage Plan is a program to manage the quality of stormwater runoff from the construction phase through the life of the lands proposed for development under the NRMP. The Drainage Plan is intended to meet the requirements of the National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit requirements established by the Regional Water Quality Control Board (RWQCB). The elements of the Drainage Plan include the use of Construction Best Management Practices (BMPs); preparation of Stormwater Pollution Prevention Plans (SWPPP) for all projects; use of permanent source control BMPs; and permanent treatment control BMPs in all areas of new development. The latter includes water quality filters, water quality wetlands, and soft-bottom channels to collect pollutants from the first flush of each storm before it enters the river. These facilities would be located outside the “Waters of the United States.” The Drainage Plan will protect water quality and aquatic resources.

Under the NRMP, mature, dense vegetation under future channel conditions with the proposed bank protection will not require periodic removal to maintain the design capacity of the channel. Traditional, periodic vegetation removal will not be required under the NRMP. However, occasional removal of woody vegetation from storm drain outlets and at existing bridges will be required. The NRMP contains maintenance procedures to be followed by LACDPW that are designed to avoid impacts to endangered species and minimize impacts to riparian resources.

1.4 Required Coordination and Applicable Regulatory Requirements

Caltrans is the state Lead Agency for this IS/EA under the California Environmental Quality Act (CEQA), and the FHWA is the federal Lead Agency under the National Environmental Policy Act (NEPA). In addition to direction provided by Caltrans and FHWA, ongoing project coordination has been provided through a Project Development Team (PDT). The PDT is composed of technical staff from Caltrans, FHWA, Los Angeles County, Newhall Land, and the CH2M HILL consultant team. The PDT continues to meet monthly throughout the course of the study to review progress, to exchange technical information, and to respond to new issues affecting the project.

Consultation and coordination with a variety of other agencies is required. Among these are:

- U.S. Department of Agriculture/Natural Resources Conservation Service (DOA/NRCS)
- U.S. Army Corps of Engineers (USACE)

- California Regional Water Quality Control Board (RWQCB)
- California Office of Historic Preservation
- Native American Heritage Commission
- U.S. Fish and Wildlife Service (USFWS)
- California Department of Fish and Game (CDFG)
- Southern California Association of Governments (SCAG)
- South Coast Air Quality Management District (SCAQMD)
- County of Los Angeles Department of Regional Planning (DRP)
- City of Santa Clarita Planning and Building Services

Construction of the Build Alternative may require state or federal permits, reviews, or approvals in addition to those required by local jurisdictions. These additional requirements fall mainly under the following statutes:

- Federal Endangered Species Act (FESA)
- California Endangered Species Act (CESA)
- National Historic Preservation Act
- Clean Water Act
- Native Plant Protection Act (NPPA)
- Department of Transportation, Section 4(f)
- Fish and Game Code

Chapter 2 **Project Alternatives**

2.1 **Alternative Development Process**

The proposed project is located in unincorporated Los Angeles County, California, northwest of the City of Santa Clarita. The project is between KP R6.8 and R9.2 (PM R4.2 to R5.7) on SR 126 (see Figure 1.1-2).

Four alternatives were studied in the PSR, including a no build alternative and three build alternatives (CH2M HILL, 1999a). Each of these alternatives included designs for an SR 126/Commerce Center Drive interchange, as well as the I-5/SR 126 interchange, located 1.5 km (0.9-mile) to the east. Since that document was prepared, the decision was made to split the interchange improvements into two separate projects because each project has distinct logical termini and each has independent utility from the other.

Prior to the preparation of the project PSR, the Newhall Land and Caltrans studied alternative locations for the proposed grade-separated interchange. Due to the high costs of relocating the SR 126/Commerce Center Drive intersection and the Valencia Commerce Center internal roadways need for large volumes of earth grading due to site topography, Caltrans concurred that the project alternatives would be analyzed for the existing intersection of SR 126/Commerce Center Drive. Subsequently, two of the three build alternatives were also eliminated during the PSR phase. The relocation of the intersection was also considered, but eliminated due to costs and access problems. The reasons for the elimination of some alternatives are discussed in Section 2.3 (Alternatives Considered and Withdrawn).

The estimated cost of this project is \$31.79 million for Alternative C, the Build Alternative. Through the Los Angeles County Metropolitan Transportation Authority's (MTA's) "Call for Projects," Newhall Land secured \$9.3 million in funding. The County of Los Angeles and/or its agents will be the responsible party for the construction and mitigation of impacts for this interchange project. Construction is expected to occur during normal weekday (7:00 AM to 7:00 PM) and some Saturdays (8:00 AM to 6:00 PM).

2.2 **Project Alternatives**

Final selection of an alternative will not be made until after the full evaluation of environmental impacts, full consideration of public hearing comments, and approval of the final environmental document.

2.2.1 No Build Alternative

This alternative assumes that no improvements are made along SR 126 and at the SR 126/Commerce Center Drive intersection beyond those already committed, funded, and expected to be in place by the year 2025. As such, this alternative has no construction or right-of-way costs associated with it.

SR 126 is a four-lane facility that meets Commerce Center Drive at a signalized, at-grade intersection. This intersection is part of recent improvements to Commerce Center Drive that also include the construction of a structure over Castaic Creek. The No Build Alternative assumes that the extension of Commerce Center Drive over the Santa Clara River to intersect with Magic Mountain Parkway would be funded and constructed by 2025.

The ICU analysis at the SR 126/Commerce Center Drive intersection shows that no improvements to the intersection would result in a LOS F by the year 2025, and traffic volumes along SR 126 would be almost equal to the capacity of the existing four-lane facility. Potential backups of traffic along SR 126 would have impacts on operations at the I-5/SR 126 interchange. As the proposed development along the corridor occurs, the No Build Alternative would result in increased congestion and delay, resulting in additional fuel consumption and vehicle emissions. The No Build Alternative (Figure 2.2-1) would not meet the project purpose and need, as discussed in Sections 1.1 and 1.2, for the following reasons:

- It would not accommodate future local circulation and access needs or alleviate congestion and capacity deficiencies.
- It would not be consistent with local and regional planning.
- It would not accommodate forecasted traffic volumes from approved developments. The increase in traffic from these developments would result in increases in traffic congestion and delay at the intersection of SR 126 and Commerce Center Drive in its current configuration. Additionally, the increase in traffic delay may also increase fuel consumption and vehicle emissions along SR 126.
- It would not enhance driver safety.

No Build Environmental Assessment

As previously discussed, the No Build Alternative would not meet the project purpose and need. Pursuant to CEQA guidelines section 15126.6 (e) the No Build Alternative shall also be evaluated along with its impact. The purpose of describing and analyzing a no project alternative is to allow decisionmakers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project. Findings will be made regarding the impacts of the No Build Alternative in Chapter 3.

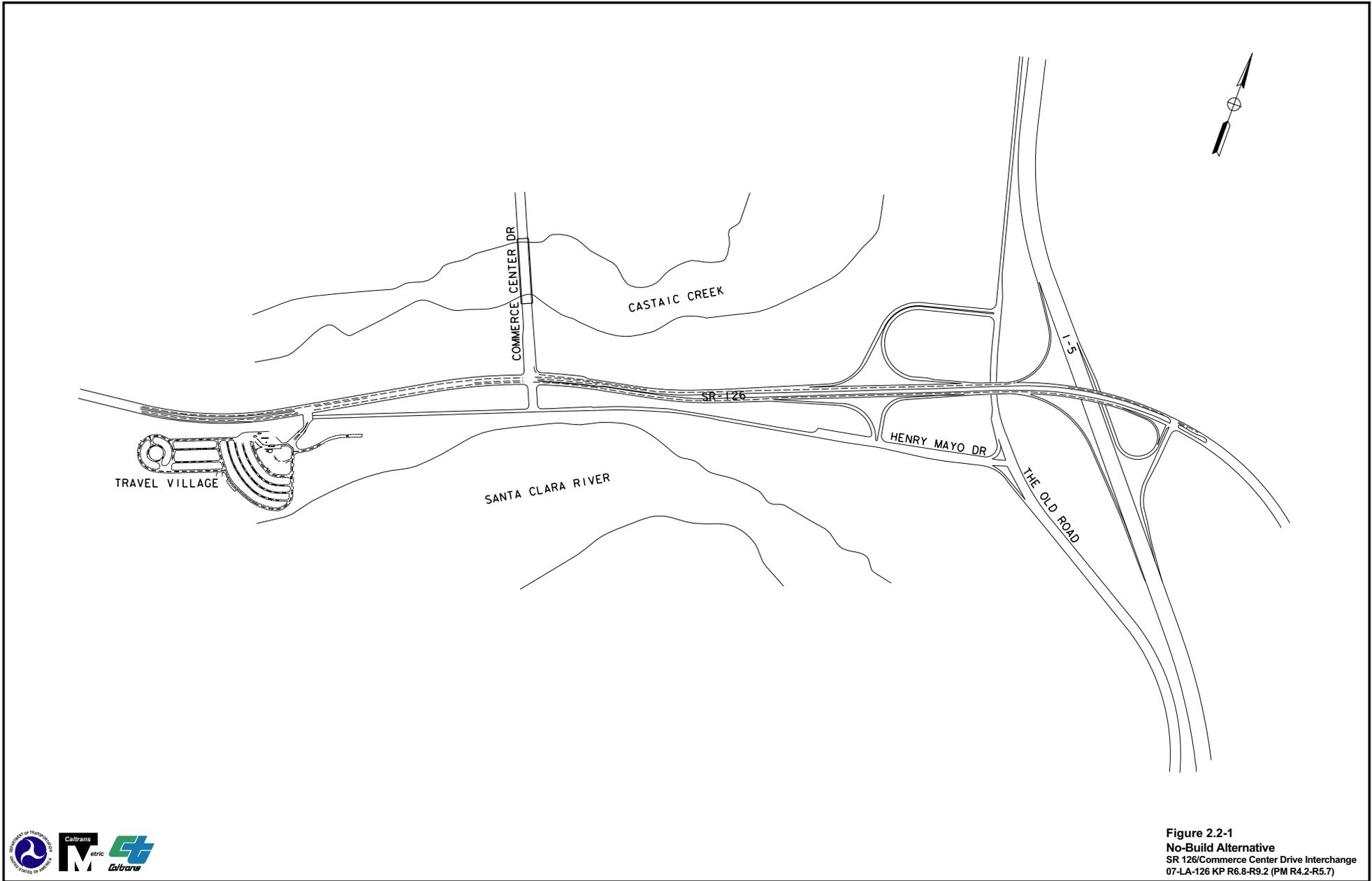


Figure 2.2-1
No-Build Alternative
 SR 126/Commerce Center Drive Interchange
 07-LA-126 KP R6.8-R9.2 (PM R4.2-R5.7)

In general, the impacts associated with the No Build Alternative would be similar, if not identical, to the existing environmental condition (see Affected Environment sections for each issue in Chapter 3). However, due to other factors such as growth in land uses outside the project area and future traffic forecasts, some environmental issues have been analyzed specifically for the No Build Alternative that may cause indirect impacts to the study area. A discussion of these indirect impacts and future traffic forecasts and indirect environmental impacts has been analyzed for the No Build Alternative in the following sections:

- Air Quality
- Noise
- Energy
- Traffic Transportation
- Biological Resources
- Cultural Resources

For all other topics, please refer to the discussion of the “Affected Environment” for the environmental impacts of the No Build Alternative.

2.2.2 Alternative C – Locally Preferred Alternative (Build Alternative)

This alternative proposes a grade-separated interchange at the SR 126 and Commerce Center Drive intersection, with a new overpass structure for Commerce Center Drive over SR 126 (Figure 2.2-2). The new interchange would provide full movements for traffic between Commerce Center Drive and along eastbound and westbound SR 126.

The Build Alternative would provide westbound diamond ramps at Commerce Center Drive. The westbound SR 126 off-ramp to Commerce Center Drive would be widened from two to four lanes at the signalized Commerce Center Drive intersection to provide two left-turn lanes and two right-turn lanes. The two right-turn lanes would be signal-controlled to reduce potential weaving conflicts with the future Hancock Lane intersection. A two-lane on-ramp would be provided for the southbound Commerce Center Drive traffic onto westbound SR 126. These new ramps would utilize the existing pavement of SR 126, which minimizes throw-away construction and traffic impacts during construction.

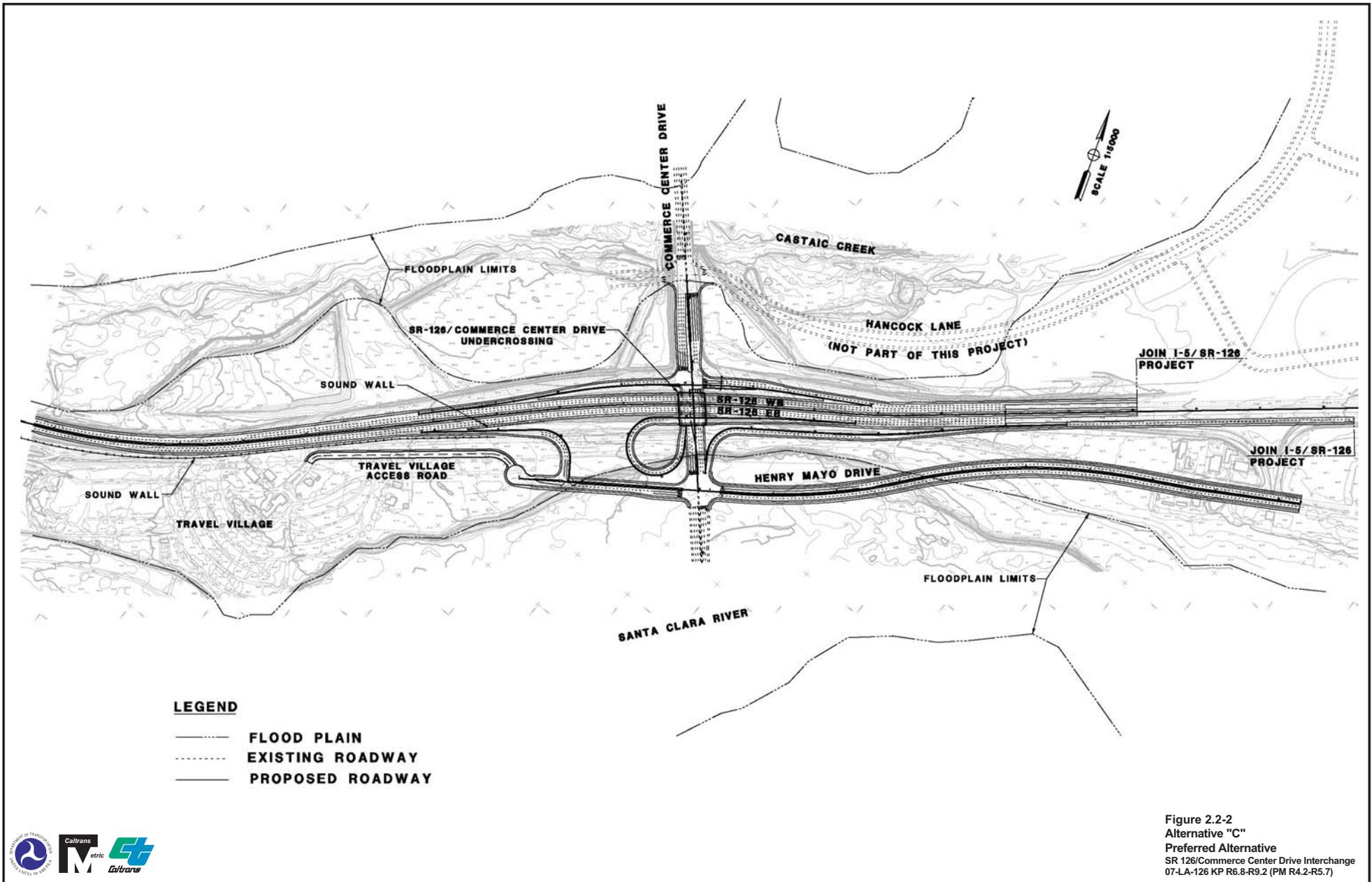
Two eastbound on-ramps would be provided from Commerce Center Drive. The first, a two-lane loop on-ramp, would be constructed from southbound Commerce Center Drive to eastbound SR 126 to accommodate the anticipated heavy traffic movements. The on-ramp would narrow to one lane and join SR 126 as the fourth lane in the eastbound direction. From northbound Commerce Center Drive, a two-lane diagonal on-ramp would be provided near

the intersection of Commerce Center Drive and Henry Mayo Drive. The on-ramp would narrow into one lane and join SR 126 as a fifth eastbound lane.

A one-lane off-ramp would be provided from eastbound SR 126 to Henry Mayo Drive. The off-ramp would widen to three lanes before the intersection with Henry Mayo Drive. As part of this project, the existing eastbound hook on- and off-ramps at SR 126 and Henry Mayo Drive, approximately 1.21 km (0.75-mile) east of SR 126/Commerce Center Drive, would be permanently removed. Vehicles currently using these ramps would be diverted west to the new interchange (i.e., proposed project).

From the SR 126/Commerce Center Drive intersection, SR 126 would be widened 850 meters (2,640 feet) to the west and then taper back down to join the existing roadway. To the east, SR 126 would be widened 1,040 meters (0.65-mile), where it would join the proposed improvements from the I-5/SR 126 interchange project. In the eastbound direction, SR 126 would be widened from two lanes to three lanes in advance of the on-ramps from Commerce Center Drive. In addition, a fourth and fifth lane would be added to eastbound SR 126 as the on-ramps from southbound and northbound Commerce Center Drive join SR 126. In the westbound direction, SR 126 would be widened from two lanes to four lanes in advance of the Commerce Center Drive off-ramp; and three lanes would continue through the interchange.

In addition to Commerce Center Drive and SR 126, improvements would also be made to Henry Mayo Drive. Currently, the State and County have joint rights over the portion of Henry Mayo Drive that intersects with the existing eastbound SR 126 hook ramps. This right-of-way of 810 square meters (8718.7 square feet) will be relinquished by the State to the County or Newhall Land due to the abandonment of the existing hook ramps as part of this project. As part of this alternative, Henry Mayo Drive would be realigned to the south and extended west to provide access to the Valencia Travel Village. This extension would provide access and reduce local trips on nearby I-5. Currently, access to the Valencia Travel Village is provided via a driveway directly from SR 126. Due to the extension of Henry Mayo Drive, access would no longer be required directly from SR 126; therefore, the driveway would be closed and used only for temporary emergency access. The relocation of the Valencia Travel Village driveway to Henry Mayo Drive from SR 126 would remove the turning movements of recreational vehicles (RVs) from SR 126 and provide improved free-flow operations on the mainline.



The Santa Clara River to the south of SR 126 and Castaic Creek to the north are environmentally sensitive areas and considered major constraints in the design of the SR 126/Commerce Center Drive Interchange. The intersection of proposed Hancock Lane with Commerce Center Drive cannot be moved further north due to the conflicts with Castaic Creek. The alignment of SR 126 would be shifted to the south, and the intersection of Henry Mayo Drive with Commerce Center Drive would be shifted to the south into the Santa Clara River floodplain to provide the required intersection spacing. For purposes of this project, this intersection would serve as the new access to the Valencia Travel Village and the new eastbound on- and off-ramps, and would continue to serve as access to Henry Mayo Drive. The reconfiguration of the intersection will require additional fill that would serve as slope stabilization from approximately 15 meters (50 feet) south of the curb return of the intersection. The fill would be comprised of riprap and soil-cement only. All associated river bank protection measures (i.e., riprap) to the Santa Clara River would be provided consistent with the approved NRMP.

A proposed bridge is planned for development at Commerce Center Drive across the Santa Clara River and connects to Magic Mountain Parkway. The design of the slope stabilization/fill for the reconfigured Commerce Center Drive/Henry Mayo Drive intersection facilitates the construction of the northern portion of the bridge. However, the year 2025 traffic assignment includes this improvement; and the intersection lane configuration has been designed accordingly. The proposed SR 126/Commerce Center Drive interchange would facilitate traffic from future planned land uses in the project vicinity (Valencia Commerce Center and Newhall Ranch) that would cross the Santa Clara River.

The Build Alternative would address the purpose and need of the project in the following areas:

- It would be consistent with local and regional planning by accommodating local circulation and access needs.
- It would alleviate congestion and capacity deficiencies.
- It would accommodate the forecasted area buildout and the resulting increases in traffic volumes.

Alternative C is the preferred alternative due to overall safety (see Draft Project Report), operational benefits, and feasibility of construction.

2.2.3 Relationship to State, Regional, and Local Transportation Planning

The Build Alternative is identified in the approved 2001 Regional Transportation Plan (RTP) prepared by Southern California Association of Governments (SCAG). Similarly, this project is identified in the federally approved 2004/2005 to 2009/2010 Regional Transportation Improvement Program (RTIP).¹ Therefore, this project has also been included in the 2004 Federal Transportation Improvement Program (FTIP). The project identification number on the RTIP is LA0C8099, model number L269, and it is described as:

SR-126/COMMERCE CTR DR NEW IC. CONSTRUCT A PARTIAL CLOVERLEAF, GRADE SEPARATED IC AND WIDEN ST 126 FROM 0.76 KM EAST OF IC TO 0.85 KM WEST 4-6 LANES. (2001 CFP 8099) (PPNO# 3118).

2.2.4 Transportation Systems Management

Transportation Systems Management (TSM) is a series of methods to lessen the negative impacts associated with traffic by maximizing the efficiency of existing transportation facilities. One possible activity for the project location is the optimization of signal timing of the existing traffic signal. These types of activities can be implemented with the Build Alternative to greatly improve efficiency in operations in the future.

The primary purpose of the proposed project is to accommodate planned growth in the study area by ensuring adequate highway capacity, and improved local access and traffic circulation. (Chapter 1, Purpose and Need). A TSM alternative directly related to the construction of the proposed interchange would not increase the ability of SR 126 to accommodate regional pass-through traffic and local traffic destined to adjacent planned land uses.

Travel through the existing SR 126/Commerce Center Drive intersection is largely a function of existing and planned land uses in the area. As such, there are limited opportunities to utilize TSM tools through the project to reduce the travel demand. One opportunity, to maximize the efficiency of the existing roadway infrastructure (existing geometrics, signal control, etc.), has been analyzed as the 2025 No Build Alternative in this report. However, as shown in the traffic analysis, forecast traffic volumes and levels of service associated with planned land uses in the study area would be at a level high enough to justify the reconfiguration of the existing at-grade intersection to a grade-separated interchange (Chapter 1, Section 1.2.1, Operational Deficiencies).

¹ Southern California Association of Governments. *Final 2004 Regional Transportation Improvement Plan (RTIP) (FY 2004/2005-2009/2010) – State Highway Projects.*

Because this alternative would not result in physical improvements to the existing at-grade intersection, the TSM alternative: (1) would not provide for adequate highway operations along SR 126 upon buildout of planned land uses, (2) would not provide for safety improvements at an intersection forecast to operate at LOS F, and (3) would not accommodate planned land use growth in the project area. Therefore, the TSM alternative has been dropped from further consideration.

2.3 Alternatives Considered and Withdrawn

Four alternatives for the SR 126/Commerce Center Drive interchange project were studied in the PSR (CH2M HILL, 1999a), including the No Build Alternative and three build alternatives. The two eliminated build alternatives are discussed below.

2.3.1 Alternative A – Buttonhook Ramp Concept

This alternative (Figure 2.3-1) is very similar to Alternative C – Build Alternative. However, Alternative A would have provided a hook on-ramp at the Commerce Center Drive/Henry Mayo Drive intersection, as compared with a loop on-ramp included in the design of the Build Alternative. This alternative is estimated to cost approximately \$39.12 million. However, this concept was eliminated due to operational considerations, such as a high risk of wrong way movements and proximity of the hook on-ramp to the Commerce Center Drive/Henry Mayo Drive intersection. The substandard spacing between the eastbound off-ramp and Commerce Center Drive would not be consistent with current Caltrans standards.

2.3.2 Alternative B – Single-Point Diamond Concept

This alternative (Figure 2.3-2) would have aligned the eastbound and westbound ramps to form a single intersection at the Commerce Center Drive undercrossing and is estimated to cost approximately \$45 million.. All three intersections along Commerce Center Drive (A Street, eastbound and westbound ramps, and Henry Mayo Drive) would be equally spaced approximately 135 meters (443 feet) apart. All of the interchange movements in this alternative would access the same roadway, Commerce Center Drive. This alternative was eliminated due to short southbound queue length for the heavy southbound Commerce Center Drive to eastbound SR 126 movement, impacts to traffic operations during construction, nonstandard features of the design that would potentially create greater safety risks to motorists, such as a wider clear span for the undercrossing and increasing depth of the structures and raising the profile of SR-126 main line, and high construction cost.

2.4 Other Local Projects and Proposals

Figure 2.4-1 illustrates the locations of other local projects and proposals. SR 126 is currently used as a major route between I-5 and Ventura County to the west. During the next 20 years, the area around the SR 126/Commerce Center Drive intersection is projected to experience a buildout of major commercial and industrial developments, which will result in considerable increases in regional and inter-regional traffic on these routes. Increases in local traffic are also projected for the area due to ongoing construction and planned development within the greater Santa Clarita Valley. Additionally, several transportation improvement projects within the Santa Clarita Valley will change traffic patterns, contributing additional traffic to the SR 126/Commerce Center Drive intersection. These commercial/industrial developments and local transportation improvement projects are discussed below. Documents for the following projects, with the exception of the Valencia Commerce Center, are available for viewing at Caltrans District 7. Those documents relating to the Valencia Commerce Center can be obtained from Newhall Land, a subsidiary of The Newhall Land and Farming Company.

The addresses of these locations are as follows:

- California Department of Transportation-District 7, 120 South Spring Street, Los Angeles, CA 90012
- Newhall Land, 23823 Valencia Boulevard, Valencia, CA 91355-2194

2.4.1 Valencia Commerce Center

Newhall Land is developing 284 hectares (702 acres) north of the SR 126/Commerce Center Drive intersection as a major industrial, office, and supporting commercial-use center named Valencia Commerce Center. Approximately 40 percent (113 hectares, or 280 acres) of the area is being preserved as open space and hillside management area.

Despite this preservation of open space, the Valencia Commerce Center is forecasted to grow to approximately 1.24 million square meters (approximately 13.3 million square feet) by the year 2025, resulting in a large employment area north of SR 126 at Commerce Center Drive. The buildout of the Valencia Commerce Center would add approximately 50,000 vehicle trips per day to be added to SR 126 and I-5 (regionally) (Austin-Foust, 2003). This will also include the extension of Hancock Lane that would intersect with Commerce Center Drive south of the Castaic Creek Bridge. A majority of Valencia Commerce Center drivers would use SR 126, with a high proportion of those trips accessing the Valencia Commerce Center through the I-5/ Hasley Canyon Road intersection. Trips on the local street system would be added to Commerce Center Drive, The Old Road, and Hasley Canyon Road.

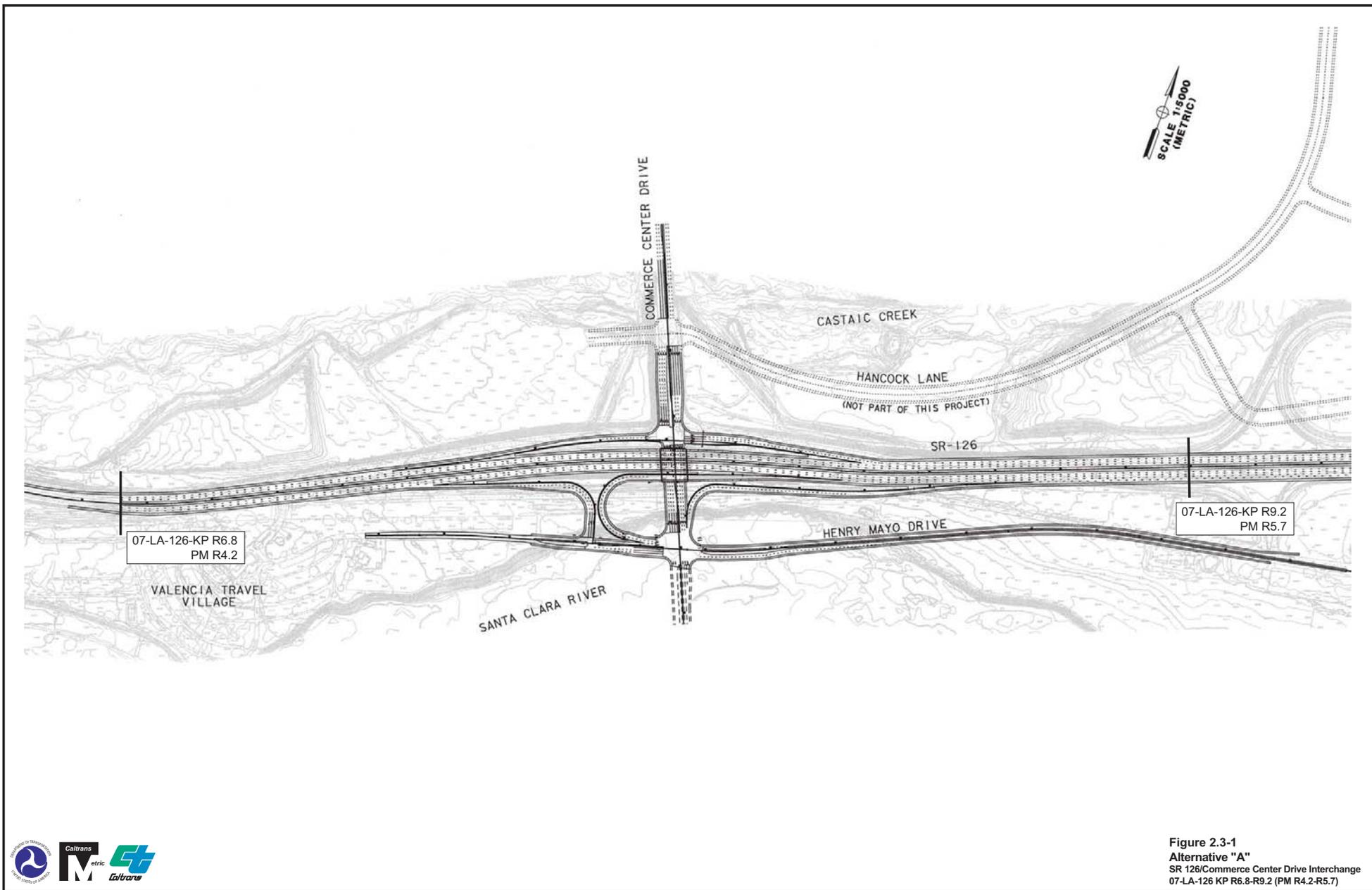
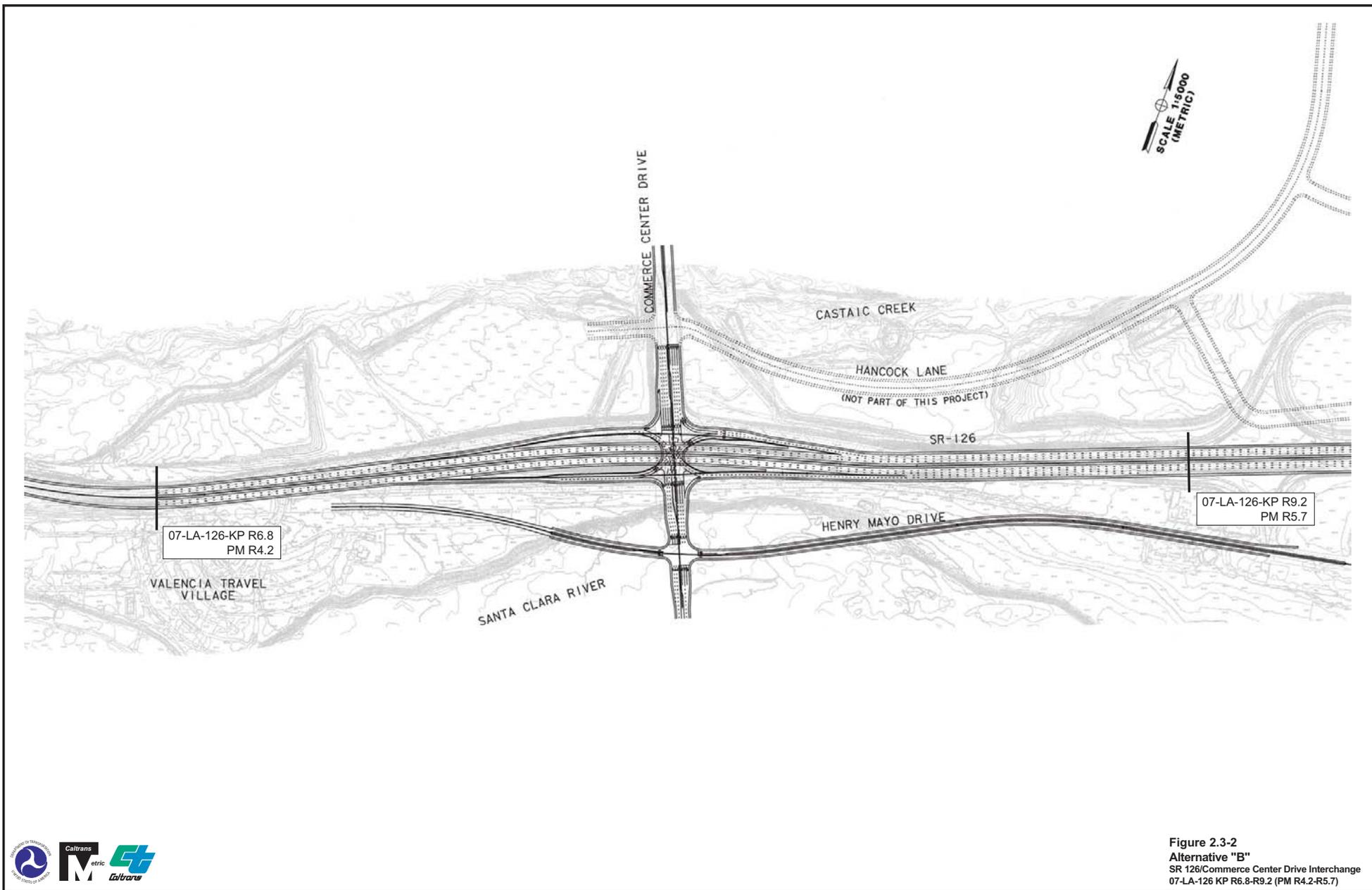


Figure 2.3-1
 Alternative "A"
 SR 126/Commerce Center Drive Interchange
 07-LA-126 KP R6.8-R9.2 (PM R4.2-R5.7)



SCALE 1:5000
(METRIC)

07-LA-126-KP R6.8
PM R4.2

VALENCIA TRAVEL
VILLAGE

SANTA CLARA RIVER

COMMERCE CENTER DRIVE

CASTAIC CREEK

HANCOCK LANE
(NOT PART OF THIS PROJECT)

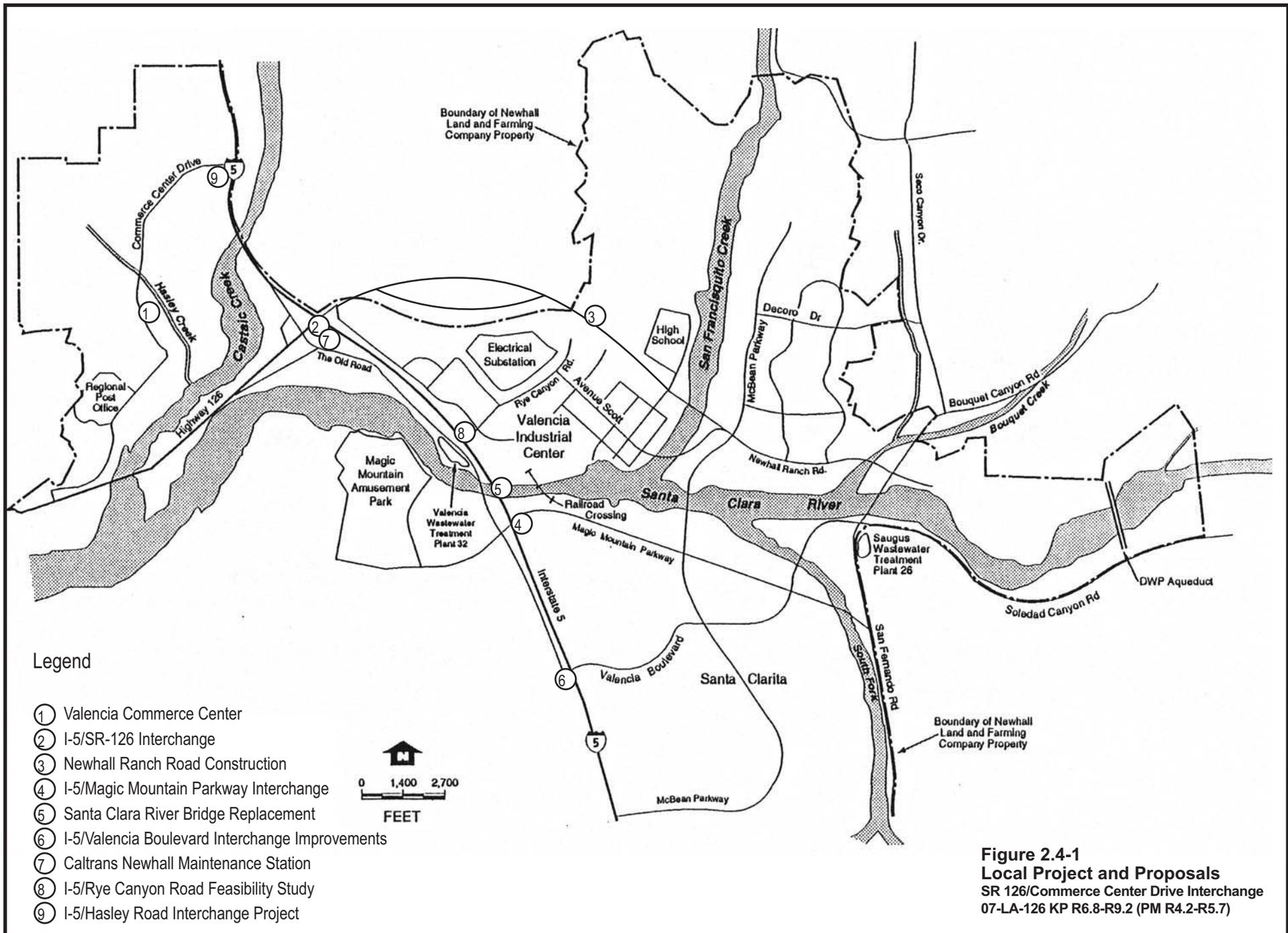
SR-126

HENRY MAYO DRIVE

07-LA-126-KP R9.2
PM R5.7



Figure 2.3-2
Alternative "B"
SR 126/Commerce Center Drive Interchange
07-LA-126 KP R6.8-R9.2 (PM R4.2-R5.7)



Legend

- ① Valencia Commerce Center
- ② I-5/SR-126 Interchange
- ③ Newhall Ranch Road Construction
- ④ I-5/Magic Mountain Parkway Interchange
- ⑤ Santa Clara River Bridge Replacement
- ⑥ I-5/Valencia Boulevard Interchange Improvements
- ⑦ Caltrans Newhall Maintenance Station
- ⑧ I-5/Rye Canyon Road Feasibility Study
- ⑨ I-5/Hasley Road Interchange Project

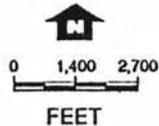


Figure 2.4-1
Local Project and Proposals
 SR 126/Commerce Center Drive Interchange
 07-LA-126 KP R6.8-R9.2 (PM R4.2-R5.7)

Pursuant to CEQA, an Environmental Impact Report (EIR) was finalized in April 1990 (Sikand, 1990). It stated that the purpose of the proposed project is to develop a major expansion of the existing Valencia Industrial Center, serving the growing business needs of the Santa Clarita Valley and surrounding communities. The proposed project would result in adverse impacts to the following environmental resource areas: geologic resources, floodplain, cultural resources, biota, scenic resources, air quality, sewage disposal, water service, traffic, fire service, sheriff service, environmental safety, and noise levels. With the implementation of measures to minimize harm discussed in the final EIR, these effects would be mitigated to levels of insignificance, except for unavoidable adverse impacts to air quality. Because air quality impacts could not be mitigated to levels of insignificance, a Statement of Overriding Consideration was prepared (Sikand, 1991). The development of Valencia Commerce Center was cleared environmentally and amended to the County of Los Angeles General Plan in September 1991. A tentative parcel map for the area has also been approved. Currently, Valencia Commerce Center is approximately 50 percent complete.

2.4.2 I-5/SR 126 Interchange

The existing I-5/SR 126 interchange, located northwest of the City of Santa Clarita in Los Angeles County, is currently being reconfigured and this work will be completed in early 2004. The interchange will be reconfigured to provide missing directional movements, improve traffic operations on the interchange, increase capacity, improve local access and circulation in the region and in the local area, enhance the safety of the interchange, and accommodate planned growth. The construction of this roadway project will affect traffic operations in the region as well as those at the I-5/Hasley Canyon Road intersection. A Negative Declaration/ Finding of No Significant Impact (ND/FONSI) was approved by Caltrans and FHWA in June 2001 (CH2M HILL, 2001).

This project would result in adverse impacts to the following environmental resource areas: water quality (i.e., siltation), hazardous waste, air quality, and biological resources. After mitigation, these impacts would be reduced to a level below significance.

2.4.3 Newhall Ranch Road Construction

In 2005, a majority of the segment of Newhall Ranch Road, from east of the northbound I-5 off-ramp, would be constructed as an ultimate six- to eight-lane (three to four lanes in each direction) city arterial, connecting to Copper Hill Drive. This connection to I-5/SR 126 would provide access via SR 126 to the Newhall Ranch development, a master-planned community to be located west of I-5, consisting of over 20,000 residential units and over 464,000 square meters (5.0 million square feet) designated for commercial and industrial use.

2.4.4 I-5/Magic Mountain Parkway Interchange

Newhall Land (the Project Proponent), in cooperation with the City of Santa Clarita, the County of Los Angeles, and Caltrans, is currently constructing Phase 1 of the I-5/Magic Mountain Parkway interchange. The construction of the Build Alternative will be completed in three phases. Phase 1 (under construction) will modify the I-5/Magic Mountain Parkway interchange. This modification is being constructed in concert with the Santa Clara River Bridge reconstruction, as described in Section 2.4.5. The Phase 1 interchange improvement will also require minor modifications (slope and grades) to Magic Mountain Parkway to attain minimum vertical clearances. Phase 2 is planned to include the reconstruction of the I-5/Magic Mountain Parkway Interchange area and realignment of the Old Road at Magic Mountain Parkway, west of I-5. These improvements are planned to increase intersection spacing to join the Los Angeles County six-lane roadway project at Tourney Road. Phase 3 realigns and widens Magic Mountain Parkway east of I-5 to eight lanes from the I-5/SR 126 Interchange to the Fairway Shopping Center entrance. Magic Mountain Parkway will be restriped from six to eight lanes between the Fairway entrance and McBean Parkway. An IS/EA was finalized in July 2000, resulting in the approval of an ND/FONSI (Tetra Tech, 2000).

This proposed project results in adverse impacts to the following environmental resource areas: topography, geology, and soils; use of nonrenewable resources; hazardous materials; hydrology, drainage, and water quality; air quality; noise levels; light and glare; biological resources; land use; traffic and transportation; and construction-related impacts. With the incorporation of measures to minimize harm, there will be no adverse impacts resulting from the project. The prescribed measures to minimize harm reduce impacts to acceptable levels. The purpose of this project is to improve traffic safety and the deficiencies of the existing roadway; increase the capacity and improve the operation of existing roadways; alleviate existing and future congestion; conform to state, regional, and local plans and policies; facilitate the flow of goods and services through the area; and ensure continued mobility of the public at the state, regional, and local level.

2.4.5 Santa Clara River Bridge Replacement

The purpose of this project is to replace the Santa Clara River Bridge on I-5 and the I-5/Magic Mountain Parkway interchange in Santa Clarita described above in Section 2.4.4. Major degradation of the Santa Clara Riverbed surrounding the existing I-5 bridge pilings has occurred because of scour and upstream mining. As a result, the bridge was identified as a scour susceptible bridge, and has been rated Scour Critical, Code 3 as defined by federal guidelines. The bridge also has indications of structural problems.

This project will replace the existing northbound and southbound structures of the Santa Clara River Bridge with a single structure. The new structure will have four lanes in each direction. Caltrans prepared an Environmental Impact Report/Environmental Assessment (EIR/EA), which was finalized in June 2000 (Caltrans, 2000a). The purpose of this project was to replace a scour-susceptible bridge; ensure continued mobility of the public at the state, regional, and local level; facilitate the efficient flow of goods and services through the area; and improve traffic safety. An Environmental Addendum, pursuant to CEQA, was completed in February of 2003.

The replacement bridge is designed to accommodate the movement or migration of animals. This project is currently under construction and is estimated to be completed by March 2005.

2.4.6 I-5/Valencia Boulevard Interchange Improvements

Construction of this project was completed in February 2002. This project widened Valencia Boulevard through the interchange with I-5; modified the ramp configuration, which improved the overall operation of the interchange; replaced the existing bridge; and constructed a new southbound direct on-ramp.

An IS/EA was finalized in June 2000, resulting in the approval of a FONSI and Negative Declaration (Tetra Tech, 2000). The purpose of the project was to improve traffic safety and the deficiencies of the existing roadway over I-5 and the interchange increase the capacity and improve the operation of existing roadways; alleviate existing and future congestion; conform to state, regional, and local plans and policies; facilitate the flow of goods and services through the area; and ensure continued mobility of the public at the state, regional, and local level.

Construction of the project resulted in adverse impacts to noise levels, air quality, water quality, and plants and animal life; although impacts to water quality, noise levels, and air quality would be minimal. After mitigation, impacts to biological resources would be minimal.

2.4.7 Caltrans Newhall Maintenance Station

In addition to these roadway projects, Caltrans constructed a new maintenance facility (Newhall Maintenance Station) between The Old Road and I-5, south of SR 126. This project has not caused a considerable increase in traffic volumes, nor has it created traffic delays within the I-5/SR 126 Interchange Project vicinity. An Initial Study was prepared, resulting in the approval of a Negative Declaration (Caltrans, 1993). The purpose of this project was to relocate the maintenance station to an area with more compatible surrounding

land uses, provide easier access for maintenance vehicles and employees, and reduce the crowded conditions at the existing facility.

Construction and implementation of this project had less-than-adverse impacts to natural features including, but not limited to, plant life, animal life, sensitive habitats, and animal movements. Environmental clearance for this project will be completed mid-2004.

2.4.8 I-5/Rye Canyon Road Feasibility Study

Newhall Land has prepared a feasibility study to relocate the I-5/Rye Canyon Road hook ramps approximately 137 meters (450 feet) to the north of their existing location (1.6 kilometers [0.9 miles] south of the I-5/SR 126 interchange). This improvement will include the installation of a traffic signal and widen ramp and intersection approaches. The draft plans, specifications, and estimates (Draft PS&E) were submitted to Caltrans in mid-2001. Construction is planned to begin in mid-2004 with a completion date of March 2005.

2.4.9 I-5/Hasley Canyon Road Interchange Project

Proposed development within Valencia Commerce Center would generate additional traffic accessing I-5 at the I-5/Hasley Canyon Road interchange, located 1.6 km (0.99-mile) north of the I-5/SR 126 interchange. The anticipated traffic increase warrants improvements to the interchange to reduce delay and to improve safety and traffic circulation. Improvements will include replacement of the bridge overpass, realignment and reconstruction of the existing ramps, and intersection approach widening.

An IS/EA was released for public review in January 2001, and was later approved as a ND/FONSI by Caltrans and FHWA in July of the same year (Newhall Land, 2000d). The purpose of the project is to increase capacity and improve local access and circulation, improve the operation of the interchange, incorporate planned infrastructure improvements, enhance safety, and accommodate planned growth within the study area.

The proposed project will result in adverse impacts to the following environmental resource areas: water quality (i.e., siltation), floodplains, wetlands, air quality, noise levels, light and glare, and biological resources. After mitigation, these impacts will be reduced to a level below significance. Construction on this project is estimated to begin in June 2004 and be completed by December 2005.

Chapter 3 Affected Environment, Environmental Consequences, and Measures to Minimize Harm

3.1 Hydrology, Water Quality, Stormwater Runoff

3.1.1 Affected Environment

Surface Water

The proposed project would be located within the Santa Clara River floodplain, which originates in Soledad Canyon in the San Gabriel Mountains, approximately 49.9 kilometers (31.0 miles) east-southeast of the project site. The river drains an area of about 1,036 square kilometers (400 square miles) at its confluence with Castaic Creek. Within the project area, the river flows west, crossing I-5 south of the existing SR 126/Commerce Center Drive intersection, to the coast where it drains into the Pacific Ocean near the City of San Buenaventura. The Santa Clara River is not a wild or scenic river, as designated by the National Wild and Scenic Rivers System (National Park Service, 1999).

In the project vicinity, the Santa Clara River is a permanent stream with highly seasonal flows. Flows at the Saugus gauging station range from 1.13 to 1.98 cubic meters per second (cms) (40 to 70 cubic feet per second [cfs]) during the winter months, and less than 0.09 cms (3 cfs) during the low flow, summer season (United States Geological Survey [USGS], 1999). Total annual precipitation in the area averages approximately 0.46-meter (18.11 inches) per year, with almost all precipitation in the November through March period (National Weather Service, 1999).

The Santa Clara River has been designated as a Significant Ecological Area (SEA) by the County of Los Angeles. This designation was made due to the presence of habitat for several special-status species (Los Angeles County, 1990), discussed in Section 3.7 (Vegetation) and Section 3.8 (Wildlife).

Castaic Creek is located north of the proposed project area and merges with the Santa Clara River in the area west of the existing Valencia Travel Village. It is an ephemeral creek, with rainy season flows and extended dry periods. As discussed in Section 3.8, the creek offers potential aquatic habitat for California Department of Fish and Game (CDFG) fully protected species of unarmored threespine stickleback (*gasterosteus aculeatus williamsoni*) known to

be in the area. As a result, this portion of Castaic Creek is considered part of a Significant Natural Area (SNA), as determined by the CDFG.

Existing surface water quality data are not available through direct surface water monitoring results; however, surface water quality can be inferred through local water supply records. As discussed above, Castaic Creek is an ephemeral stream that periodically dries during the summer and fall; the Santa Clara River also has a strongly seasonal flow. The implication of these seasonal patterns is that the extended low-flow periods of both streams during dry seasons should tend to cause their quality to approximate that of local groundwater. Groundwater quality has been characterized by the Newhall County Water District, which uses local wells for municipal supplies (in contrast to other local suppliers that include blended State Water Project surface water). The 401 and 404 water quality requirements will be done and referred to during a stormwater quality assessment and a stormwater data report.

The Water Quality Control Plan for the Los Angeles Region (Basin Plan) contains both numeric and narrative surface water quality objectives. The discharge of waste into surface waters must not violate either of these objectives. Table 3.1-1 lists the various narrative water quality objectives applicable to all inland surface waters and enclosed bays and estuaries (LARWQCB, 1995).

Table 3.1-1. Narrative Water Quality Objectives for Surface Waters

Parameter	Objective
Bioaccumulation	Toxic pollutants shall not be present at levels that will bioaccumulate in aquatic life to levels that are harmful to aquatic life or human health.
BOD	Waters shall be free of substances that result in increases in the BOD, which adversely affect beneficial uses.
Biostimulatory Substances	Water shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growth causes nuisance or adversely affects beneficial uses.
Color	Waters shall be free of coloration that causes nuisance or adversely affects beneficial uses.
Dissolved Oxygen	At a minimum (see specifics below), the mean annual dissolved oxygen concentration of all waters shall be greater than 7 mg/L; and no single determination shall be less than 5.0 m/L, except when natural conditions cause lesser conditions.
Exotic Vegetation	Exotic vegetation shall not be introduced around stream courses to the extent that such growth causes nuisance or adversely affects beneficial uses.
Floating Material	Water shall not contain floating materials, including solids, liquids, foams, and scum, in concentrations that cause nuisance or adversely affect beneficial uses.

Parameter	Objective
Mineral Quality	Mineral quality in natural waters is largely determined by the mineral assemblage of soils and rocks and faults near the land surface. Point and nonpoint source discharges of poor quality water can degrade the mineral content of natural waters. High levels of dissolved solids render waters useless for many beneficial uses. Elevated levels of boron affect agricultural use (especially citrus).
Oil and Grease	Waters shall not contain oils, greases, waxes, or other materials in concentrations that result in a visible film or coating on the surface of the water or on objects in the water that cause nuisance, or that otherwise adversely affect beneficial uses.
PH	The pH of inland surface waters shall not be depressed below 6.5 or raised above 8.5 as a result of waste discharges. Ambient pH levels shall not be changed more than 0.5 units from natural conditions as a result of waste discharge. The pH of bays or estuaries shall not be depressed below 6.5 or raised above 8.5 as a result of waste discharges. Ambient pH levels shall not be changed more than 0.2 units from natural conditions as a result of waste discharge.
Radioactive Substances	Radionuclides shall not be present in concentrations that are deleterious to human, plant, animal, or aquatic life or that result in the accumulation of radionuclides in the food web to an extent that presents a hazard to human, plant, animal, or aquatic life.
Settleable Material	Waters shall not contain settleable material in concentrations that cause nuisance or adversely affect beneficial uses.
Suspended Solids	Waters shall not contain suspended solid material in concentrations that cause nuisance or adversely affect beneficial uses.
Toxicity	Toxicity is the adverse response of organisms to chemical or physical agents. When the adverse response is mortality, the result is termed acute toxicity. All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays or population density, growth anomalies, bioassays of appropriate duration or other appropriate methods as specified by the State or Regional Board.
Temperature	The natural receiving water temperature of all regional waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses. Alterations that are allowed must meet the requirements below. For waters designated WARM, water temperature shall not be altered by more than 5°F above the natural temperature. At no time shall these WARM-designated waters be raised above 80°F as a result of waste discharges. For waters designated COLD, water temperature shall not be altered by more than 5°F above the natural temperature.
Taste and Odor	Waters shall not contain taste- or odor-producing substances in concentrations that impart undesirable tastes or odors to fish flesh or other edible aquatic resources, cause nuisance, or adversely affect beneficial uses.

Parameter	Objective
Turbidity	Turbidity is an expression of the optical property that causes light to be scattered in water due to particulate matter such as clay, silt, organic matter, and microscopic organisms. Turbidity can result in a variety of water quality impairments. The secondary drinking water standard for turbidity is 5 NTU (nephelometric turbidity units). Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Increases in natural turbidity attributable to controllable water quality factors shall not exceed the following limits: Where natural turbidity is between 0 and 50 NTU, increases shall not exceed 20 percent and where natural turbidity is greater than 50 NTU, increases shall not exceed 10 percent. Allowable zones of dilution within which higher concentrations may be tolerated may be defined for each discharge in specific Waste Discharge Requirements.

Source: California State University, Sacramento, 2004.

The Santa Clara River is a permanent stream with typical flows ranging from 1.98 cubic meters per second (cms) (70 cubic feet per second [cfs]) during the winter months to less than 0.09 cms (3 cfs) during the summer season (USGS, 1999). The Santa Clara River is listed on the United States Environmental Protection Agency (USEPA) 303(d) list of impaired water bodies. Total maximum daily load (TMDL) restrictions have been promulgated by the LARWQCB for the Santa Clara River, Reach 7 (Hydrologic Unit 403.51), for chloride and ammonia.

Castaic Creek is located north of the proposed project area, and merges with the Santa Clara River downstream of Castaic Junction. It is an ephemeral creek, with rainy season flows and extended dry periods. The creek offers potential aquatic habitat for three listed species of fish known to be in the area. As a result, this portion of Castaic Creek is considered part of a Significant Natural Area (SNA), as determined by the California Department of Fish and Game (CDFG). Castaic Creek is not listed on the USEPA 303(d) list.

The Los Angeles RWQCB (RWQCB, LA Region 4) Basin Plan has prescribed qualitative and numeric water quality standards for the Santa Clara River. The Basin Plan also prescribes TMDLs for chloride and ammonia for the Santa Clara River in the project area. For chloride, the numeric objective is 80 to 100 milligrams per liter (mg/L). For ammonia, the numeric objective varies depending on pH and temperature, but the general range is 0.53 to 2.7 mg/L of total ammonia (at average pH and temperature) in waters designated as WARM to protect against chronic toxicity and 2.3 to 28.0 mg/L to protect against acute toxicity (RWQCB, 1994)

The physical characteristics of local surface waters within the project vicinity can be inferred based on well data at Newhall during predominantly low-flow periods (Castaic Lake Water Agency, 1999). These characteristics include the following:

- Hardness—308 milligrams per liter (mg/L)
- pH—7.4 (nearly neutral)
- Nitrate Levels—2.8 mg/L (low nitrate-N level)
- Total dissolved solids (TDS) concentration—approximately 535 mg/L

It is expected that high, winter storm flows typically act to both dilute the hard water and TDS, and add silt to the stream. These water quality characteristics are typical for warm-water Southern California streams and are supportive of the aquatic life and SEA designations for listed fish species.

The project area is not located within the coastal zone management program area, and no coastal barriers are located within the project area.

Groundwater

The proposed project is located within the eastern groundwater basin of the Santa Clara River valley basin. The basin includes alluvial sediments along the river and its tributaries, and deeper Saugus formation sediments that underlie the alluvium. Depth to water in the alluvial aquifer varies greatly due to the seasonal and long-term variation in the amount of recharge and discharge.

The Los Angeles RWQCB has designated four existing beneficial uses for groundwater in the project area. These include municipal/domestic water supply, industrial service supply, industrial process supply, and agricultural supply. The majority of water extraction within the Santa Clarita Valley occurs along the Santa Clara River. The largest groundwater user in the project area is the Newhall Land and Farming Company, which operates 25 to 30 wells primarily for agricultural purposes. Several other private water purveyors also extract groundwater for municipal and industrial uses. These include the Los Angeles County Waterworks District No. 35 (for the Wayside Honor Rancho), the Santa Clarita Water Company, the Newhall County Water District, and the Valencia Water Company. Total groundwater extractions by the purveyors from the alluvial aquifer ranged between 19,740 and 38,240 cubic kilometers (16,000 to 31,000 acre-feet) from 1987 to 1994 (Santa Clarita Valley Water Report, 2001).

3.1.2 Permanent Impacts

Siltation and Water Quality

Permanent siltation and water quality impacts would result from the increased rate of soil erosion due to runoff from the project site, and the subsequent siltation in waters downstream of the project site. The impacts would be proportionate to the increase in stormwater runoff from the project site, and would occur in the small unlined channels draining the project site. In the vicinity of the proposed roadway embankment, the maximum difference of water surface elevations is 0.19-m (0.62-foot) at cross section 23.04 in the floodplain fringe. The proposed project will increase flow velocities slightly at some locations. The velocity on the right-over bank (near the proposed embankment of Henry Mayo Drive) ranges from 1.68 to 2.31 meters (5.51 to 7.58 feet) per second (m/s). The floodplain extends across the riverbanks near the project site. In the worst-case scenario (at cross section 20.40), the proposed roadway embankment reduces the floodplain width from 393 m to 299 m (1,289 feet to 981 feet). To avoid damage to existing structures within the floodplain, FEMA criteria normally limits cumulative increases in the 100-year base flood elevation to less than 0.31 meters (1 foot). Since there are no existing structures within the floodplain and the maximum impact on the water surface is within FEMA guidelines, the proposed embankment does not have an adverse impact on the floodplain of the Santa Clara River. Based on a discussion with the LACDPW Planning Division, the County has adopted the FEMA floodplain management guideline. Additional information corresponding to the 100-year storm as a result of the project can be found in *Location Hydraulic Study* (CH2M HILL, 2004a).

Eroded soils would be transported in runoff and would settle out of the water downstream, increasing siltation. While suspended, these soil particles may prevent sunlight from reaching aquatic plants, clog fish gills, or choke other organisms. Other pollutants common in soils near highways such as heavy metals, oil and grease, fertilizers, and pesticides would adhere to these soil particles and would be transported downstream with them. These adsorbed pollutants would degrade water quality and would harm aquatic life by causing algal blooms, or interfering with photosynthesis, respiration, growth, and reproduction (EPA, 1995).

Stormwater Runoff

The proposed project would result in an increase of impervious surface area of about 8.5 hectares (21 acres). This additional impervious surface area would result in increased surface runoff in small unlined streams and channels. In the Santa Clara River, permanent hydrologic impacts would result from increased runoff and the potential for increased erosion and scour within the river bed. The increase in impervious surface area would result in a proportionate increase of surface runoff from the project site. In the Santa Clara River at

the project site, the tributary drainage area is approximately 121,400 hectares (299,985 acres). The additional impervious surface area constitutes less than 0.01 percent of the watershed. Assuming the increase in surface runoff to be directly proportional to the increase in impervious surface area, the increase in runoff would be negligible.

3.1.3 Temporary Impacts

Siltation and Water Quality

Construction of the preferred alternative would involve grading at the project area, which may result in temporary erosion of disturbed earth by wind and/or water adjacent to and within the Santa Clara River. Construction of the project would not directly impact Castaic Creek, located north of the proposed construction area. Temporary siltation and water quality impacts would be similar to permanent impacts described above. Construction-related erosion would result in fine-grain particulate solids entering the Santa Clara River and may potentially contaminate aquatic and/or wetland habitats. However, these potential temporary water quality impacts from construction-related erosion may be mitigated.

Stormwater Runoff

There would be a slight increase in the amount of stormwater runoff on the project site due to the increase in the amount of impervious surfaces. As a result, there would be a small increase in runoff to the Santa Clara River, which could potentially degrade surface water quality.

3.1.4 Measures to Minimize Harm

Siltation

The construction and operation of the proposed project will require coverage under the NPDES. Two NPDES permits pertain to Caltrans projects, listed below. Coverage under these NPDES permits will require consideration and implementation of BMPs to the maximum extent practicable.

- State Water Resources Control Board (SWRCB) Order No. 99-08-DWQ, NPDES General Permit for stormwater discharges associated with Construction Activity (General Permit)
- SWRCB Order No. 99-06-DWQ, NPDES Statewide Storm Water Permit (Statewide Permit)

Prior to construction of the proposed project, the project shall obtain coverage under the General Permit. Further, both construction and operation of the proposed project shall obtain coverage under Caltrans Statewide NPDES Permit. Caltrans satisfies the requirements of the Caltrans Statewide NPDES Permit by implementing its Storm Water Management Plan (SWMP) (California, 2003) and Storm Water Quality Practice Guidelines. The SWMP describes the guidelines by which each project shall implement BMPs in compliance with the Caltrans Statewide NPDES Permit. Implementation of BMPs to the maximum extent practicable (MEP) would avoid or minimize these potential impacts. For instance, approved design BMPs, treatment BMPs and maintenance BMPs, will be implemented wherever feasible to control water quality impacts after construction. Caltrans-approved treatment BMPS will be incorporated in the Project Planning Guide.

All projects within the right-of-way shall comply with the recently approved SWMP, dated May 2003. Also, all projects must comply with the recently updated Storm Water Quality Handbooks listed below:

- Project Planning and Design Guidelines (reprinted April 2003)
- Storm Water Pollution Prevention Plan (SWPPP) and Water Pollution Control Program (WPCP) Preparation Manual (March 2003)
- Construction Site BMPs Manual (March 2003)

The proposed project would also comply with Caltrans District 7 District Directive DD20, October 20, 2000. Compliance with the NPDES permits and implementation of Caltrans' SWMP will minimize stormwater impacts from the proposed project. Specific measures to minimize harm are listed below.

Siltation and Water Quality

As mentioned above, coverage under the General Permit will require the project to prepare and implement an SWPPP, which will include provisions for the implementation of construction site BMPs and standard pollution prevention "Good Housekeeping" practices designed to minimize stormwater contamination, and erosion and siltation (Caltrans, 2003). These BMPs would also minimize the risk of stormwater pollution from construction activities and minimize water quality impacts to aquatic and riparian habitats from nonvisible pollutants. The SWPPP will also include a monitoring and maintenance program for these BMPs. Such BMPs would include, but are not limited to:

- The establishment of equipment staging areas and the isolation of hazardous materials from drainage to the streambed.

- The control of construction vehicles and containment of any leakage; equipment maintenance in designated areas away from drainage channels.
- The control of all construction debris within the river channel.
- Sediment traps and/or straw bale filters and silt fences.
- Temporary and permanent stabilization of exposed soil.

Coverage under Caltrans' NPDES Permit will require the project to prepare a Storm Water Data Report (SWDR) in compliance with Caltrans' SWMP (Caltrans, 2002). The SWDR will consider and implement design BMPs and treatment BMPs to the maximum extent practicable. Design BMPs will prevent minimize erosion and scour during operation of the proposed project. Examples of design BMPs include but are not limited to:

- Ditches, berms, dikes, and swales
- Overside drains
- Flared culvert end sections
- Outlet protection/velocity dissipation devices
- Vegetated surfaces/hydroseeding
- Hard surfaces

Treatment BMPs will provide some treatment of surface runoff from the proposed project to minimize stormwater contaminants associated with siltation, such as oil and grease, sediment, and metals. Examples of treatment BMPs include, but are not limited to:

- Biofiltration swales and strips
- Detention basins
- Infiltration basins

Completion of the SWPPP and the SWDR will indicate compliance with the NPDES Permits, and will minimize adverse water quality impacts.

Stormwater Runoff

Compliance with Caltrans' SWMP and production of the SWDR shall be done to consider and document the implementation of design and treatment BMPs to the maximum extent practicable. These BMPs will minimize impacts to stormwater runoff. Design and treatment BMPs to be considered include those listed above.

Construction management BMPs are designed to minimize erosion and reduce downstream siltation and potential nonvisible pollutant discharges during construction activities. Standard BMPs (Caltrans, 2003) would include, but are not limited to:

- The establishment of equipment staging areas and the requirements for storage of hazardous materials to prevent pollutants from discharging from the site, or entering waterways.
- The control of construction vehicles and containment of any leakage.
- The control of all construction debris.
- Installation of sediment traps and/or straw bale filters, silt fences, and sandbags.
- Temporary and permanent stabilization of exposed soil.
- Implementation of BMPs to minimize erosion during construction, and prevent nonpollutants from adversely affecting water quality.

Following construction of the proposed project, design and treatment BMPs will minimize hydrologic impacts to downstream receiving waters. Design and treatment BMPs include those listed above. A maintenance program for these BMPs will be implemented to confirm they are operating to their design capacity. In addition, consultation with state and federal agencies concerning protection measures for the listed aquatic species in the project vicinity in accordance with the NRMP will be required. The following are standard measures to minimize water quality impacts due to construction activities, as listed in the NRMP:

- Equipment shall not be operated in areas of ponded or flowing water without approval of the CDFG.
- Silt settling basins, installed during the construction process, shall be located away from areas of ponded or flowing water to prevent discolored, silt-bearing water from reaching areas of ponded or flowing water during normal flow regimes.
- Installation of bridges, culverts, or other structures shall not impair movement of fish or aquatic organisms. Bottoms of temporary culverts shall be placed at below-channel grades. Bottoms of permanent culverts shall be placed below-channel grades.
- Water containing mud, silt, or other pollutants from construction activities shall not be allowed to enter a flowing stream or be placed in locations that may be subject to normal storm flows during periods when storm flows can be reasonably be expected to occur.
- If a stream channel has been altered during the construction and/or maintenance operations, its low-flow channel shall be returned as nearly as practical to preproject

topographic conditions without creating a possible future bank erosion problem, or a flat wide channel or sluice-like area. The gradient of the streambed shall be returned to preproject grade, to the extent practical, unless it is specified in the NRMP as a restoration area, or a new river bottom area.

- Staging/storage areas for equipment and materials shall be located outside areas of ponded or flowing water.
- Vehicles shall not be driven or equipment operated in areas of ponded or flowing water, or where wetland vegetation, riparian vegetation, or aquatic organisms may be destroyed, except as otherwise provided for in the NRMP.
- Any equipment or vehicles driven and/or operated within or adjacent to the stream shall be checked and maintained daily to prevent leaks of materials that, if introduced to water, could be deleterious to aquatic life.
- Stationary equipment such as motors, pumps, generators, and welders located within the riverbed construction zone shall be positioned over drip pans. No fuel storage tanks are allowed in the riverbed.
- County of Los Angeles and/or their approved contractor will ensure that no debris, bark, slash, sawdust, rubbish, cement, or concrete or washings thereof, oil, petroleum products, or other organic material from any construction, or associated activity of whatever nature shall be allowed to enter into or be placed where it may be washed by rainfall or runoff into, waters of the state. When operations are completed, any excess materials or debris shall be removed from the work area and properly disposed.
- No equipment maintenance shall be done within or near any stream where petroleum products or other pollutants from the equipment may enter these areas under flow.

The following are specific water quality measures to minimize harm listed in the NRMP:

(WQ-1) The engineering design and operational criteria of the proposed water quality wetlands and filters shall be reviewed by the Regional Board staff during the 401 certification review for individual projects. The final designs should consider optimal size, retention time, internal flow patterns, use of a forebay, selection of appropriate plants, and location of inlets and outlets.

(WQ-2) The design of the proposed treatment control BMPs must meet the requirements of any similar treatment control BMP that is formally adopted by the Regional Board for the then current municipal stormwater permit for Los Angeles County or the City of Santa Clarita.

3.2 Hazardous Waste/Materials

An ISA was conducted for the proposed project (CH2M HILL, 1999c). The ISA is summarized below and herein incorporated by reference. The following work was conducted as part of the ISA:

- A site reconnaissance was performed in May 1998 to visually inspect the site, complete the Caltrans ISA Checklist, assess current land usage, and identify recognized environmental conditions that may be present at the properties.
- Regulatory agency databases and six historical aerial photographs were reviewed to identify potentially contaminated sites located at or adjacent to the proposed project.
- A chain-of-title search was performed to determine current and previous ownership information, as well as to indicate whether any leases for oil exploration activities were given for the project area.
- A standard Caltrans ISA Checklist was completed for the project site.

3.2.1 Affected Environment

The following list summarizes the conclusions regarding potential recognized environmental conditions for the project area:

- Past land use records indicate that portions of the project area were farmland from at least 1952 (date of earliest aerial photograph reviewed) to 1972. As a result of this past land use, elevated levels of nitrates in the groundwater potentially exist at the site. In addition, there is a potential for residual concentration of pesticides/herbicides in soil resulting from routine applications associated with past agricultural land use at the subject areas.
- No recognized environmental conditions were observed during a May 1998 site visit. In addition, no evidence of recognized environmental conditions was observed at directly adjacent properties during the site visit.
- A review of the environmental databases identified a number of nearby sites with potential environmental concerns. Elevated levels of petroleum in soils and groundwater resulting from underground storage tank (UST) releases have occurred at locations within 0.2-kilometer (0.13-mile) of the proposed project. In addition, a solid waste landfill with reported minor groundwater contamination is located within 0.4-kilometer (0.25-mile) of the subject area. Depth to groundwater is between 3 and 6 meters (10 and 20 feet) below ground surface.

- Research of chain-of-title information did not reveal leases for oil exploration or other leases that indicated environmental concern.

3.2.2 Permanent Impacts

No recognized environmental concerns were observed during a May 1998 site visit. As a result, the proposed project is not expected to result in an adverse risk of the release of hazardous substances during the construction and operation of the proposed project, and would not endanger the safety of workers or the general public. Additionally, neither the presence of these conditions nor the construction or operation of the proposed project are anticipated to violate any published federal, state, or local standards pertaining to hazardous waste, solid waste, or litter control.

3.2.3 Temporary Impacts

Construction Phase Impacts

As discussed in Section 3.2.1, an ISA was conducted for the proposed project (CH2M HILL, 1999c). This report concluded that the following recognized environmental conditions were identified at the subject parcel:

- Potential groundwater contamination from past agricultural land use at the site and leaking USTs, and a landfill at nearby properties.
- Potential for residual concentration of pesticides/herbicides in soil resulting from routine applications associated with past agricultural land use at the subject parcel.

Approximately 0.5-hectare (1.3 acres) of potentially contaminated land would be required for the Build Alternative, with no additional right-of-way required for the No Build Alternative. No recognized environmental concerns were observed during a May 1998 site visit. As a result, the proposed project is not expected to result in an adverse risk of the release of hazardous substances during the construction and operation of the proposed project, and would not endanger the safety of workers or the general public. Additionally, neither the presence of these conditions nor the construction or operation of the proposed project is anticipated to violate any published federal, state, or local standards pertaining to hazardous waste, solid waste, or litter control. However, because testing of soil and groundwater contamination levels will be completed after the environmental documentation phase is completed, a definitive level of impact cannot be determined until soil and groundwater tests are completed. These tests must be completed prior to the purchase or exchange of right-of-way to the State of California, which is prohibited from purchasing or receiving land on which contaminants are located.

The proposed project would require the removal of existing yellow thermoplastic traffic stripes and pavement markings. These materials have the potential to contain hazardous levels of lead and/or chromium, which could be dangerous to the environment and to human health during construction. These materials typically are removed using sand- or air-blasting equipment. Workers are required to adhere to Occupational Safety and Health Act (OSHA) standards, which describe necessary personal safety equipment and work procedures. All yellow paint debris will require proper containment during and after removal and will be properly handled. After blasting, the blasted material is collected and disposed at an appropriate hazardous materials facility. If the yellow paint debris is found to contain lead and chromium at actionable levels, then the debris will be disposed of in a Class I Landfill. The amount of material would not be substantial and would not impact local hazardous materials facilities.

3.2.4 Measures to Minimize Harm

Construction Mitigation

Although no adverse potential for or evidence of hazardous material contamination was observed or detected while conducting the ISA, the following measures to minimize harm are recommended to further minimize this potential during construction activities:

- During construction, waste material will be classified and removed from the construction area(s) to an appropriate disposal site. If the yellow paint debris is found to contain lead and chromium at actionable levels, then the debris will be disposed of in a Class I Landfill. Waste material removed from the construction area will be disposed in accordance with current standards specified in Title 22 of the California Code of Regulations (22 CCR).
- If a previously undetected hazardous waste site/location is unearthed during construction, all excavation activities in the immediate vicinity of the contaminated site will be suspended. Caltrans, in conjunction with other appropriate agencies, will develop a plan to investigate the site of contamination and to determine what corrective measures, if any, may be required to safeguard public health and the environment.

Aerially deposited lead due to vehicle emissions may be encountered during the excavation of the unpaved areas required for construction of the project. Soil samples will be collected, tested, and analyzed for lead during the design stage after roadway geometric plans have been approved. If lead is found at levels considered hazardous, the results will be noted in the Special Provisions of the project. The California Department of Toxic Substances Control (DTSC) has granted a variance to Caltrans that defines the allowable reuse of lead-

contaminated soils within the project limits. The current DTSC Variance was effective September 22, 2000.

There is the potential for minor groundwater and soil contamination due to nearby leaking USTs, a solid waste landfill, and past agricultural activities. It is believed that the proposed project will not require excavation that will impact the groundwater level. A Site Investigation (SI) to verify the presence and extent of the hazardous waste within the project area will be conducted during the design stage after roadway geometric plans have been approved, so that design and right-of-way issues can be identified and resolved at an early stage.

If surface water of shallow depth is impacted during the construction of the new structures of the Build Alternative, a dewatering permit would be required prior to construction to discharge the surface/groundwater back into the Santa Clara River. Other options for surface/groundwater disposal will be analyzed prior to any work on the structures.

New right-of-way (ROW) may be acquired, and may have buildings or structures that may need to be demolished. In that event, surveys and abatement will be conducted for asbestos-containing materials (ACM) and lead-based paint.

If contamination is identified, Caltrans will consider alternatives (including design variations) to avoid the hazardous waste area. If the site cannot be avoided, remediation of the contaminated site should be considered prior to construction because the State of California cannot purchase or be given property containing contaminated materials.

3.3 Air Quality

The following section is based on a technical report titled, *Final Air Quality Analysis*, prepared by CH2M HILL in August 2004 (CH2M HILL, 2004b).

3.3.1 Affected Environment

The project area is located in the South Coast Air Basin (SCAB), a coastal plain with connecting broad valleys and low hills, bounded by the Pacific Ocean to the southwest and high mountains to the north and east. The climate of the air basin is mild, tempered by cool sea breezes. With light average wind speeds, the atmosphere of the air basin has a limited capability to disperse air contaminants horizontally; and vertical dispersion of pollutants is hampered by the presence of a persistent inversion layer (typically 0.6-kilometers [2,000 feet] or less above sea level). During periods of limited horizontal and vertical

mixing, pollutants released to the atmosphere at or near ground level are trapped and accumulate and tend to form a uniform mixture between the ground and the inversion layer base (SCAQMD, 1993).

The potential for high pollution levels varies seasonally for many contaminants. In the summer, reaction between reactive organic gases (ROG) and oxides of nitrogen (NO_x) can form photochemical oxidants, mainly ozone. In the winter, high levels of NO_x can exist because of extremely low inversions, air stagnation during the late night and early morning hours, and the lack of intense sunlight that is needed for photochemical reactions. When strong inversions are formed on winter nights, and are coupled with near-calm winds, carbon monoxide (CO) from automobile exhausts becomes highly concentrated. During the spring and summer, when fairly deep marine layers are frequently found in the air basin, sulfate concentrations are at their peak (SCAQMD, 1993).

SCAQMD operates a network of ambient monitoring stations within SCAB, which includes the greater Los Angeles metropolitan area. The nearest representative monitoring station for this project is located near the County Fire Station on San Fernando Road in Santa Clarita. Table 3.3-1 lists the pollutant levels recorded at this station from 2002 to 2004. The area is classified as nonattainment at the state and federal levels for O_3 (ozone), CO, and PM_{10} (respirable particulate matter with a diameter less than 10 micrometers). In April of 2004 the area was designated as severe non-attainment for the most recently adopted 8-hour standard for O_3 . The EPA issued official designations for attainment the $\text{PM}_{2.5}$ (fine particulate matter less than 2.5 microns in equivalent diameter) standard on December 17, 2004 and made modifications in April 2005. The area has been designated as non-attainment for $\text{PM}_{2.5}$. Transportation conformity requirements would not apply however, until one year after the effective date of the designation for both 8-hour ozone and $\text{PM}_{2.5}$.

As shown in Table 3.3-1, O_3 and PM_{10} exceeded the California and national standards over the past 3 years. CO and NO_x did not exceed the standards. Concentrations of sulfur dioxide (SO_2), sulfates, lead, and visibility-reducing particles were not measured at this station; however, this area was either classified as “attainment” or “unclassified” for these four components in 1998 (CARB, 2003a). $\text{PM}_{2.5}$ was not measured at the Santa Clarita monitoring station.

3.3.2 Permanent Impacts

A transportation project can affect regional air quality if emissions of ozone precursors (NO_x and ROG) from traffic are greater with the project than without the project for the same study year. To be found in conformance with the Federal Clean Air Act Amendments (CAAA) of

1990, a project must be listed in approved transportation plans and programs such as the RTP and FTIP. The CAAA of 1990 require that transportation plans, programs, and projects that are funded by or approved under Title 23 of the U.S. Code of the Federal Transit Act conform to state or federal air quality plans.

Table 3.3-1. Summary of Maximum Ambient Monitoring Levels at the Santa Clarita Station (San Fernando Road)

Pollutant	Averaging Time	2002	2003	2004
CO (ppm)	1 Hour	3.3 (0 State) (0 Federal)	3.3 (0 State) (0 Federal)	5.2 (0 State) (0 Federal)
	8 Hour	1.74 (0 State) (0 Federal)	1.71 (0 State) (0 Federal)	3.7 (0 State) (0 Federal)
O ₃ (ppm)	1 Hour	0.169 (81 State)	0.194 (89 State)	0.158 (69 State)
	8 Hour	(32 Federal) 0.144 (52)	(35 Federal) 0.152 (69)	(13 Federal) 0.133 (52)
NO ₂ (ppm)	Annual Average	0.020 (0)	0.020 (0)	0.021 (0)
	1 Hour	0.086 (0)	0.092 (0)	0.090 (0)
PM ₁₀ (Micrograms per cubic meter [µg/m ³])	Annual Geometric Mean	33	32	28
	Annual Arithmetic Mean	33	32	28
	24 Hour	61 ¹ (7 State) (0 Federal)	72 ¹ (10 State) (0 Federal)	54 ¹ (2 State) (0 Federal)

¹ 24-hour PM₁₀ samples were collected on 60 days in 2002, 61 days in 2003, and 60 days in 2004.

Notes:

Hydrogen sulfide, vinyl chloride, and visibility-reducing particles are not monitored in the South Coast Air Basin.

() = number of days during the year in which a measurement was greater than the state or national standard.

Source: US EPA, 2005 – AIRData Monitor Values and the California Air Resources Board, ADAM Air Quality Database (CARB, 2003b).

The proposed SR 126/Commerce Center Drive interchange project has been included in the 2004 RTIP. Therefore, inclusion of this project in a conforming RTIP indicates the project would not cause an adverse regional impact.

The pollutant of primary concern when assessing localized impacts of transportation projects is CO and PM₁₀. Elevated CO and PM₁₀ concentrations tend to accumulate near areas of heavy traffic congestion where average vehicle speeds are low. Localized impacts are assessed by estimating maximum ambient CO and PM₁₀ concentrations near the roadways affected by the project. The concentrations are compared to the national and California ambient air quality standards for CO and PM₁₀. The impact of a project is considered to be adverse if the project creates a new CO or PM₁₀ violation or exacerbates an existing violation. Because the proposed project is in an area of non-attainment for federal O₃, PM_{2.5},

PM₁₀ and CO standards, the project is subject to project level federal conformity requirements.

In general, the proposed project would improve traffic flow and increase average vehicle speeds through the interchange relative to the no-project condition. Therefore, the project is generally expected to have a beneficial impact on localized air quality. However, the completion of this project would potentially move traffic closer to a receptor site. For this reason, a CO screening analysis was performed for the no build and preferred alternatives for two analysis years, year-open-to-traffic (2009) and horizon year (2025), to determine if the proposed build alternative would cause localized violations of the standards for CO. Localized CO impacts were evaluated using the Transportation Project-Level Carbon Monoxide Protocol written by the Institute of Traffic Studies at the University of California, Davis (Garza et al., 1997). The procedure is a screening analysis intended to allow an analyst to obtain a conservative estimate of local CO impacts at intersections without having to run computational models such as EMFAC7 and CAL3QHC. SCAG endorses the use of the protocol to assess project-level impacts. Project impacts have been assessed through relevant methodologies and significance criteria per the SCAQMD CEQA Air Quality Handbook (SCAQMD, 1993).

Table 3.3-2 presents the peak 1-hour and 8-hour CO concentrations predicted near the intersections of Commerce Center Drive and Hancock, the SR126 westbound off-ramp, and Henry Mayo Streets for the “year-open-to traffic” analysis year (2009). The maximum peak hour concentration occurs during the traffic AM peak hour. The conservative screening analysis predicts a maximum 1-hour CO concentration for the preferred alternative of 7.4 parts per million (ppm), which is well below the national standard of 35 ppm and the state standard of 20 ppm. The conservative screening analysis predicts a maximum 8-hour concentration for the preferred alternative of 4.2 ppm, which is below the national and state standard of 9 ppm.

Table 3.3-2. Maximum CO Concentrations – 2009 (Opening Year)

Intersection	Maximum 1-hour CO Concentration (ppm)		Maximum 8-Hour CO Concentration (ppm)	
	No Build	Preferred Alternative	No Build	Preferred Alternative
Commerce Center Drive/Hancock	7.4	7.4	4.2	4.2
Commerce Center Drive/SR 126 Off-Ramp	NA	7.0	NA	3.9
Commerce Center Drive/Henry Mayo	6.8	6.1	3.8	3.3

Notes:

Concentrations include a future (2009) 1-hour background concentration of 5.26 ppm and an 8-hour background concentration of 2.69 ppm (SCAQMD, 2003).

NA: Intersection of Commerce Center Drive/SR 126 Off-Ramp would not exist prior to the proposed project.

The National Ambient Air Quality Standards (NAAQS) for CO are 35 ppm (1-hour) and 9 ppm (8-hour).

The California Ambient Air Quality Standards (CAAQS) for CO are 20 ppm (1-hour) and 9 ppm (8-hour).

Source: CH2M HILL, 2004b.

Table 3.3-3 presents the peak 1-hour and 8-hour CO concentrations predicted near the intersections of Commerce Center Drive and Hancock, the SR126 westbound off-ramp, and Henry Mayo Streets for the buildout analysis year (2025). The conservative screening analysis predicts a maximum 1-hour CO concentration for the preferred alternative of 13.9 ppm, which is well below the national standard of 35 ppm and the state standard of 20 ppm. The conservative screening analysis predicts a maximum 8-hour concentration for the preferred alternative of 8.7 ppm, which is below the national and state standard of 9 ppm.

Table 3.3-3. Maximum CO Concentrations - 2025

Intersection	Maximum 1-hour CO Concentration (ppm)		Maximum 8-Hour CO Concentration (ppm)	
	No Build	Preferred Alternative	No Build	Preferred Alternative
Commerce Center Drive/Hancock	13.9	13.9	8.7	8.7
Commerce Center Drive/SR 126 Off-Ramp	NA	10.9	NA	6.7
Commerce Center Drive/Henry Mayo	7.5	12.1	4.3	7.5

Notes:

Concentrations include a future (2025) 1-hour background concentration of 5.1 ppm and an 8-hour background concentration of 2.6 ppm (SCAQMD, 2003).

NA: Intersection of Commerce Center Drive/SR 126 Off-Ramp would not exist prior to the proposed project.

The NAAQS for CO are 35 ppm (1-hour) and 9 ppm (8-hour).

The CAAQS for CO are 20 ppm (1-hour) and 9 ppm (8-hour).

Source: CH2M HILL, 2004b.

The proposed project would not contribute to any new CO violations or cause an increase in any existing violations. Although the 1-hour and 8-hour concentrations at the intersection of

Commerce Center Drive and Henry Mayo are higher for the preferred alternative compared to the no build in 2025 (Table 3.3-3), the values are below the national and state standards. Therefore, the project-level conformity requirements are satisfied.

Projects are subject to conformity requirements for PM₁₀ if they are located in a PM₁₀ nonattainment or maintenance area (federal standards). At the regional scale, this project is included in the 2004 RTIP. The RTIP air quality analysis must show that the transportation system will not increase PM₁₀ emissions overall. Therefore, inclusion of this project in a conforming 2004 RTIP indicates the project would not cause a regional PM₁₀ impact. Upon final designation of the area for PM_{2.5} the RTIP and AQMP will be updated and a determination on the regional impact of projects on secondary fine particulate will be made.

At the local scale, a qualitative PM₁₀ analysis is required for this project because the proposed site is located in a federal nonattainment zone for PM₁₀. To show project-level conformity for PM₁₀, the analysis must show that no new local PM₁₀ violations of the federal 24-hour standard will be created and the severity or number of existing violations will not be increased as a result of the project. Although this site is also located in a state nonattainment zone for PM₁₀, a guidance document for assessing the contribution of individual traffic projects to local violations of the state 24-hour standard does not exist at this time, nor is a local PM₁₀ analysis required at the state level to show project-level conformity. Therefore, potential local PM₁₀ and PM_{2.5} impacts are only assessed against the federal level in this document.

As shown in Table 3.3-2, no violations of the PM₁₀ National Ambient Air Quality Standards (NAAQS) have been recorded at the Santa Clarita Station, which is the nearest representative monitoring station for this project, over the past 3 available years (1999 through 2001). For example, the 1999 through 2001 data show a maximum 24-hour concentration of 72 micrograms per cubic meter (µg/m³), approximately 48 percent of the federal standard. Because the concentrations are well below the standard and no unusual circumstances are expected (such as heavy wintertime sanding conditions or a high concentration of diesel trucks), this project would be unlikely to contribute to a violation of the PM₁₀ NAAQS.

PM_{2.5} are ultra-fine particulates associated with combustion emissions and secondary pollutant formation in the atmosphere. Currently no guidance exists for the quantitative or qualitative assessment of PM_{2.5} from transportation projects. PM_{2.5} impacts would be associated with tailpipe exhaust from vehicles and through the chemical transformation of emissions oxides of nitrogen into aerosols of nitrate. Direct emissions of PM_{2.5} may

potentially cause nearby hotspots while secondary PM_{2.5} formation would be associated with regional impacts. As with PM₁₀, it is unlikely that PM_{2.5} “hotspots” will be associated with transportation projects that improve the level of service on freeways since local accumulation of vehicle emissions would be reduced. Similarly, regional impacts from PM_{2.5} associated with a transportation project would be unlikely if that project was included in the RTIP and regional air quality analysis conducted for the AQMP/SIP. Therefore, it is unlikely the proposed SR-126 project will cause an impact to local air quality from direct and indirect PM_{2.5} emissions since this project will improve local levels of service. It is also unlikely that the proposed SR-126 project will cause a regional air quality impact for PM_{2.5} since the analysis conducted for the AQMP/SIP for ozone attainment would be similar to the analysis required for secondary PM_{2.5} formation and progress towards attainment of the standard would be achieved.

The proposed project would not contribute to a violation of the CO standards, and the project-level conformity requirements are satisfied. Therefore, no measures to minimize harm for operational impacts are necessary.

3.3.3 Temporary Impacts

Construction Phase Impacts

Emissions from the proposed project would impact air quality during construction. Equipment would be used during site preparation and project construction for activities such as clearing, grading, excavating, loading/unloading of trucks, and travel on unpaved roads. These activities would generate emissions of fugitive dust.

In addition to the fugitive dust, the exhaust emissions from the operation of heavy equipment will also contain criteria pollutants such as PM₁₀, NO_x, and ROG. NO_x and ROG are important because they react to form O₃ in the presence of sunlight. The vehicles of commuting workers and other equipment powered by internal combustion engines would also generate emissions of criteria pollutants and could impact air quality at or near the construction site.

A detailed air quality impact analysis for construction was not done for this analysis. However, based on the extent of area disturbed and the duration of construction anticipated, it is likely that construction activities related to the Build Alternative would cause a temporary adverse impact without the implementation of BMPs discussed below.

3.3.4 Measures to Minimize Harm

Construction Mitigation

Because generation of fugitive dust and other criteria pollutants would occur during site preparation and construction, a construction traffic and vehicular management plan will be incorporated to mitigate the impacts of this project. The following measures are necessary to control fugitive dust and vehicular emissions.

Fugitive Dust Control

The fugitive dust control measures in Tables 3.3-4, 3.3-5, and 3.3-6 are based on Best Available Control Measures (BACM) listed in the SCAQMD Rule 403 Implementation Handbook, January 1999 Edition. The BACMs in Table 3.3-4 apply for areas impacted by construction when wind gusts exceed 40.2 km per hour (25 miles per hour), the BACMs in Table 3.3-5 are required for exemption of Rule 403 paragraph (d)(4), and the BACMs in Table 3.3-6 are required to meet track-out control options in Rule 403 paragraph (d)(5)(B).

Table 3.3-4. Best Available Control Measures for High-Wind Conditions (>25 mph)

Fugitive Dust Source Category	Control Actions
Earth-moving	<ul style="list-style-type: none"> • (1A) Cease all active operations; OR • (2A) Apply water to soil not more than 15 minutes prior to moving such soil.
Disturbed surface areas	<ul style="list-style-type: none"> • (0B) On the last day of active operations prior to a weekend, holiday, or any other period when active operations will not occur for not more than four consecutive days: apply water with a mixture of chemical stabilizer diluted to not less than 1/20 of the concentration required to maintain a stabilized surface for a period of six months; OR • (1B) Apply chemical stabilizers prior to wind event; OR • (2B) Apply water to all unstabilized disturbed areas 3 times per day. If there is any evidence of wind-driven fugitive dust, increase watering frequency to a minimum of four times per day; OR • (3B) Take the actions specified in Table 3.3-5, Item (3c); OR • (4B) Utilize any combination of control actions (1B), (2B), and (3B) such that, in total, these actions apply to all disturbed surface areas.
Unpaved roads	<ul style="list-style-type: none"> • (1C) Apply chemical stabilizers prior to wind event; OR • (2C) Apply water twice per hour during active operation; OR • (3C) Stop all vehicular traffic.
Open storage piles	<ul style="list-style-type: none"> • (1D) Apply water twice per hour; OR • (2D) Install temporary coverings.
Paved road track-out	<ul style="list-style-type: none"> • (1E) Cover all haul vehicles; OR • (2E) Comply with the vehicle freeboard requirements of Section 23114 of the California Vehicle Code for both public and private roads.
All Categories	<ul style="list-style-type: none"> • (1F) Any other control measures approved by the Executive Officer and the U.S. EPA as equivalent to the methods specified in Table 3.3-4 may be used.

Source: SCAQMD Rule 403 Implementation Handbook (January 1999).

Table 3.3-5. Dust-Control Actions for Exemption from Paragraph (d)(4)

Fugitive Dust Source Category	Control Actions
Earth-moving (except construction cutting and filling areas, and mining operations)	<ul style="list-style-type: none"> • (1a) Maintain soil moisture content at a minimum of 12 percent, as determined by ASTM method D-2216, or other equivalent method approved by the Executive Officer, the California Air Resources Board, and the U.S. EPA. Two soil moisture evaluations must be conducted during the first three hours of active operations during a calendar day, and two such evaluations each subsequent four-hour period of active operations; OR • (1a-1) For any earth-moving which is more than 100 feet from all property lines, conduct watering as necessary to prevent visible dust emissions from exceeding 100 feet in length in any direction.
Earth-moving: Construction fill areas:	<ul style="list-style-type: none"> • (1b) Maintain soil moisture content at a minimum of 12 percent, as determined by ASTM method D-2216, or other equivalent method approved by the Executive Officer, the California Air Resources Board, and the U.S. EPA. For areas which have an optimum moisture content for compaction of less than 12 percent, as determined by ASTM Method 1557 or other equivalent method approved by the Executive Officer and the California Air Resources Board and the U.S. EPA, complete the compaction process as expeditiously as possible after achieving at least 70 percent of the optimum soil moisture content. Two soil moisture evaluations must be conducted during the first three hours of active operations during a calendar day, and two such evaluations during each subsequent four-hour period of active operations.
Earth-moving: Construction cut areas and mining operations:	<ul style="list-style-type: none"> • (1c) Conduct watering as necessary to prevent visible emissions from extending more than 100 feet beyond the active cut or mining area unless the area is inaccessible to watering vehicles due to slope conditions or other safety factors.
Disturbed surface areas (except completed grading areas)	<ul style="list-style-type: none"> • (2a/b) Apply dust suppression in sufficient quantity and frequency to maintain a stabilized surface. Any areas which cannot be stabilized, as evidenced by wind driven fugitive dust must have an application of water at least twice per day to at least 80 percent of the unstabilized area.
Disturbed surface areas: Completed grading areas	<ul style="list-style-type: none"> • (2c) Apply chemical stabilizers within five working days of grading completion; OR • (2d) Take actions (3a) or (3c) specified for inactive disturbed surface areas.
Inactive disturbed surface areas	<ul style="list-style-type: none"> • (3a) Apply water to at least 80 percent of all inactive disturbed surface areas on a daily basis when there is evidence of wind driven fugitive dust, excluding any areas which are inaccessible to watering vehicles due to excessive slope or other safety conditions; OR • (3b) Apply dust suppressants in sufficient quantity and frequency to maintain a stabilized surface; OR • (3c) Establish a vegetative ground cover within 21 days after active operations have ceased. Ground cover must be of sufficient density to expose less than 30 percent of unstabilized ground within 90 days of planting, and at all times thereafter; OR • (3d) Utilize any combination of control actions (3a), (3b), and (3c) such that, in total, these actions apply to all inactive disturbed surface areas.
Unpaved Roads	<ul style="list-style-type: none"> • (4a) Water all roads used for any vehicular traffic at least once per every two hours of active operations; OR • (4b) Water all roads used for any vehicular traffic once daily and restrict vehicle speeds to 15 miles per hour; OR • (4c) Apply a chemical stabilizer to all unpaved road surfaces in sufficient quantity and frequency to maintain a stabilized surface.

Fugitive Dust Source Category	Control Actions
Open storage piles	<ul style="list-style-type: none"> • (5a) Apply chemical stabilizers; OR • (5b) Apply water to at least 80 percent of the surface area of all open storage piles on a daily basis when there is evidence of wind driven fugitive dust; OR • (5c) Install temporary coverings; OR • (5d) Install a three-sided enclosure with walls with no more than 50 percent porosity which extend, at a minimum, to the top of the pile.
<u>All Categories</u>	<ul style="list-style-type: none"> • (6a) Any other control measures approved by the Executive Officer and the U.S. EPA as equivalent to the methods specified in Table 3.3-5 may be used.

Source: SCAQMD Rule 403 Implementation Handbook (January 1999).

Table 3.3-6. Track Out Control Options Paragraph (d)(5)(B)

Control Options
<ul style="list-style-type: none"> • (1) Pave or apply chemical stabilization at sufficient concentration and frequency to maintain a stabilized surface starting from the point of intersection with the public paved surface, and extending for a centerline distance of at least 100 feet and a width of at least 20 feet. • (2) Pave from the point of intersection with the public paved road surface, and extending for a centerline distance of at least 25 feet and a width of at least 20 feet, and install a track-out control device immediately adjacent to the paved surface such that exiting vehicles do not travel on any unpaved road surface after passing through the track-out control device. • (3) Any other control measures approved by the Executive Officer and the U.S. EPA as equivalent to the methods specified in Table 3.3-6 may be used.

Source: SCAQMD Rule 403 Implementation Handbook (January 1999).

Vehicular Emissions Controls

- Maintain equipment and vehicle engines in good condition and in proper tune as per manufacturer's specifications and per SCAQMD rules.
- Use electricity from existing nearby power lines rather than from temporary diesel- or gasoline-powered generators, to the extent feasible.
- Provide temporary traffic control during all phases of construction activities that affect circulation on public roads to maintain traffic flow.
- Schedule construction activities that affect traffic flow on the arterial system to off-peak hours.

With the implementation of these measures during the construction phases of the project, project construction impacts to air quality will not be adverse.

3.4 Noise

The following section is based on a technical report titled, *Final Noise Analysis*, prepared by CH2M HILL in August 2004 (CH2M HILL, 2004c).

3.4.1 Affected Environment

Vehicular traffic on SR 126 is the dominant source of noise in the project area. Other environmental noise levels include noise from occasional distant aircraft overflights and faint sound levels generated by distant traffic on I-5. However, these other sources do not contribute to noise levels measured onsite as described below. Land areas surrounding the project site are primarily undeveloped, open land. There are no permits issued for development of noise-sensitive uses within the project corridor. Some of the land outside the state right-of-way may be developed as commercial buildings. For determination of noise impacts, the FHWA has defined various land use categories in 23 Code of Federal Regulations (CFR) 772. Typical noise-sensitive areas are within the Category B land use which, as defined by FHWA, includes residences, motels, hotels, public meeting rooms, schools, churches, libraries, hospitals, picnic areas, recreation areas, playgrounds, active sports areas, and public parks. The only existing developed land use that could be considered a Category B receiver is the Valencia Travel Village, which is located at the west end of the project and south of SR 126. The Travel Village provides parking and other accommodations for travelers using RVs.

Existing 2004 peak-hour noise levels were measured at four receiver locations identified as 1 through 6 (Figures 3.4-1 and 3.4-2). These receiver locations were selected for use in predicting noise levels within Valencia Travel Village. Existing peak-hour noise levels for the selected receivers are summarized in Table 3.4-1. FHWA, Caltrans, and Los Angeles County criteria are shown for comparison. These data show that existing noise levels within the Travel Village, closest to SR 126 (Receiver Location 2), approach the Caltrans noise abatement criteria. At the location of the outdoor pools (4) and other interior stalls, existing noise levels are in compliance with the Los Angeles County, Caltrans, and FHWA noise impact criteria.

Table 3.4-1. Existing Peak-Hour Noise Levels (in dBA)

Receiver Location	FHWA/Caltrans Approach/ Exceed Criterion	L.A. County Criterion	Existing Noise Level
1	66	65	63
2	66	65	66
3	66	65	68
4	66	65	61
5	66	65	64
6	66	65	57

Bold numbers identify locations where existing L_{eq} approaches or exceeds the noise abatement criteria.

Source: CH2M HILL.

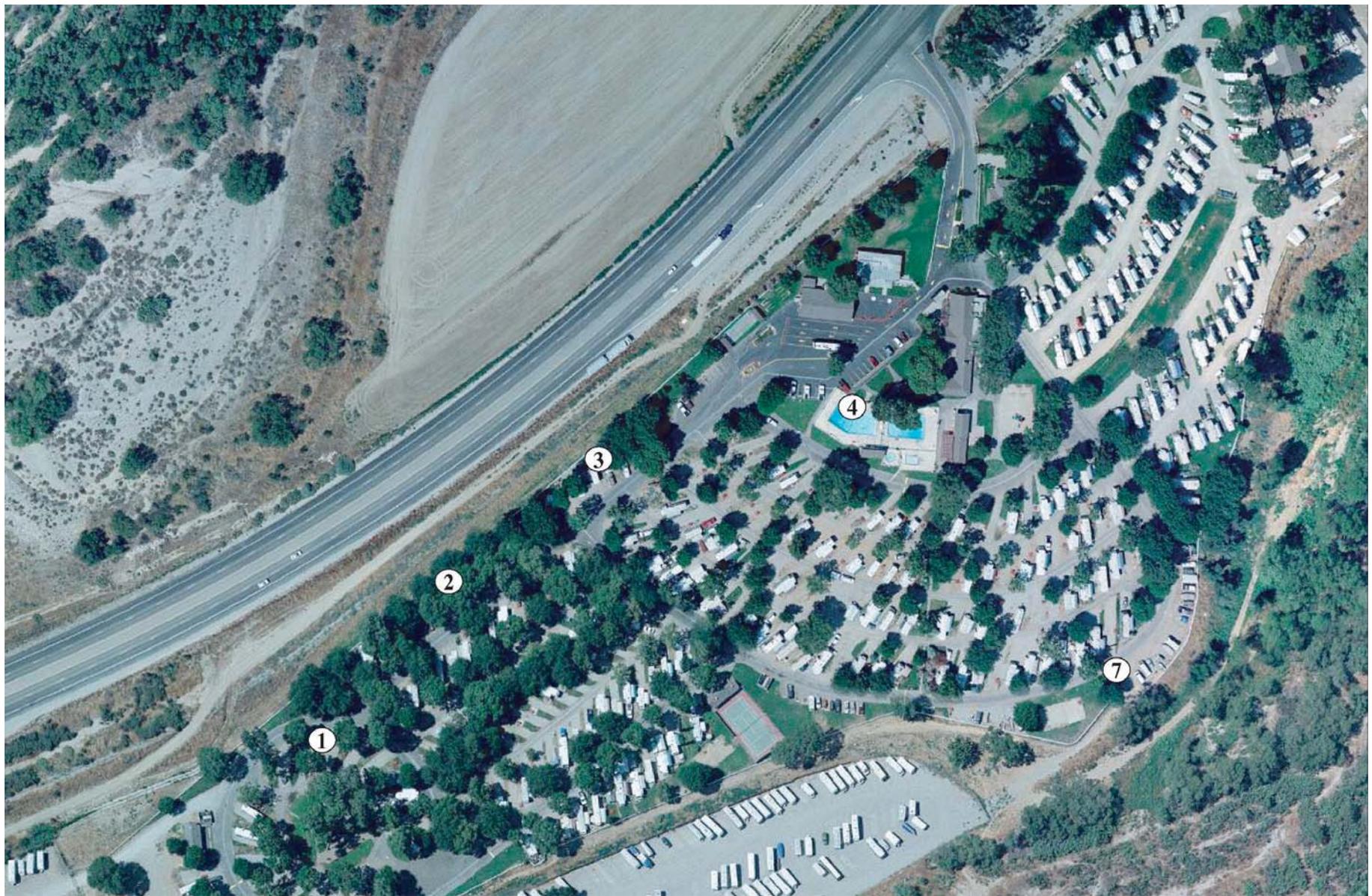
3.4.2 Permanent Impacts

Methodology

Traffic noise levels were evaluated using the FHWA Traffic Noise Prediction Model (FHWA-RD-77-108) as coded into the SOUND32 computer program. The FHWA model is the analytical method currently favored by most state and local agencies, including Caltrans, for highway traffic noise prediction. The model is based upon reference energy emission levels for automobiles, medium trucks (two axles), and heavy trucks (three or more axles), with consideration given to vehicle volume, speed, roadway configuration, distance to the receiver, and the acoustical characteristics of the site. The FHWA model was developed to predict hourly equivalent steady-state sound level (L_{eq}) values for free-flowing traffic conditions, and it is generally considered to be accurate within +1.5 decibels (dB). The SOUND32 version of the FHWA model uses Calveno traffic noise emission curves, which are recommended by Caltrans to more accurately calculate noise levels generated by California traffic.

Impacts

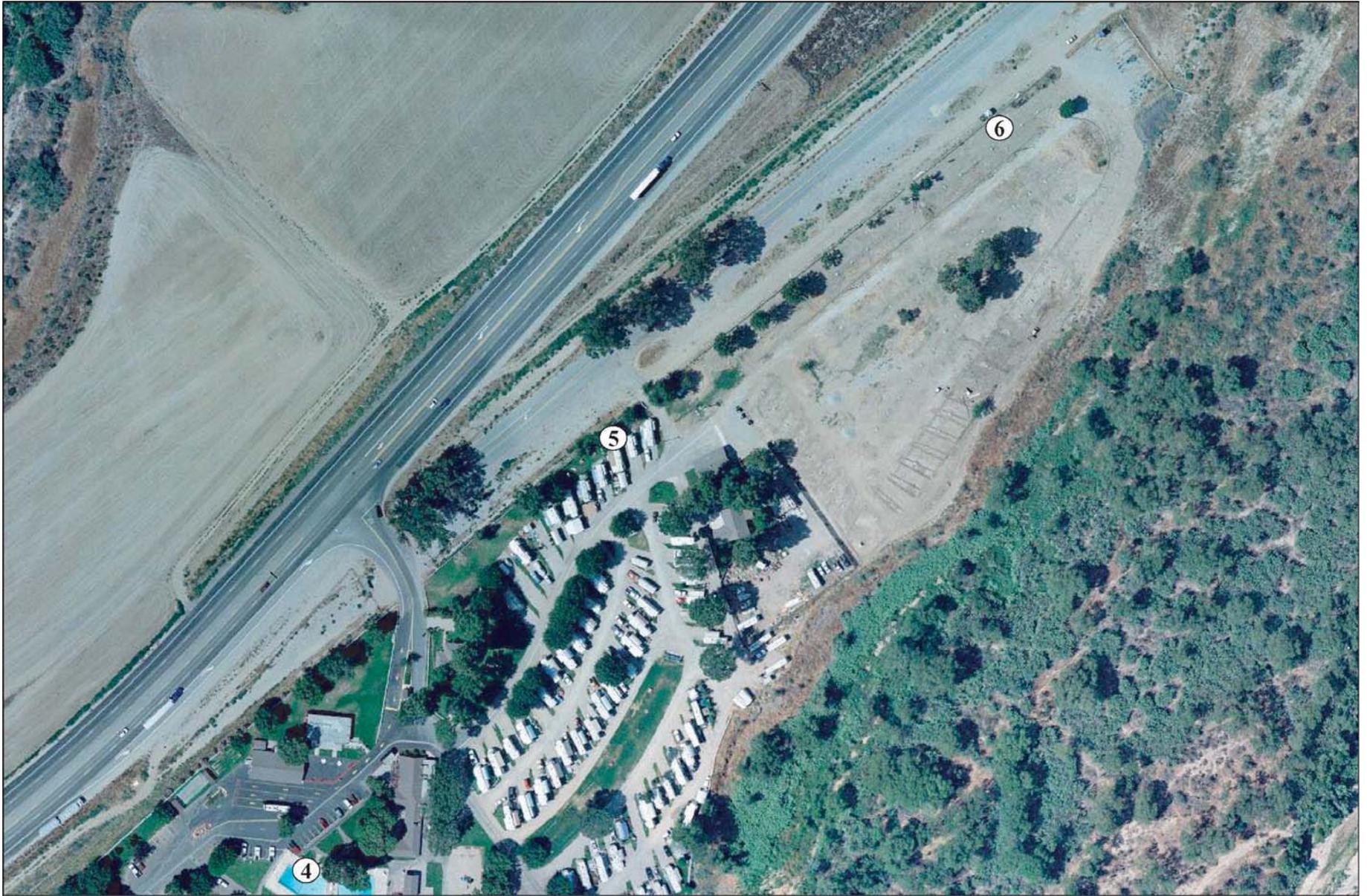
The SOUND32 computer program was used to calculate future (2025) Build and No Build traffic noise levels from SR 126 in terms of peak-hour L_{eq} . The same six sites, as discussed in Section 3.4.1, representing receiver locations inside the Valencia Travel Village were analyzed. Table 3.4-2 summarizes future Build and No Build traffic noise levels at these locations in terms of the state/federal and county criteria. These data show that future (2025) traffic noise levels for both the Build and No Build conditions exceed the 66-dBA criterion at all selected receiver locations within the Valencia Travel Village.



Noise Monitoring Locations

Figure 3.4-1
 Noise Level Measurement Locations
 SR 126/Commerce Center Drive Interchange
 07-LA-126 KP R6.8-R9.2 (PM R4.2-R5.7)





Noise Monitoring Locations

Figure 3.4-2
Noise Level Measurement Locations
SR 126/Commerce Center Drive Interchange
07-LA-126 KP R6.8-R9.2 (PM R4.2-R5.7)

Table 3.4-2. Projected Future (2025) Peak-Hour Noise Levels (in dBA)

Receiver Location	2004 Existing	2025 No Build	2025 Build	FHWA/Caltrans Criterion	L.A. County Criterion*
1	63	68	68	66	65
2	66	70	71	66	65
3	68	71	73	66	65
4	61	65	65	66	65
5	64	70	72	66	65
6	57	63	66	66	65

*The Los Angeles County criterion is in terms of Ldn. Assuming a day/night traffic volume split of 85/15 percent and a peak-hour volume of 10 percent ADT, noise level in terms of Ldn would be about the same as peak-hour L_{eq} .

Bold numbers identify locations where peak-hour L_{eq} approaches or exceeds the noise abatement criteria.

Source: CH2M HILL.

3.4.3 Temporary Impacts

Construction Phase Impacts

During the construction phase, noise from construction activities would add to the noise environment in the immediate project area. Activities involved in construction would generate noise levels, as indicated in Table 3.4-3, ranging from 82 to 86 decibels A-rated (dBA) at a distance of 30 meters (100 feet). The distance from the project construction activities to the nearest parking areas within Valencia Travel Village would be approximately 25 to 30 meters (80 to 100 feet). Construction activities would be temporary in nature and are anticipated to occur during normal daytime working hours. Construction at night would not occur; therefore, sleep disruptions are not anticipated.

Table 3.4-3. Construction Equipment Noise

Construction Phase	Loudest Equipment	Maximum Sound Level at 30 Meters (100 Feet) (dBA)
Clearing and Grubbing	Bulldozer, backhoe	83 dBA
Earthwork	Scraper, bulldozer	85 dBA
Foundation	Backhoe, loader	82 dBA
Superstructure	Crane, loader	83 dBA
Base Preparation	Truck, bulldozer	85 dBA
Paving	Paver, truck	86 dBA

Source: U.S. Department of Transportation, 1977.

Noise would also be generated during the construction phase by increased truck traffic on area roadways associated with transport of heavy materials and equipment. This noise

increase would be of short duration, and would probably occur primarily during daytime hours. The diversion of traffic onto local roads and to traffic "bottle-neck" areas might also create temporary noise impacts.

Using simple divergence over distance (6 dBA reduction per doubling of distance), resulting estimated pile driver noise level would be 80 dBA at 213 meters (700 feet). This estimate is for an impact pile driver. Depending on soil conditions in the area, alternative pile driving methods, such as vibratory pile driving, may be practical, which would result in a reduction of 5 dBA in noise levels (75 dBA). Additional noise reduction could be realized through shielding provided either by natural terrain or by placement of temporary barriers or excess soil generated through construction between the noise source(s) and receiving areas.

Construction activity will be limited to normal construction time window for the area (7:00 AM to 7:00 PM weekdays and 8:00 AM to 6:00 PM Saturdays)

3.4.4 Abatement Measures

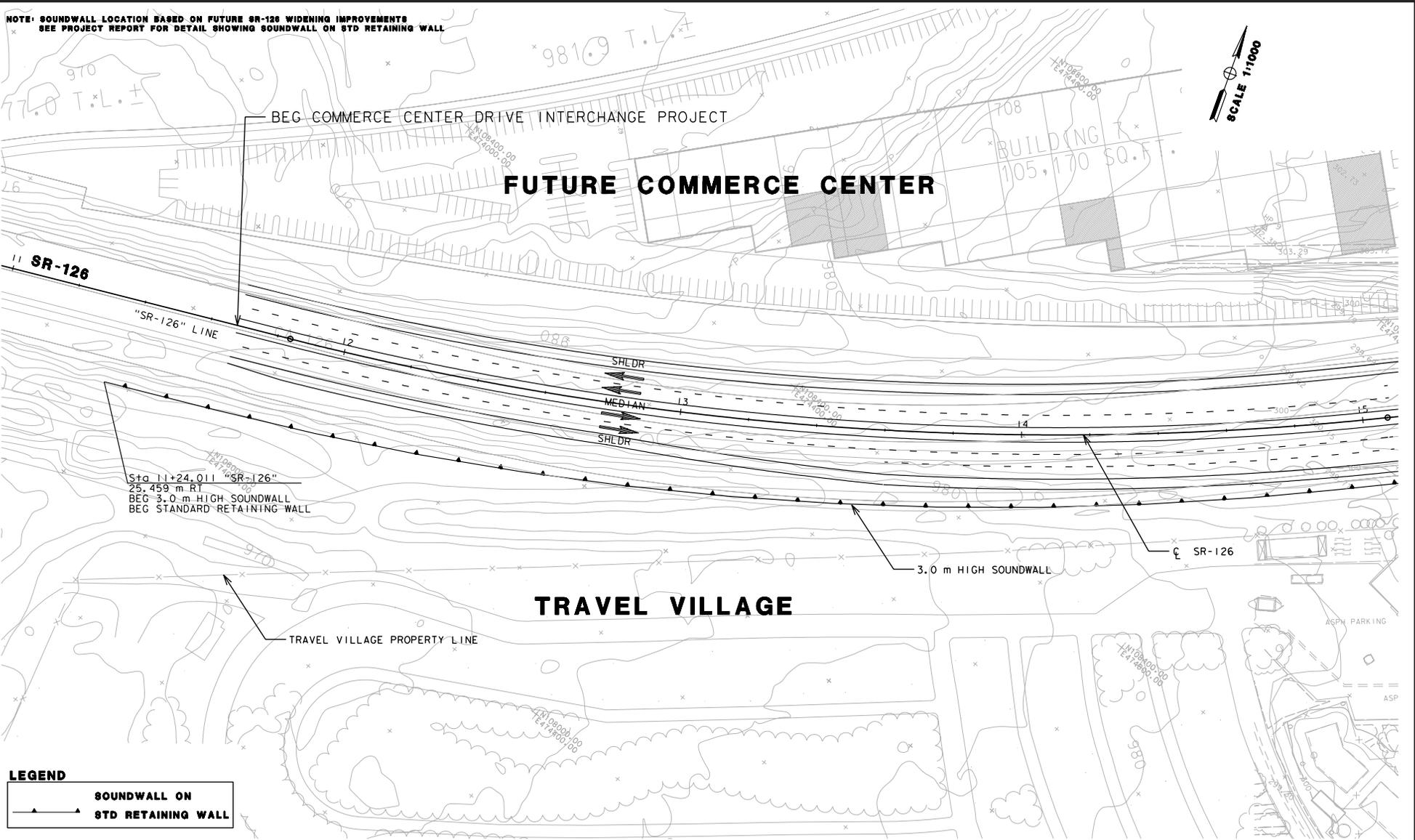
Permanent Measures

Potential traffic noise abatement measures that may be considered for the project include the following:

- Construction of a noise barrier along the south side of SR 126
- Depressing the roadway
- Modifying the proposed alignment of the road
- Modifying speed limits
- Restricting truck traffic

Of the above abatement measures, the noise barrier option is usually the most practical, reasonable, and effective choice. The other options would be inconsistent with the project purpose; therefore, they would be impractical. Table 3.4-4 shows the results of the noise barrier modeling analysis. Caltrans requires a 5-dBA noise reduction for a barrier to be considered feasible abatement, hence the need for a 14-foot wall; this also satisfies the Los Angeles County assumed noise level criterion. Therefore, a noise barrier of heights between 3 meters (10 feet) and 4.2 meters (14 feet) above the roadway surface would reduce future traffic noise levels within the Valencia Travel Village to acceptable levels. Figure 3.4-3A, 3.4-3B, and 3.4-3C show the noise barrier locations. To be effective, the barrier should be constructed of massive materials, and should be continuous without gaps or openings that could result in flanking paths and reduce barrier performance. A combination of berm and wall may also be acceptable.

NOTE: SOUNDWALL LOCATION BASED ON FUTURE SR-126 WIDENING IMPROVEMENTS
SEE PROJECT REPORT FOR DETAIL SHOWING SOUNDWALL ON STD RETAINING WALL



Sta 11+24.011 "SR-126"
25.459 m RT
BEG 3.0 m HIGH SOUNDWALL
BEG STANDARD RETAINING WALL

LEGEND

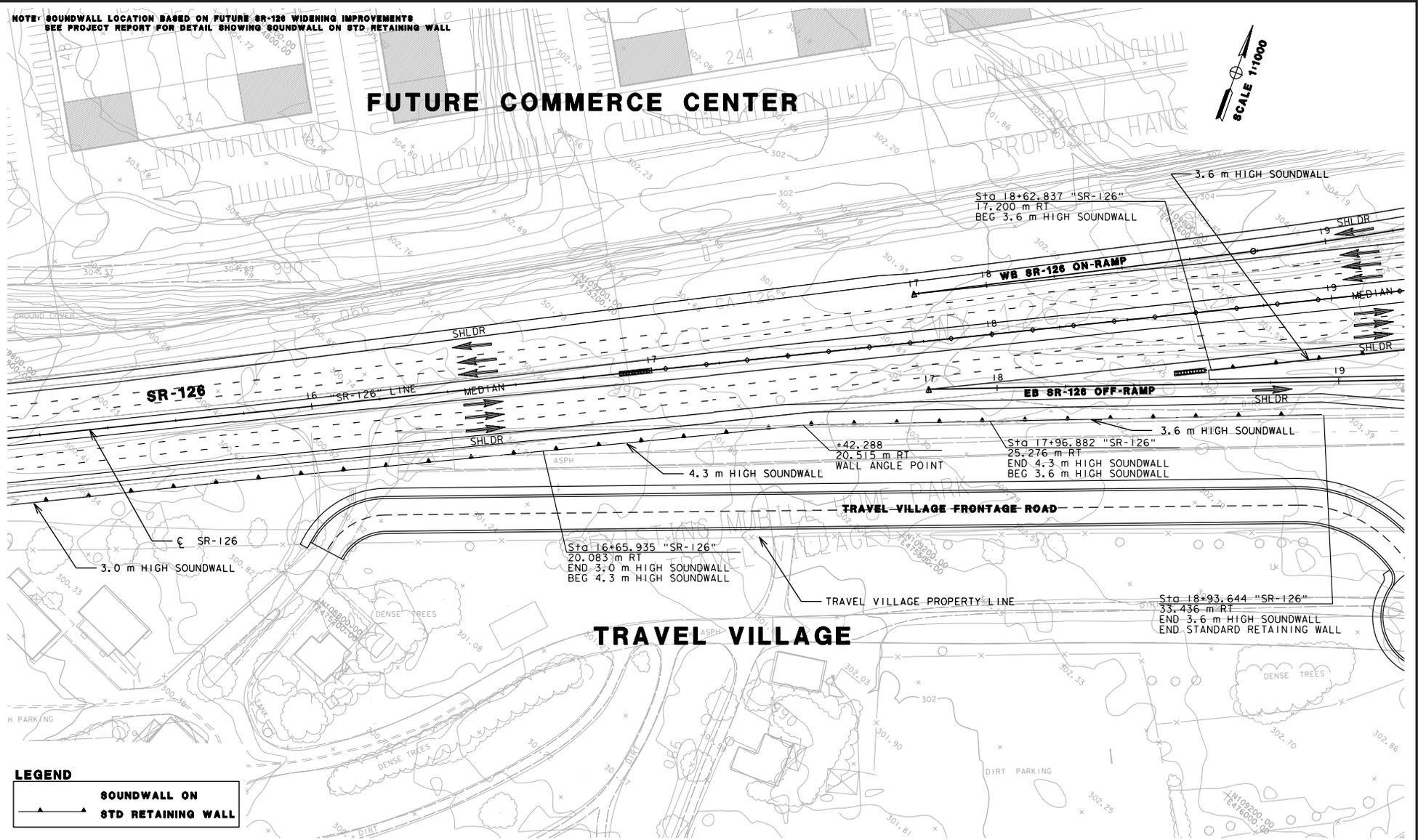
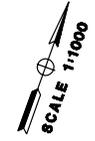
SOUNDWALL ON
STD RETAINING WALL

Figure 3.4-3a
Potential Noise Barrier Location
SR 126/Commerce Center Drive Interchange
07-LA-126 KP R6.8-R9.2 (PM R4.2-R5.7)



NOTE: SOUNDWALL LOCATION BASED ON FUTURE SR-126 WIDENING IMPROVEMENTS
SEE PROJECT REPORT FOR DETAIL SHOWING SOUNDWALL ON STD. RETAINING WALL

FUTURE COMMERCE CENTER



TRAVEL VILLAGE

LEGEND

SOUNDWALL ON STD. RETAINING WALL

Figure 3.4-3b
 Potential Noise Barrier Location
 SR 126/Commerce Center Drive Interchange
 07-LA-126 KP R6.8-R9.2 (PM R4.2-R5.7)



Table 3.4-4. Future Peak-Hour Noise Levels With Noise Barrier Calculations (in dBA)

Receiver Location	Build Alternative/ No Barrier	2.5-Meter (8-Foot) Barrier	3-Meter (10-Foot) Barrier	3.6-Meter (12-Foot) Barrier	4.2-Meter (14-Foot) Barrier
1	68	64	62*	60	59
2	71	64	62*	61	60
3	73	63*	62	61	60
4	65	63*	61	60	58
5	72	69	67	66*	64
6	66	63	62	61*	60

*Barrier at this height breaks the line-of-sight between a 3.5 meter (11.5-foot) truck stack and receiver.

Cells with **bold** letters indicate barrier heights meeting the Caltrans and FHWA noise level criteria.

Shaded cells indicate barrier heights providing a minimum noise level reduction of 5 dBA.

Assumed barrier locations are along the SR 126 right-of-way.

Source: CH2M HILL.

It should also be noted that noise barriers can have their own negative impacts. Barriers may interfere with the passage of air, interrupt scenic views, create objectionable shadows, or reduce or eliminate visibility of a business from the roadway. Barriers could also create maintenance access problems, make it difficult to maintain landscaping, create drainage problems, and provide pockets for trash and garbage to accumulate. While a noise barrier may be beneficial for the Valencia Travel Village for noise reasons, it would result in the business losing its visibility from SR 126. Therefore, all abatement measures, if meeting the FHWA/Caltrans noise abatement criteria and determined to be feasible, will be designed with the consent and cooperation of the owner(s) of the Valencia Travel Village.

If pertinent parameters change substantially during the final project design, the preliminary noise abatement/mitigation design may be changed or eliminated from the final project design. A final decision of the construction of the noise abatement/mitigation will be made upon completion of the project design.

Construction Measures

Equipment operating at the project site will conform with contractual specifications requiring the contractor to comply with all local noise control rules, regulations, and ordinances. However, there are no FHWA or Caltrans criteria for mitigating construction noise impacts. Despite the lack of criteria for construction noise abatement, the following standard Caltrans measures will be implemented to minimize such impacts:

- Whenever possible, the operation of heavy equipment and other noisy procedures shall be limited to daylight hours; otherwise a nighttime noise variance will be required.
- The installation and maintenance of effective mufflers on equipment.
- Construction equipment shall be required to maintain all engine covers, shields, and screening from the manufacturer.
- Location of equipment and vehicle staging areas as far from the Valencia Travel Village as possible.
- Limit unnecessary idling of equipment.

3.5 Energy

3.5.1 Affected Environment

Energy consumption will be required for the construction of the proposed interchange project. The primary energy type/source is expected to be fossil fuels and electricity.

The interchange project would be located primarily within the County of Los Angeles, near the City of Santa Clarita. Electricity within this portion of the County is provided by Southern California Edison (SCE). SCE generates power from sources such as the San Onofre generating plant, the Big Creek hydroelectric plant, and Etiwanda generating station (gas-fire generation) (SCE, 2002). Automobile and truck fueling stations are located throughout the area, primarily southeast of the project site, along developed sections of I-5.

3.5.2 Permanent Impacts

Local energy demand for transportation projects typically is dominated by vehicle fuel usage. For this type of project, it is assumed that the energy consumption by vehicles is much larger than the incremental change in electrical energy consumption for any additional lighting (i.e., roadway lighting), which is expected to be minimal. Therefore, energy used from lighting would not have an impact on the environment

As shown in the air quality and traffic analyses of the project (Sections 3.3 and 3.18, respectively), construction of the Build Alternative would not impact the local air quality and traffic patterns of the project area. Based on the traffic analysis, the project would improve operations along SR 126, and at Commerce Center Drive, resulting in less vehicle delay (i.e., idle time that would occur if the intersection continued to be at-grade). The free-flow characteristics of the proposed grade-separated interchange would minimize vehicle delay and reduce the need for vehicle fuel consumption. Therefore, the proposed SR 126/Commerce Center Drive interchange would not have an adverse effect on local energy demand.

3.5.3 Temporary Impacts

The construction of the proposed interchange would require the use of additional fuel and electricity. Construction vehicles and tools would create additional demand for fuel and electricity. However, because of the temporary nature of the construction period of the project, impacts to energy resources would be minimal and would not have an adverse effect on the environment.

3.5.4 Measures to Minimize Harm

Measures to minimize harm are not required.

3.6 Wetlands and Other Waters of the United States

3.6.1 Affected Environment

Under Section 404 of the Clean Water Act, the USACE regulates the discharge of fill and dredged material into “waters of the United States,” which are broadly defined in 33 CFR 328.3(a). Waters of the United States is defined as the ordinary high-water mark, unless adjacent wetlands are present. The term “ordinary high-water mark” means the line on the shore or edge of a channel established by the fluctuation of water and indicated by physical characteristics such as a clear natural line impressed on the bank, shelving, destruction of vegetation, debris, etc. The Final EIS/EIR for the 404 Permit and 1603 Permit for Portions of the Santa Clara River and Its Tributaries discussed the delineation of wetlands in the vicinity of this proposed project (USACE, 1998a). In that document, the USACE and the applicant agreed to the limits of the jurisdiction of USACE for the analysis of the EIS/EIR.

The Santa Clara River was previously delineated under the NRMP. The jurisdiction of the USACE and CDFG is shown in Exhibit 3. Areas of wetlands and waters of the United States

were not delineated separately because of the long-term nature of the 404 permit and the transitory nature of the Santa Clara River.

The SR 126/Commerce Center Drive interchange was one of the projects whose impacts were specifically identified in the NRMP. Detailed project-level limits of the riverbed and jurisdictional Waters of the U.S. were determined and certified by the USACE when the Individual 404 permit (94-00504-BAH) was issued to Valencia Company (then Newhall Land) in November 1998. The USACE acknowledged that the riverbed area defined in the NRMP was conservative and contained areas that would not likely be delineated as jurisdictional waters or wetlands. A copy of the wetland delineation is included (see Figure 3.6-1) and shows the generalized location of the proposed Commerce Center bridge and bank protection relative to the shaded area within Castaic Creek and the Santa Clara River (USACE, 1998b). Those shaded areas represent the area regarded conservatively through the NRMP process to be USACE jurisdictional water and/or wetland. (Refer to NRMP Figure 1c [or Figure 2-2c in the NRMP Final EIR/EIS] for a legible copy of this figure.)

Approval of the NRMP included conditions that require each individual project component constructed over the life of the permit to pass through a preconstruction verification process prior to project implementation. A Verification Request Letter (VRL) must be submitted to the USACE that contains: vegetation type boundaries at the project site; anticipated biological impacts; limits of construction disturbance; need for stream diversions; any pertinent environmental protection measures; statement on the consistency with the NRMP and 404 permit; and compliance with environmental protection measures for threatened and endangered species, water quality, and riparian habitats. Based upon the earlier review and approval by the USACE of the NRMP, no further wetland delineation is required for the VRL to be submitted for this project.

3.6.2 Permanent Impacts

Jurisdictional areas, defined by the USACE and CDFG, within the Santa Clara River were delineated as part of the EIS/EIR for the 404 Permit and 1603 Streambed Alteration Agreement for Portions of the Santa Clara River and Its Tributaries (USACE, 1998a) and the NRMP (USACE, 1998b), as part of a larger group of projects being developed by Newhall Land. A total of 4.12 hectares (10.17 acres) of impacts to wetlands, all of which is considered jurisdiction by the ACOE and CDFG, will result from construction of the proposed project. Areas of wetlands and waters of the United States, defined by the USACE, were not delineated separately for this project because of the long-term nature of the 404 permit and the transitory nature of the Santa Clara River. Impacts to wetlands and

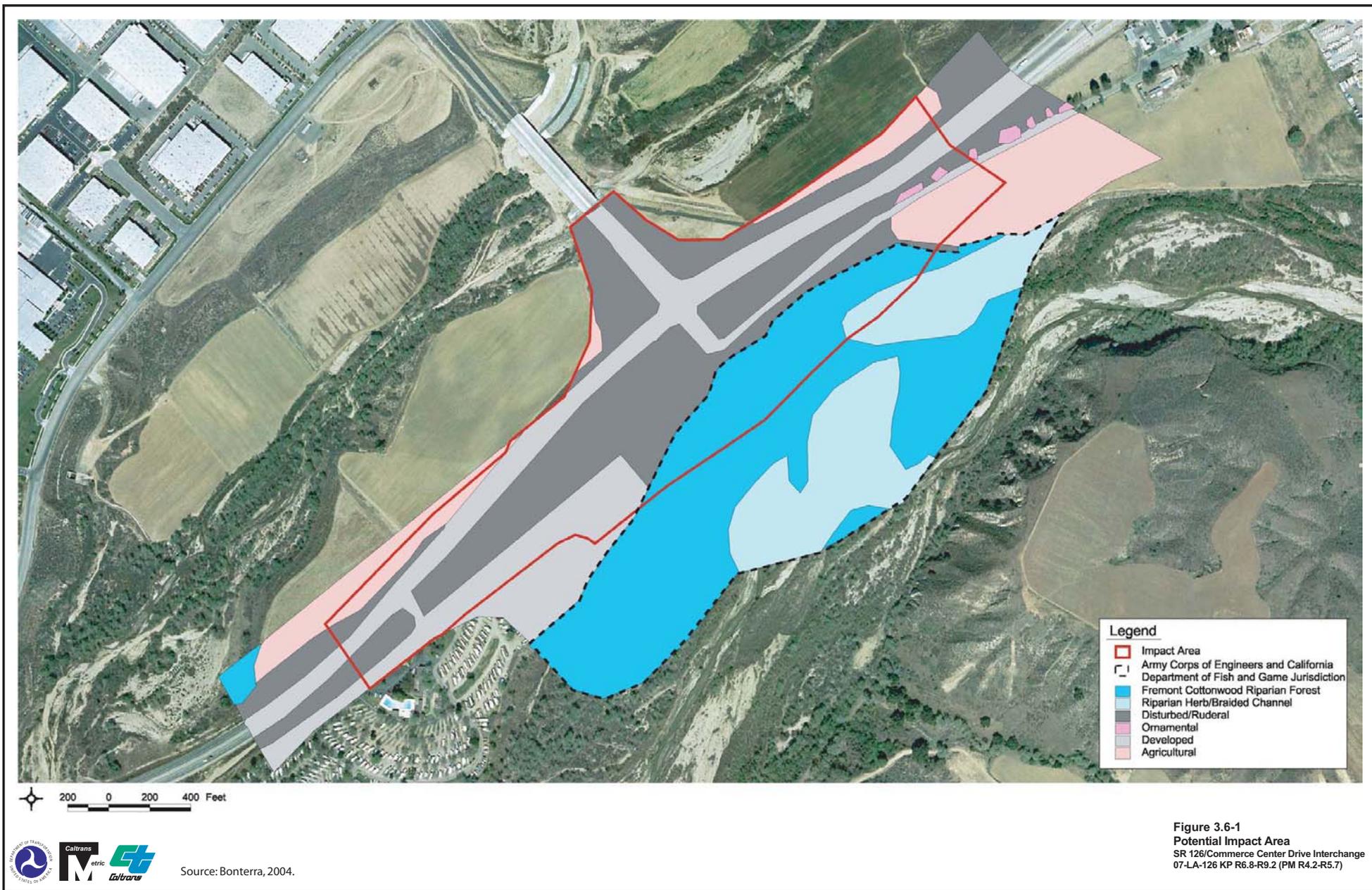


Figure 3.6-1
Potential Impact Area
 SR 126/Commerce Center Drive Interchange
 07-LA-126 KP R6.8-R9.2 (PM R4.2-R5.7)

Waters of the United States resulting from this proposed project are not listed separately, because these impacts are discussed within the NRMP as a component of the proposed NRMP project.

3.6.3 Temporary Impacts

Temporary impacts to wetlands and waters of the United States resulting from the construction of this proposed project are not listed separately because these impacts are discussed and addressed within the NRMP.

3.6.4 Measures to Minimize Harm

Impacts of this project were previously analyzed in the aforementioned EIR/EIS, and the following measures to minimize harm will be implemented:

BIO-4 (a) Construction activities shall be limited to the following areas of temporary disturbance: (1) an 85-foot-wide zone that extends into the river from the base of the riprap or gunite bank protection where it intercepts the river bottom and (2) 20-foot-wide temporary access ramps and roads to reach construction sites. The locations of these temporary construction sites and the routes of all access roads shall be shown on maps submitted with the Verification Request Letter (see BIO-5 (m)) that are submitted to the CDFG and USACE. Any variation from these limits shall be noted, with a justification for a variation. The construction plans should indicate what type of vegetation, if any, would be temporarily disturbed and the postconstruction activities to facilitate natural revegetation of the temporarily disturbed areas. The boundaries of the construction site and any temporary access roads within the riverbed shall be marked in the field with stakes and flagging. No construction activities, vehicular access, equipment storage, stockpiling, or adverse human intrusion shall occur outside the work area and access roads..

BIO-4 (b) All native riparian trees with a 4-inch diameter at breast height (dbh) or greater that must be removed in areas to be temporarily disturbed will be replaced at a 3:1 ratio. Following completion of the construction activities, the appropriate number of 1- to 5-gallon container plants will be transplanted to the site during the winter. The growth and survival of the replacement trees will meet the performance standards specified in BIO-5(e) and (f). In addition, the growth and survival of the planted trees will be monitored for 5 years in accordance with the methods and reporting procedures specified in Mitigation Measure BIO-5.**BIO-4 (c)** Native vegetation within temporary construction areas will be stockpiled and, following completion of construction activities, mulched and spread over the temporary effect areas. Areas temporarily disturbed by construction activities will also be weeded

annually, as needed, for up to 5 years following construction. These areas will be monitored annually for 5 years after construction to document colonization by weeds and native plants. Weeds will be removed by hand, an approved herbicide application, and/or by equipment. In the event that native plant cover does not reach 50 percent of the preconstruction native plant cover within 3 years, Newhall Land will revegetate the temporary construction area in accordance with the methods specified in BIO-5. Annual monitoring reports on the status of the natural recovery of temporarily disturbed areas will be submitted to USACE, USFWS, and CDFG as part of the Annual Mitigation Status Report (see BIO-5 (n)) and Mitigation Accounting Form (see BIO-5 (l)) to be submitted to USACE, USFWS, and CDFG by April 1 of each year.

BIO-5 (a) The permanent removal of riparian habitats (EIS mapping units 1 through 4 and 5 through 8) in the riverbed and “upland impact zone” (as defined in the EIS/EIR) shall be replaced by creating riparian habitats of similar functions and values in the project area. Wetland restoration shall be in-kind and at a 1:1 replacement ratio (except as indicated in Item [d]) for new habitat installed 2 years in advance of the removal of habitat at the construction site. If replacement habitat cannot be installed 2 years in advance of the project, the ratios listed below will apply. As described in Item (d), lower replacement ratios may be appropriate if a USACE-approved hydrogeomorphic method (HGM) of assessing replacement ratios indicates lower ratios would ensure replacement of habitat values and functions.

Timing of Mitigation	Value of Habitat Affected*	Proposed Ratio Required for Revegetation
Habitat installation completed 2 years or more prior to construction impact	N/A	1:1
Habitat installation completed less than 2 years in advance of impact	Low	1:1
	Medium	2:1
	High	3:1

High = (EIS/EIR mapping units 1, 2, 3, 6), Medium = (EIS/EIR mapping units 4, 7), and Low = (EIS/EIR mapping units 5, 8).

BIO-5 (b) Newhall Land shall mitigate for the removal of riparian habitats contiguous with riverbed riparian habitat that may occur outside the “upland impact zone.” The replacement of these types of habitats would occur in association with the development of a project identified in the NRMP, and shall follow the procedures for the replacement in-channel habitats, as described in this mitigation measure.

BIO-5 (c) Creation of new riparian habitats shall occur at suitable sites in or adjacent to the watercourses included in the NRMP. Habitat restoration sites in the riverbed shall be located only in areas where the predominant habitats present are dry, open floodplain; and weedy restoration sites should be new riverbed areas created during the excavation of uplands for bank protection projects in the NRMP. Restoration sites may also occur at locations outside the riverbed where there are appropriate hydrologic conditions to create a self-sustaining riparian habitat and where upland and riparian habitat values are absent or very low. All sites shall contain suitable hydrological conditions and surrounding land uses to ensure a self-sustaining functioning riparian habitat. Candidate restoration sites shall be selected by Newhall Land and described in the *Annual Mitigation Status Report* that will be submitted to the USACE by April 1 of each year. Sites will be approved when restoration plans are submitted to the USACE and CDFG as part of the *Verification Request Letters* submitted for individual projects, or as part of the *Annual Mitigation Status Report* and *Mitigation Accounting Form*.

BIO-5 (d) Replacement habitat shall be designed to replace the functions and values of the habitats being removed. At this time, the replacement habitat shall be restored in accordance with the acreage replacement ratios described in Item (a). The replacement habitats shall have similar dominant trees and understory shrubs and herbs as the affected habitats. In addition, the replacement habitats shall be designed to replicate the density and structure of the affected habitats once the replacement habitats have reached mature status. Replacement ratios that are lower than those listed in Item (a) may be used if a USACE-approved HGM is applied in which habitat functions and values of both the affected habitat and the replacement habitat are quantified.

BIO-5 (e) Average plant spacing shall be determined based on an analysis of habitats to be replaced. Typical plant spacing is presented below for use in developing willow-cottonwood woodland habitat as an example only. Newhall Land shall develop similar tree spacing specifications for other habitats to be restored, such as wet mixed scrub, dry willow scrub, cottonwood woodland, scalebroom scrub, and wet herbaceous. Plant spacing specifications shall be reviewed and approved by the USACE and CDFG when restoration plans are submitted to the USACE as part of the *Verification Request Letters* submitted to the USACE and CDFG for individual projects or as part of the *Annual Mitigation Status Report* and *Mitigation Accounting Form*.

Species	Average Plant Spacing	Height	
		After 3 years	After 5 years
Arroyo willow	2.44m (8 ft)	3.05m (10 ft)	4.57m (15 ft)
Black willow	2.44-3.05m (8-10 ft)	3.66m (12 ft)	5.49m (18 ft)
Sandbar willow	2.44m (8 ft)	1.22m (4 ft)	1.82m (6 ft)
Red willow	2.44m (8 ft)	2.74m (9 ft)	4.57m (15 ft)
Cottonwood	6.10m (20 ft)	2.13m (7 ft)	3.66m (12 ft)

BIO-5 (f) Each tree and shrub species used in restoration shall have a minimum of 80 percent survival after 3 years and 70 percent survivorship after 5 years. Key indicator tree species to be used in the riparian restoration program shall achieve a minimum growth at the end of 3 years and 5 years as described above in Item (e). Performance standards for cover shall be developed for each individual habitat type being created, based on the observed natural cover in undisturbed habitats in the project area. These standards shall be approved by the USACE and CDFG after they have reviewed the *Annual Mitigation Status Report* and *Mitigation Accounting Form*. Minimum growth, survivorship, and cover performance at the mitigation sites shall be measured based on random samples taken during years 3 and 5 at each individual mitigation site, or at other sampling intervals if the USACE hydrogeomorphic methodology is used by Newhall Land.

BIO-5 (g) If the minimum growth, survivorship, and/or cover are not achieved at the time of the 3- and 5-year evaluations, then Newhall Land shall be responsible for taking the appropriate corrective measures as to achieve the specified growth, survivorship, and/or cover criteria. Newhall Land shall be responsible for any costs incurred during the revegetation or in subsequent corrective measures. If acts of God (flood, fires, or drought) occur after the vegetation has met the 3-year criteria for growth, survival, and cover, Newhall Land will not be responsible for replanting damaged areas. If these events occur prior to the plants meeting the 3-year criteria, Newhall Land shall be responsible for replanting the area one time only.

BIO-5 (h) Newhall Land shall be responsible for weeding all restoration sites to prevent an infestation of non-native weeds for a period of 5 years after the initial habitat restoration, regardless of the success of the planted species. The cover of non-native plant species at the mitigation sites shall not exceed 10 percent at any time, within this 5-year period.

BIO-5 (i) Temporary irrigation shall be installed, as necessary, for plant establishment. Irrigation shall continue as needed to meet the 3-to 5 year performance criteria regarding

survivorship and growth. Irrigation shall be terminated in the winter to provide the least stress on plants. Removal of the irrigation system shall occur in conjunction with appropriate “weaning” procedures to minimize plant stress. Irrigation shall be terminated at the earliest opportunity after achieving the 5-year criteria.

BIO-5 (j) and BIO-5 (k) As an alternative to the restoration of habitats to compensate for permanent removal of riparian habitats, Newhall Land (at the discretion of USACE and CDFG on a project-by-project basis) may remove exotic plant species from the project area in locations: (1) where there is an infestation of exotics such as *Arundo*, such that the natural habitat functions and values are substantially degraded and at risk, and where the cover of exotics is equal to or exceeds 25 percent of the ground or (2) other areas where exotic removal would be strategic in a watershed approach to weed management, as determined by the USACE and CDFG. The weed removal sites shall be selected in a logical manner to ensure that the eradication of weeds from specific sites will contribute to the overall control of exotics in the NRMP watercourses. Removal areas shall be kept free of exotic plant species for five years after initial treatment. In addition, native riparian vegetation must become established through natural colonization and meet the revegetation plant cover goals established by the USACE and CDFG under Item (f) after 5 years.

BIO-5 (l) To provide an accurate and reliable accounting system for mitigation, Newhall Land shall file a *Mitigation Accounting Form* annually with USACE and CDFG by April 1. This form shall document the amount of vegetation planted during the past year, the status of all mitigation credits to date, and any credits subtracted by projects implemented during the past year. Newhall Land will keep detailed records and provide the *Mitigation Accounting Form* to the USACE and CDFG annually for review for the life of the permit, or until all credits have been used up for individual projects. The USACE and CDFG shall provide concurrence within 30 working days, including written verification for all restoration and weed removal sites that meet the specified performance criteria. If there are any questions regarding the accounting, a meeting will be scheduled among Newhall Land, the USACE, and the CDFG.

BIO-5 (m) If Newhall Land does not have sufficient mitigation credits for an upcoming project and is, therefore, planning to restore habitat or remove exotics concurrent with project implementation, project-specific plans for restoring habitats or for removing exotics from existing habitats shall be submitted to the USACE and CDFG as part of the *Verification Request Letters* for individual project approvals (as described in the alternative permitting process in the EIS/EIR).

BIO-5 (n) An *Annual Mitigation Status Report* shall be submitted to the USACE and CDFG by April 1 of each year for the life of the permit, or until 5 years after all mitigation has been completed. This report shall include any required plans for plant spacing, locations of candidate restoration and weed removal sites, restoration methods, weed removal plans, and habitat restoration performance standards. For active habitat creation sites, the report shall include the survival, percent cover, and height of planted species; the number of species of plants replaced; an overview of the revegetation effort and its success in meeting performance criteria; the method used to assess these parameters; and photographs. For active exotic species removal sites, the report shall include an assessment of weed removal; a description of the relative cover of native vegetation, bare areas, and exotic vegetation; colonization by native plants; and photographs. The report shall also include the *Mitigation Accounting Form* (see **BIO-5 (I)** above), which outlines accounting information related to species planted or exotic removed, and mitigation credit remaining.

BIO-5 (o) The mitigation program shall incorporate applicable principles in the interagency “Federal Guidance for the Establishment, Use, and Operation of Mitigation Banks” (FR60;58605-58614), to the extent feasible and appropriate, particularly the guidance on administration and accounting. Nothing in the 404 permit shall preclude Newhall Land from selling mitigation credits to other parties wishing to use the 404 permit for a project and/or maintenance activity included in the 404 permit.

3.7 Vegetation

A Natural Environment Study (NES) was conducted for this proposed project (BonTerra, 2004). Survey methodology is discussed in the NES. The findings of surveys performed related to the preparation of the NES are summarized below. Additionally, Table A-1 in the NES provides a compendia of the floral species observed.

3.7.1 Affected Environment

Vegetation within the study area includes Fremont cottonwood riparian forest, riparian herb/braided channel, disturbed/ruderal, agricultural, ornamental, and developed. Table 3.7-1 lists the vegetation in the study area.

Table 3.7-1. Vegetation in the Study Area

Common Name	Scientific Name
FREMONT COTTONWOOD RIPARIAN FOREST	
Fremont cottonwood	<i>Populus fremontii</i>
red willow	<i>Salix laevigata</i>
arroyo willow	<i>Salix lasiolepis</i>
giant reed	<i>Arundo donax</i>
Mexican elderberry	<i>Sambucus mexicana</i>
mule fat	<i>Baccharis salicifolia</i>
narrow-leaved willow	<i>Salix exigua</i>
Mediterranean tamarisk	<i>Tamarix ramosissima</i>
Great Basin sagebrush	<i>Artemisia tridentata</i>
coyote bush	<i>Baccharis pilularis</i>
black sage	<i>Salvia mellifera</i>
interior flat-topped buckwheat	<i>Eriogonum fasciculatum</i> var. <i>foliolosum</i>
golden currant	<i>Ribes aureum</i>
sugar bush	<i>Rhus ovata</i>
valley cholla	<i>Opuntia parryi</i>
giant wild rye	<i>Leymus condensatus</i>
orange bush monkeyflower	<i>Mimulus aurantiacus</i>
Indian tree tobacco	<i>Nicotiana glauca</i>
California sagebrush	<i>Artemisia californica</i>
deerweed	<i>Lotus scoparius</i>
common eucrypta	<i>Eucrypta chrysanthemifolia</i>
coastal prickly pear	<i>Opuntia littoralis</i>
Italian thistle	<i>Carduus pycnocephalus</i>
Sapling red	
western verbena	<i>Verbena lasiostachys</i>
HERBACEOUS SPECIES	
ripgut brome	<i>Bromus diandrus</i>
beardless wildrye	<i>Elymus triticoides</i>
red brome	<i>Bromus madritensis</i>
foxtail fescue	<i>Vulpia myuros</i>
soft chess	<i>Bromus hordeaceus</i>
cheat grass	<i>Bromus tectorum</i>
western ragweed	<i>Ambrosia psilostachya</i>
summer mustard	<i>Hirschfeldia incana</i>
common cryptantha	<i>Cryptantha intermedia</i>

Common Name	Scientific Name
miner's lettuce	<i>Claytonia perfoliata</i>
granny's hair net	<i>Pterostegia drymarioides</i>
dwarf nettle	<i>Urtica dioica</i>
annual sunflower	<i>Helianthus annuus</i>
branching phacelia	<i>Phacelia ramosissima</i>
southern slender vetch	<i>Vicia ludoviciana</i>
yerba mansa	<i>Anemopsis californica</i>
sedges	<i>Carex</i> spp.
mugwort	<i>Asteraceae suksdorfii</i>
Mexican rush	<i>Juncus mexicanus</i>
giant nettle	<i>Urtica holosericea</i>
Mexican tea	<i>Chenopodium ambrosioides</i>

RIPARIAN HERB/BRAIDED CHANNEL

watercress	<i>Rorippa nasturtium-aquaticum</i>
greater water speedwell	<i>Veronica anagallis-aquatica</i>
seep monkey flower	<i>Mimulus guttatus</i>
broad-leaved cat-tail	<i>Typha latifolia</i>
common bulrush	<i>Scirpus acutus</i>
Olney's bulrush	<i>Scirpus americanus</i>
curly dock	<i>Rumex crispus</i>
baltic rush	<i>Juncus balticus</i>
tall umbrella sedge	<i>Cyperus eragrostis</i>
white sweet clover	<i>Melilotus alba</i>
spike redtop	<i>Agrostis exarata</i>
rabbit's foot grass	<i>Polypogon monspeliensis</i>
western ragweed	<i>Ambrosia psilostachya</i>
prickly sow thistle	<i>Sonchus asper</i>
weedy cudweed	<i>Gnaphalium luteo-album</i>
narrow-leaved willow	<i>Salix exigua</i>
Indian tree tobacco	<i>Nicotiana glauca</i>
arroyo willow	<i>Salix lasiolepis</i>
giant reed	<i>Arundo donax</i>
thick-leaved yerba santa	<i>Eriodictyon crassifolium</i>
sand wash butterweed	<i>Senecio flaccidus</i>
Great Basin sagebrush	<i>Artemisia tridentata</i>
fastigate golden aster	<i>Heterotheca fastigiata</i>
deerweed	<i>Lotus scoparius</i>
California sagebrush	<i>Artemisia californica</i>

Common Name	Scientific Name
woolly star	<i>Eriastrum densifolium</i>
rosemary flat-topped buckwheat	<i>Eriogonum fasciculatum</i> var. <i>polifolium</i>
red brome	<i>Bromus madritensis</i>
sandbur	<i>Cenchrus incertus</i>
mugwort	<i>Artemisia vulgaris</i>
common heliotrope	<i>Heliotropium curassavicum</i>
Mediterranean schismus	<i>Schismus barbatus</i>
summer mustard	<i>Hirschfeldia incana</i>
yellow sweet clover	<i>Melilotus indicus</i>
Mexican tea	<i>Chenopodium ambrosioides</i>
red-stemmed filaree	<i>Erodium cicutarium</i>
jimson weed	<i>Datura wrightii</i>
great marsh evening primrose	<i>Oenothera elata</i>
Thurber's buckwheat	<i>Eriogonum thurberi</i>
DISTURBED/RUDERAL AREAS	
ripgut brome	<i>Bromus diandrus</i>
red brome	<i>Bromus madritensis</i>
wild oat	<i>Avena fatua</i>
slender wild oat	<i>Avena barbata</i>
foxtail barley	<i>Hordeum murinum</i> ssp. <i>leporinum</i>
soft chess	<i>Bromus hordeaceus</i>
foxtail fescue	<i>Vulpia myuros</i>
cheat grass	<i>Bromus tectorum</i>
Mediterranean schismus	<i>Schismus barbatus</i>
goldentop	<i>Lamarkia aurea</i>
Bermuda grass	<i>Cynodon dactylon</i>
summer mustard	<i>Hirschfeldia incana</i>
common fiddleneck	<i>Amsinckia menziesii</i>
bur clover	<i>Amsinckia menziesii</i>
long-beaked filaree	<i>Erodium botrys</i>
arroyo lupine	<i>Lupinus succulentus</i>
pygmy sand weed	<i>Crassula connata</i>
sandbur	<i>Cenchrus incertus</i>
red-stemmed filaree	<i>Erodium cicutarium</i>
London rocket	<i>Sisymbrium irio</i>
cheese weed	<i>Malva parviflora</i>
yellow sweet clover	<i>Melilotus indicus</i>
common horseweed	<i>Conyza canadensis</i>

Common Name	Scientific Name
owl's clover	<i>Castilleja exserta</i>
totalote	<i>Centaurea melitensis</i>
California poppy	<i>Eschscholzia californica</i>
winged pectocarya	<i>Pectocarya penicillata</i>
black mustard	<i>Brassica nigra</i>
annual sunflower	<i>Helianthus annuus</i>
common horsetail	<i>Equisetum arvense</i>
Russian thistle	<i>Salsola tragus</i>
lamb's quarters	<i>Chenopodium album</i>
telegraph weed	<i>Heterotheca grandiflora</i>
puncture vine	<i>Tribulus terrestris</i>
pineapple weed	<i>Chamomilla suaveolens</i>
prickly lettuce	<i>Lactuca serriola</i>
common knotweed	<i>Polygonum arenastrum</i>
slender southern vetch	<i>Vicia ludoviciana</i>
London rocket	<i>Sisymbrium irio</i>
milk thistle	<i>Silybum marianum</i>
common purslane	<i>Portulaca oleracea</i>
prickly sow thistle	<i>Sonchus asper</i>
burclover	<i>Medicago minima</i>
tumbling pigweed	<i>Amaranthus albus</i>
ORNAMENTAL SPECIES	
Fremont cottonwood	<i>Populus fremontii</i>
Mexican elderberry	<i>Sambucus mexicana</i>
mulberry	<i>Morus</i> sp.
gum	<i>Eucalyptus</i> sp.
Liquidambar	<i>Liquidambar</i> sp.
London plane tree	<i>Platanus acerifolia</i>
Peruvian pepper tree	<i>Schinus molle</i>
fruit trees	<i>Prunus</i> sp.
western sycamore	<i>Platanus racemosa</i>
ash	<i>Fraxinus</i> sp.
DEVELOPED AREAS	
cilantro	<i>Coriandrum sativum</i>
leeks	<i>Allium porrum</i>
kale	<i>Brassica oleracea</i>

3.7.2 Permanent Impacts

Construction of the proposed project would result in the loss of approximately 4.12 hectares (10.17 acres) of native habitat that provide valuable nesting, foraging, roosting, and denning opportunities for a wide variety of wildlife species. In addition, project implementation would result in the loss of 20.77 hectares (51.33 acres) of non-native habitats that are relatively unimportant as wildlife habitat. However, these non-native habitats do provide nesting, foraging, roosting, and denning opportunities for some species. Removing or altering habitats in the study area would result in the loss of small mammals, reptiles, amphibians, and other animals of slow mobility that live in the direct impact area of the project. The proposed project is not expected to disrupt or hinder species movement along the Santa Clara River or Castaic Creek. Although a portion of the Santa Clara riverbed would be disturbed by implementation of the proposed project, the disturbance would remain on the outer terrace of one side of the riverbed. Therefore, the habitat upstream and downstream of the disturbance would remain connected by the low-flow channel, lower terraces, and opposite bank of the riverbed. Hence, no impacts on wildlife movement and habitat fragmentation are expected to occur in the study area.

3.7.3 Temporary Impacts

Construction Phase Impacts

Grading activities would disturb soils and result in the accumulation of dust on the surface of the leaves of trees, shrubs, and herbs. The respiratory function of the plants in the area would be impaired when dust accumulation is excessive. The indirect effect of project construction on the native vegetation in the immediate vicinity of the construction area would not reduce plant populations below self-sustaining levels.

3.7.4 Measures to Minimize Harm

The following measures will minimize harm to cumulative to biological impacts. The 404 Permit and 1603 Streambed Alteration Agreement for portions of the Santa Clara River have been identified in the NRMP. Where appropriate, the measures to minimize harm from the NRMP were used to ensure that this project is consistent with the 404 permit issued to Valencia Company in December 1998 and are referenced as described in the *Mitigation Monitoring and Reporting Program, Valencia Company, Revised Natural River Management Plan*. The Arundo removal option has been recommended over revegetation of the disturbed area because future roadway and/or flood control operation and maintenance activities performed consistent with the terms and conditions of the NRMP would periodically disturb the same section of the bank in the future.

Riparian Habitat Mitigation

The construction of the proposed project would impact 4.12 hectares (10.17 acres) of Fremont cottonwood riparian forest, all of which is considered jurisdictional by the USACE and CDFG. Implementation of a riparian habitat mitigation program would be as follows:

The project applicant will remove exotic plant species from the project area in locations: (1) where there is an infestation of exotics such as *Arundo* that have substantially degraded and placed at risk the natural habitat functions and values, and where the cover of exotics is equal to or exceeds 25 percent of the ground or (2) other areas where exotic removal would be effective in a watershed approach to weed management, as determined by USACE and CDFG. The weed-removal sites shall be selected to ensure that the eradication of weeds from specific sites will contribute to the overall control of exotics in the NRMP watercourses. Removal areas shall be kept free of exotic plant species for 5 years after initial treatment.

The removal program shall utilize methods and procedures approved by the USACE and CDFG to remove exotics including, but not limited to, mechanical equipment in specific areas, hand-cutting, and the application of herbicides to stumps. Exotic plant species removal credit will be given as shown below (except when weed removal is used to mitigate for loss of habitat for sensitive riparian bird species where the USACE and CDFG may require higher ratios). Weed eradication plans shall be submitted to the USACE and CDFG for approval as part of the Verification Request Letter submitted to the USACE and CDFG for the proposed project. The plan shall describe the proposed methods and the conditions of the site to be treated. A monitoring program shall be implemented to document the effectiveness of the removal and the natural establishment of native vegetation in the weeded area.

Table 3.7-2. Value of Riparian Habitat

Value of Riparian Habitat to be Removed	Mitigation Ratios for Exotic Removal	
	2 Years in Advance	< 2 Years in Advance
High (EIS/EIR mapping units 1, 2, 3, 6)	3:1	4:1
Medium (EIS/EIR mapping units 4, 7)	2:1	3:1
Low (EIS/EIR mapping unit 5, 8)	1:1	2:1

Riparian herb/braided channel and Fremont cottonwood riparian forest correspond to mapping units 1 and 6, respectively. However, the riparian herb/braided channel in the study area should be considered of medium value because it is heavily invaded by giant reed.

The *Arundo* removal program will be operated through Newhall Land. Newhall Land will be responsible for monitoring the mitigation program and reporting to the resource agencies

to keep them informed of the status of the mitigation program. Reports to resource agencies will include a *Mitigation Accounting Form* filed annually, and an *Annual Mitigation Status Report*.

Other vegetation types present within the impact area other than riparian vegetation include disturbed/ruderal, ornamental, agriculture, and developed. These 20.77 hectares (51.33 acres) represent areas of low biological value and measures to minimize impacts to these areas are not biologically warranted.

3.8 Wildlife

As discussed above, a Natural Environment Study was conducted for this proposed project (BonTerra, 2004). Survey methodologies are discussed in the NES. The findings of the surveys performed in support of the preparation of the NES are summarized below. Because the surveys are more than two years old, while they may provide additional useful information on the site, they cannot verify current conditions; that is, whether species surveyed for are currently present or absent on the project site. As such, where habitat for special-status species is present, the species is presumed to occupy the site, and impacts are evaluated and mitigation developed accordingly. Table A-2 in the NES provides a compendia of the faunal species observed.

3.8.1 Affected Environment

The vegetation types within the study area provide habitat for a host of wildlife species. Most creek and waterways in Southern California are intermittent and subject to periods of high water flow in winter and spring, and little to no flow in late summer and fall. The study area contains two drainages, Castaic Creek and the Santa Clara River, that both flow generally from east to west. It should be noted, however, that Castaic Creek is located outside the potential project impact area. At the time of the survey, Castaic Creek was dry, while the Santa Clara River contained low, flowing water. Unarmored threespine stickleback (*Gasterosteus aculaetus williamsonii*) and arroyo chub (*Gila orcutti*) are known to occur in both this portion of the Castaic Creek and the Santa Clara River. The Santa Ana sucker (*Catostomus santaannae*) has a disjunct distribution and is not known from the study area; however, it has a moderate potential to occur because it is known in nearby watercourses. The introduced mosquito fish (*Gambusia affinis*) is also known to occur in these watercourses.

Amphibians require moisture for at least a portion of their life cycle, and many require standing or flowing water for reproduction. Terrestrial species may or may not require

standing water for reproduction. These species are able to survive in dry areas by estivating, remaining beneath the soil in burrows or under logs or leaf litter, emerging only when temperatures are low and humidity is high. Many of these species' habitats are associated with water, and they emerge to breed once the rainy season begins. Soil moisture conditions can remain high throughout the year in some habitat types, depending on factors such as amount of vegetation cover, elevation, and slope aspect.

Although not observed during the surveys, the riparian vegetation types (Fremont cottonwood riparian forest, and riparian herb/braided channel) provide suitable habitat for the Pacific tree frog (*Hyla regilla*), western toad (*Bufo boreas*), and Pacific slender salamander (*Batrachoseps pacificus*); and they are expected to occur in the study area.

Reptilian diversity and abundance typically vary with vegetation type and character. Many species prefer only one or two vegetation types; however, most will forage in a variety of habitats. Most species occurring in open areas use rodent burrows for cover, protection from predators, and extreme weather conditions.

Reptile species observed during the surveys in the study area include the side-blotched lizard (*Uta stansburiana*), western fence lizard (*Sceloporus occidentalis*), and western yellow-bellied racer (*Coluber constrictor*). Other reptiles expected to occur onsite include southern alligator lizard (*Gerrhonotus multicarinatus*), western skink (*Eumeces skiltonianus*), gopher snake (*Pituophis melanoleucus*), and western rattlesnake (*Crotalus viridis*).

Birds were the most widely observed vertebrate taxon occurring on the study site. Species observed included great blue heron (*Ardea herodias*), great egret (*Ardea albus*), killdeer (*Charadrius vociferus*), rock dove (*Columba livia*), mourning dove (*Zenaida macroura*), Anna's hummingbird (*Calypte anna*), Nuttall's woodpecker (*Picoides nuttallii*), black phoebe (*Sayornis nigricans*), Say's phoebe (*Sayornis saya*), western scrub jay (*Aphelocoma californica*), American crow (*Corvus brachyrhynchos*), common raven (*Corvus corax*), oak titmouse (*Baeolophus inornatus*), wrentit (*Chamaea fasciata*), Brewer's blackbird (*Euphagus cyanocephalus*), and house finch (*Carpodacus mexicanus*). The common yellowthroat (*Geothlypis trichas*), spotted towhee (*Pipilo maculatus*), California towhee (*Pipilo crissalis*), loggerhead shrike (*Lanius ludovicianus*), northern mockingbird (*Mimus polyglottos*), phainopepla (*Phainopepla nitens*), song sparrow (*Melospiza melodia*), white-crowned sparrow (*Zonotrichia leucophrys*), western meadowlark (*Sturnella neglecta*), and lesser goldfinch (*Carduelis psaltria*) would also be expected to occur because many of these species were observed just outside the study area. In addition, the nests of cliff swallows (*Hirundo phrrhonota*) were observed under the newly constructed Commerce Center Drive

bridge across Castaic Creek. Birds of prey (raptors) observed on the site included the red-shouldered hawk (*Buteo lineatus*) and red-tailed hawk (*Buteo jamaicensis*). Other raptors expected to occur in the study area include the white-tailed kite (*Elanus leucurus*), American kestrel (*Falco sparverius*), and turkey vulture (*Cathartes aura*).

Mammal species observed or detected included the Botta's pocket gopher (*Thomomys bottae*), California ground squirrel (*Spermophilus beecheyi*) western gray squirrel (*Sciurus griseus*), woodrat (*Neotoma* sp.), and raccoon (*Procyon lotor*). Other mammals expected to occur include deer mouse (*Peromyscus maniculatus*), California pocket mouse (*Perognathus californicus*), western harvest mouse (*Reithrodontomys megalotis*), brush rabbit (*Sylvilagus bachmani*), and desert cottontail (*Sylvilagus audubonii*). Larger mammals, including both herbivores and carnivores, observed or expected on the study area include the Virginia opossum (*Didelphis virginiana*), coyote (*Canis latrans*), gray fox (*Urocyon cinereoargenteus*), striped skunk (*Mephitis mephitis*), bobcat (*Felis rufus*), and mule deer (*Odocoileus hemionus*).

Bats occur throughout most of Southern California and may use any portion of the study area as foraging habitat. The riparian vegetation types in the project region provide potential roosting opportunities for several bat species, although no direct evidence of bat roosting (e.g., bats or bat guano) was observed during field survey. Most of the bats that could potentially occur onsite are inactive during the winter and either hibernate or migrate, depending on the species. The Yuma myotis (*Myotis yumanensis*), California myotis (*Myotis californicus*), western pipistrelle (*Pipistrellus hesperus*), big brown bat (*Eptesicus fuscus*), hoary bat (*Lasiurus cinereus*) and Mexican free-tailed bat (*Tadarida brasiliensis*) all may occur on the study area.

Wildlife Movement

Wildlife corridors link together areas of suitable wildlife habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbance. The fragmentation of open space areas by urbanization creates isolated "islands" of wildlife habitat. In the absence of habitat linkages that allow movement to adjoining open-space areas, various studies have concluded that some wildlife species, especially the larger and more mobile mammals, will not likely persist over time in fragmented or isolated habitat areas because they prohibit the infusion of new individuals and genetic information (MacArthur and Wilson, 1967; Soule, 1987; Harris and Gallagher, 1989; Bennett, 1990).

Wildlife corridors mitigate the effects of this fragmentation by: (1) allowing animals to move between remaining habitats, thereby permitting depleted populations to be replenished

and promoting genetic exchange; (2) providing escape routes from fire, predators, and human disturbances, thus reducing the risk that catastrophic events (such as fire or disease) will result in population or local species extinction; and (3) serving as travel routes for individual animals as they move in their home ranges in search of food, water, mates, and other needs (Noss, 1983; Farhig and Merriam, 1985; Simberloff and Cox, 1987; Harris and Gallagher, 1989).

In a large, open-space area in which there are few or no man-made or naturally occurring physical constraints to wildlife movement, wildlife corridors as defined above may not yet exist. Given an open-space area that is both large enough to maintain viable populations of species and provide a variety of travel routes (canyons, ridgelines, trails, riverbeds, and others), wildlife will use these "local" routes while searching for food, water, shelter, and mates, and will not need to cross into other large open-space areas. Based on their size, location, vegetative composition, and availability of food, some of these movement areas (e.g., large drainages and canyons) are used for longer lengths of time and serve as source areas for food, water, and cover, particularly for small- and medium-sized animals. This is especially true if the travel route is within a larger open-space area. However, once open-space areas become constrained and/or fragmented as a result of urban development or construction of physical obstacles such as roads and highways, the remaining landscape features or travel routes that connect the larger open-space areas can "become" corridors as long as they provide adequate space, cover, food, and water, and do not contain obstacles or distractions (e.g., man-made noise, lighting) that would generally hinder wildlife movement.

Wildlife movement activities usually fall into one of three movement categories: (1) dispersal (e.g., juvenile animals from natal areas, or individuals extending range distributions); (2) seasonal migration; and (3) movements related to home range activities (foraging for food or water, defending territories, searching for mates, breeding areas, or cover). A number of terms have been used in various wildlife movement studies, such as "wildlife corridor," "travel route," "habitat linkage," and "wildlife crossing" to refer to areas in which wildlife move from one area to another.

In general, the hills above Castaic Creek and the Santa Clara River and its tributaries are undeveloped, or contain scattered croplands and residences. Lands in the floodplain are mostly developed for commercial, industrial, and agricultural uses. The Santa Clara River, which traverses these floodplains, represents an important wildlife corridor because: (1) the river is mostly undeveloped and contains native riparian habitat; (2) the width of the river is generally 213 meters (699 feet) or more; and (3) the river and its tributaries provide linkages between the proposed project and regional habitat areas. The Santa Clara River and its

tributaries, such as San Francisquito Creek, provide linkages east and north to the Angeles National Forest. The Santa Clara River also extends west to the Santa Clara River Valley where tributary creek and pasture lands on the south side of the river provide linkages to the Santa Susana Mountains. Castaic Creek provides access to the Angeles National Forest via Castaic Dam and its associated recreational area. Overall, both of these creeks provide high quality regional wildlife corridors.

3.8.2 Permanent Impacts

Construction of the proposed project would result in the loss of approximately 4.12 hectares (10.17 acres) of native habitat that provide valuable nesting, foraging, roosting, and denning opportunities for a wide variety of wildlife species. In addition, project implementation would result in the loss of 20.77 hectares (51.33 acres) of non-native habitats that are relatively unimportant as wildlife habitat. However, these non-native habitats do provide nesting, foraging, roosting, and denning opportunities for some species. Removing or altering habitats in the study area would result in the loss of small mammals, reptiles, amphibians, and other animals of slow mobility that live in the direct impact area of the project. More mobile wildlife species now using the study area would be forced to move into remaining areas of open space, consequently increasing competition for available resources in those areas. This situation would result in the loss of individuals that cannot successfully compete. The proposed project would not reduce common wildlife populations in the region below self-sustaining numbers, given the small amount of impact area.

The proposed project is not expected to disrupt or hinder species movement along the Santa Clara River or Castaic Creek. Although a portion of the Santa Clara riverbed would be disturbed by implementation of the proposed project, the disturbance would remain on the outer terrace of one side of the riverbed. Therefore, the habitat upstream and downstream of the disturbance would remain connected by the low-flow channel, lower terraces, and opposite bank of the riverbed. Hence, no impacts on wildlife movement and habitat fragmentation are expected to occur in the study area. As stated in Section 3.2.2 of the NES, both the Santa Clara River and Castaic Creek provide for high quality regional wildlife movement. However, as stated in Section 4.3.2 of the NES, the proposed project is not expected to adversely disrupt or hinder wildlife species movement along the Santa Clara River or Castaic Creek within the project vicinity because the disturbance would be limited to the outer terrace of one side of the riverbed of the Santa Clara River. Habitat upstream and down stream of the impact area along the Santa Clara River would remain connected and is expected to continue to be utilized for wildlife movement after project implementation.

Night Lighting

Lighting of the infrastructure would inadvertently result in an indirect effect on the behavioral patterns of nocturnal and crepuscular (active at dawn and dusk) wildlife at these areas. Of greatest concern is the effect on small ground-dwelling animals that use the darkness to hide from predators, and on owls, which are specialized night foragers. These impacts, while adverse, would not be expected to reduce any current wildlife population below self-sustaining levels.

Human Activity

Human disturbance could disrupt normal foraging and breeding behavior of wildlife remaining onsite, considerably diminishing the value of onsite habitat areas. This impact would occur due to the high biological value of native habitat areas (i.e., Fremont cottonwood riparian forest, riparian herb/braided channel) in the study area.

3.8.3 Temporary Impacts

Noise Impacts (Indirect)

Noise levels in the study area would increase over present levels during construction of the proposed project. During construction, temporary noise impacts have the potential to disrupt foraging, nesting, roosting, and denning activities for a variety of wildlife species. Most species in the vicinity of the study area are not listed as Threatened or Endangered under state or federal statute. However, if the western yellow-billed cuckoo, southwestern willow flycatcher, least Bell's vireo, and several common and special-status raptor species, including white-tailed kite and burrowing owl, establish nests within or contiguous to the project site prior to implementation of construction, then construction-associated noise would have the potential to result in temporary short-term impacts to these species. Impacts from construction noise may result in the temporary displacement of birds from their nests to adjacent habitat areas due to these disturbances, thus leaving the nests unprotected and subject to predation or infestation by nest parasites such as the brown-headed cowbird. Indirect noise impacts on these species nests, or nesting activities, would be considered because these species are protected by federal and state wildlife laws and by Section 15380 of CEQA.

Noise would also increase over present levels when the traffic on roads adjacent to the riverbed increases. Therefore, habitat remaining onsite adjacent to development would be considered disturbed. Wildlife stressed by noise may be extirpated from the remaining onsite natural open space, leaving only wildlife tolerant of human activity. Chronic (permanent) noise increase would contribute to an incremental loss of habitat, but would not reduce wildlife populations below self-sustaining levels.

Increased Dust and Urban Pollutants

Grading activities would disturb soils and result in the accumulation of dust on the surface of the leaves of trees, shrubs, and herbs. The respiratory function of the plants in the area would be impaired when dust accumulation is excessive. This indirect effect of project construction on the native vegetation in the immediate vicinity of the construction area would not reduce plant populations below self-sustaining levels.

Additional impacts to wildlife in the area could occur as a result of changes in water quality. Urban runoff from the proposed project containing petroleum residues and the potential for improper disposal of petroleum and chemical products from construction equipment (temporary) or infrastructure areas (i.e., vehicles, improper disposal of chemicals) (permanent) could adversely affect water quality. This, in turn, could affect populations of aquatic species (including common and special-status fish, amphibian, and reptile species), and other species that use riparian areas (including common and special-status amphibian, reptile, birds, and mammal species). Water quality could also be adversely affected by runoff of nutrients from project landscape features. This could impact the Santa Ana sucker, unarmored three-spine stickleback, arroyo chub, arroyo toad, southwestern pond turtle, and two-stripe garter snake, and could reduce the biological value of riparian habitats in the immediate project area. However, standard BMPs implemented through the SWPPP and NPDES permits minimize the level of impact.

3.8.4 Measures to Minimize Harm

Implementation of the following recommended measures to minimize harm will mitigate direct, indirect, and cumulative biological impacts to a level that is considered not adverse. Where appropriate, the measures to minimize harm from the NRMP were used to ensure that this project is consistent with the 404 permit issued to Valencia Company in December 1998 and are referenced as described in the *Mitigation Monitoring and Reporting Program, Valencia Company, Revised Natural River Management Plan*. Mitigation for impacts to wildlife habitat and wildlife movement include those described in Section 3.7.5 of this IS/EA as well as the following mitigation measures from the NRMP regarding sensitive species to be incorporated as a component of this project. Because the proposed project is not anticipated to adversely disrupt or hinder wildlife species movement along the Santa Clara River, even though the proposed project would impact some of the habitat in this area, the amount of habitat impacted did not warrant a specific mitigation measures relative to wildlife movement. However, several mitigation measures identified in the NES for other biological resource issues will have a direct benefit to wildlife resources, including wildlife movement. These measures include, but are not limited to, the (1) implementation of a riparian habitat

mitigation program, (2) implementation of avoidance procedures for sensitive and aquatic species, (3) restoration of temporarily disturbed areas, and (4) implementation of aquatic habitat and water quality protection measures.

BIO-1 (a) Construction activities shall be limited to the following areas of temporary disturbance: (1) an 85-foot wide zone that extends into the river from the base of the rip-rap or gunite bank protection where it intercepts the river bottom; and (2) 20-foot wide temporary access ramps and roads to reach construction sites. The locations of these temporary construction sites and the routes of all access roads shall be shown on maps submitted with the VRL that are submitted to the CDFG and ACOE. Any variation from these limits shall be noted, with a justification for a variation. The construction plans should indicate what type of vegetation, if any, would be temporarily disturbed, and the post-construction activities to facilitate natural revegetation of the temporarily disturbed areas. The boundaries of the construction site and any temporary access roads within the riverbed shall be marked in the field with stakes and flagging. No construction activities, vehicular access, equipment storage, stockpiling, or substantial human intrusion shall occur outside the work area and access roads.

BIO-1 (b) Equipment shall not be operated in areas of ponded or flowing water unless there are no practicable alternative methods to accomplish the construction work, and only after prior approval by the CDFG and the ACOE. Approval shall be acquired by submitting a request to CDFG and ACOE no later than 30 days prior to construction. The request must contain a biological evaluation demonstrating that no sensitive fish, amphibians, and/or reptiles are currently present, or likely to be present during construction, at the construction site, or along access roads. This request may be included in the *Verification Request Letter* that is submitted to the CDFG and ACOE.

BIO-1 (c) Temporary sediment retention ponds shall be constructed downstream of construction sites that are located in the riverbed under the following circumstances: (1) the construction site contains flowing or ponded water that drains off-site into the undisturbed streamflow or ponds, as allowed for certain areas under Item (a) above; or (2) streamflow is diverted around the construction site, but the work is occurring in the period November 1st through April 15th when storm flows could inundate the construction site. The sediment ponds shall be constructed of riverbed material and shall prevent sediment-laden water from reaching undisturbed ponds or streamflows. To the extent feasible, ponds shall be located in barren or sandy river bottom areas devoid of existing riparian scrub, riparian woodland, or aquatic habitat. The ponds shall be maintained and repaired after flooding events, and shall be restored to pre-construction grades and substrate conditions within 30 days after

construction has ended at that particular site. The location and design of sediment retention ponds shall be included in the Storm Water Pollution Prevention Plan (SWPPP) prepared by the project applicant for all construction activities that require a NPDES General Construction Activity Storm Water Permit.

BIO-1 (d) Installation of structures shall not impair water flow. Bottoms of temporary culverts shall be placed at or below channel grade. Bottoms of permanent culverts shall be placed below channel grade.

BIO-1 (e) Water containing mud, silt, or other pollutants from construction activities shall not be allowed to enter a flowing stream or placed in locations that may be subject to normal storm flows during the period November 1st through April 15th.

BIO-1 (f) Vehicles shall not be driven or equipment operated in areas of ponded or flowing water, or where wetland vegetation, riparian vegetation, or aquatic organisms may be destroyed, except as otherwise provided for in the 404 permit or 1603 agreement.

BIO-1 (g) Silt settling basins, installed during the construction process, shall be located away from areas of ponded or flowing water to prevent discolored, silt-bearing water from reaching areas of ponded or flowing water during normal flow regimes.

BIO-1 (h) If a stream channel has been altered, the low flow channel shall be returned as nearly as practical to pre-project topographic conditions.

BIO-1 (i) Temporary structures and associated materials not designed to withstand high seasonal flows shall be removed to areas above the high water mark before such flows occur.

BIO-1 (j) Staging/storage areas for construction equipment and materials shall be located outside of the ordinary high water mark.

BIO-1 (k) Any equipment or vehicles driven and/or operated within or adjacent to the stream shall be checked and maintained daily, to prevent leaks of materials that if introduced to water could be deleterious to aquatic life.

BIO-1 (l) Stationary equipment such as motors, pumps, generators, and welders will not be located within the riverbed construction zone.

BIO-1 (m) The project applicant shall use best efforts to ensure that no debris, bark, slash sawdust, rubbish, cement or concrete or washing thereof, oil, petroleum products, or other organic material from any construction, or associated activity of whatever nature, shall be

allowed to enter into, or be placed where it may be washed by rainfall or runoff into, the Santa Clarita River or Castaic Creek. When construction operations are completed, any excess materials or debris shall be removed from the work area.

BIO-1 (n) No equipment maintenance shall be conducted within 50 feet (15 meters) of a watercourse.

BIO-2 (a) Prior to initiating construction, all construction sites and access roads within the riverbed, as well as all riverbed areas within 91 meters (300 feet) of the construction site and access road, shall be inspected by a qualified biologist for the presence of the unarmored threespine stickleback, arroyo chub, Santa Ana sucker, arroyo toad, two-striped garter snake, and southwestern pond turtle. The USACE and the CDFG shall be notified of the inspection and shall have the option of attending. If either agency is not represented, the biologist shall file a written report of the inspection with the agency not in attendance within 14 days of the survey and no sooner than 30 days prior to any construction work in the riverbed.

BIO-2 (b) Construction work areas and access roads shall be cleared of the species listed above immediately before the prescribed work is to be carried out, immediately before any equipment is moved into or through the stream or habitat areas, and immediately before diverting any stream water. The removal of such species shall be conducted by a qualified biologist using procedures approved by the USACE and CDFG, and with the appropriate collection and handling permits. Species shall be relocated to nearby suitable habitat areas. A plan to relocate these species shall be submitted to the USACE and CDFG for review and approval no later than 30 days prior to construction. This plan can also be included in the Verification Request Letters submitted to the USACE and CDFG for individual project approvals. Under no circumstances shall the unarmored three-spine stickleback be collected or relocated, unless USFWS personnel or their agents implement this measure.

BIO-2 (c) All stream flows traversing a construction site or temporary access road shall be diverted around the site and under access roads (using temporary culverts or crossings that allow fish passage). A temporary diversion channel shall be constructed using the least-damaging method possible, such as blading a narrow pilot channel through an open, sandy river bottom. The removal of wetland and riparian vegetation to construct the channel shall be avoided to the greatest extent feasible. The temporary channel shall be connected to a natural channel downstream of the construction site prior to diverting the stream. The integrity of the channel and diversion shall be maintained throughout the construction period. The original stream channel alignment shall be restored after construction, provided suitable

conditions are present at the work site after construction. A temporary stream diversion plan shall be included in the Verification Request Letters submitted to the USACE and CDFG for individual project approvals.

BIO-2 (d) A qualified biologist shall be present when any stream diversion takes place, and shall patrol the areas both within, upstream, and downstream of the work area to rescue any species stranded by the diversion of the stream water. Species that are collected shall be relocated to suitable downstream of the work area.

BIO-3 (a) The removal of any riparian habitat suitable for breeding, nesting, foraging, and temporary usage during migration by the above species from the project footprint (i.e., boundaries of temporary and permanent impacts) shall be mitigated through the removal of exotic species from an area of existing similar habitat. The requirement for removing exotic species from existing habitat shall follow the replacement ratios and timing requirements in BIO-1. Existing habitat to be weeded as mitigation for the loss of riparian habitat suitable for the above species must be located adjacent to habitat occupied by the above species and infested with invasive weeds. If weed removal is used for mitigation for sensitive-species habitat replacement, the weed removal must result in habitat conditions suitable for the affected sensitive species. The final exotic removal plans for impacts to these types of habitats shall be reviewed by the USACE and CDFG as described in BIO-1.

BIO-3 (b) Beginning 30 or more days prior to the removal of any suitable riparian habitat that will occur during the riparian bird breeding and nesting season of March 15 through August 1, the project applicant shall arrange for weekly bird surveys to detect the above riparian bird species in the habitats to be removed, and any other such habitat within 91 meters (300 feet) of the construction work areas. The surveys shall be conducted by a qualified biologist using CDFG and/or USFWS survey protocols. The surveys shall continue on a weekly basis, with the last survey being conducted no more than 7 days prior to the initiation of construction work.

In the event that one of the species listed above is observed in the habitats to be removed or in other habitats within 91 meters (300 feet) of the construction work areas, the project applicant has the option of delaying all construction work in the suitable habitat or within 91 meters (300 feet) of the suitable habitat until after August 1, or continuing the surveys to locate any nests. If an active nest is found, clearing and construction within 91 meters (300 feet) of the nest shall be postponed until the nest is vacated and juveniles have fledged,

and when there is no evidence of a second attempt at nesting. Limits of construction to avoid a nest site shall be established in the field with flagging and stakes or construction fencing. Construction personnel shall be instructed on the ecological sensitivity of the area.

Locating and determining the status of a nest shall be performed in accordance with approved procedures by the USFWS and CDFG, including the possible need for an endangered species permit to accurately observe and monitor a nest of a listed or proposed species. The USACE and CDFG shall be notified at least 14 days prior to the first scheduled survey and shall have the option of attending. Results of the surveys, including surveys to locate nests, shall be provided to the USACE and CDFG no later than 5 days prior to construction. The results shall include a description of any nests located and measures to be implemented to avoid nest sites. No surveys will be necessary if the work is completed outside the riparian bird breeding and nesting season (i.e., from August 1 through March 15).

BIO-3 (c) The project shall use best efforts to restrict public access into the bottom of the Santa Clara River adjacent to the project site that could adversely affect sensitive fish and wildlife resources, particularly listed or proposed species. These actions shall include, among other things, posting signs identifying an ecologically sensitive area, promoting public education and awareness of such ecological sensitivities, coordinating with the City of Santa Clarita on the placement of trails and public access routes to and along the river to avoid conflicts with sensitive biological resources, and the maintenance of fences and barricades to prevent unauthorized or unrestricted access to the river bottom.

BIO-20 Thirty days prior to construction activities, a qualified biologist shall conduct a survey to determine if the burrowing owl is present at the site, and the nesting status of the individuals at the site. If nesting is not occurring, construction work can proceed after any owls have been evacuated from the site using CDFG-approved burrow closure procedures. If nesting is occurring, construction work shall be delayed until fledglings have left the nest. Preconstruction surveys shall be conducted only in areas dominated by field crops and grassland. Results of the surveys and relocation efforts shall be provided to CDFG.

BIO-21 Thirty days prior to construction activities in all riparian areas within or adjacent to the riverbed, a qualified biologist shall conduct a survey to determine if any tri-colored blackbirds are present at the site, and the status of nesting. If no nesting is occurring, construction work can proceed. If nesting is occurring, construction work shall be delayed until fledglings have left the nest. Results of the survey shall be provided to CDFG. If a

riparian or wetland habitat used by blackbirds for nesting is to be removed, it shall be replaced according to the procedures in the NRMP.

BIO-22 Thirty days prior to construction activities in all riparian areas within or adjacent to the riverbed, a qualified biologist shall conduct a survey to determine if any of the following raptors are nesting in large trees: long-eared owl, white-tailed kite, northern harrier, and Cooper's hawk. If nesting is not occurring, construction work can proceed. If an active nest is present, construction work shall be delayed until fledglings have left the nest. Results of the surveys and relocation efforts shall be provided to CDFG. If an area of riparian woodland used by raptors for nesting is to be removed, it shall be replaced according to the procedures and replacement ratios for such woodlands described in Mitigation Measure BIO-1.

3.9 Special-Status Species

The following section addresses special-status biological resources observed, reported, or having the potential to occur in the study area. These resources include plant and wildlife species that have been afforded special status and/or recognition by federal and state resource agencies, as well as private conservation organizations. In general, the principal reason an individual taxon (species, subspecies, or variety) is given such recognition is the documented or perceived decline or limitations of its population size or geographical extent and/or distribution resulting, in most cases, from habitat loss. In addition, special-status biological resources include vegetation types and habitats that are either unique, of relatively limited distribution in the region, or of particularly high wildlife value. These resources have been defined by federal, state, and local government conservation programs.

3.9.1 Affected Environment

Vegetation Types

Fremont cottonwood riparian forest is considered a special-status or rare vegetation type by the CNDDDB (CDFG, 2002). Riparian habitats, such as this one, are considered a high priority for preservation due to their decline throughout Southern California and capacity to support rare and endangered species. Fremont cottonwood riparian forest in the study area is a moderate- to high-quality riparian system that has a potential to support endangered and threatened species.

Plant Species

Twelve special-status plant species are known to occur in the project region. A brief description of the special-status plant species known from the project region is listed below alphabetically according to the scientific name.

The focused special-status plant survey (conducted on April 25 and May 15 and 16, 2003) located one population of Peirson's morning glory that consisted of approximately 38 plants on a berm, between Henry Mayo Parkway and SR 126. No other special-status plant species were observed during the focused survey.

Nevin's Barberry (*Berberis nevinii*)

Nevin's Barberry is a federal and state endangered and California Native Plant Society (CNPS) List 1B species that typically blooms between April and June. This evergreen shrub occurs in sandy and gravelly soils in coastal sage scrub, riparian scrub, cismontane woodland, and chaparral below 850 meters (2,700 feet) above mean sea level (msl). This species is known to occur in Los Angeles, Riverside, San Bernardino, and San Diego Counties. This species occurs in San Francisquito Canyon in the vicinity of the study area. This species was not observed during the general or focused surveys of the study area and is not expected to occur due to limited amount of suitable habitat or substrate onsite.

Club-Haired Mariposa Lily (*Calochortus clavatus* ssp. *clavatus*)

The club-haired mariposa lily is a CNPS List 4 species. This species is a long-stemmed, perennial bulb found from San Luis Obispo County extending into Ventura and northwest Los Angeles Counties typically found below 1,300 meters (4,300 feet) above msl that blooms between March and May. This subspecies has been noted more frequently in the Liebre Mountains than the slender mariposa lily (*Calochortus clavatus* var. *gracilis*), which is extremely similar in appearance. The club-haired mariposa lily differs from the slender mariposa lily by its coarse, zig-zag stem that is 5 to 10 decimeter (dm) in height and a corolla with petals that are 40 to 50 millimeters (mm) (1.6 to 2.0 in) long. In the Liebre Mountains, this subspecies has been recorded in Mint Canyon, Bouquet Canyon, Texas Canyon, Osito Canyon, Red Mountain, Warm Springs Mountain, Castaic Canyon, Agua Dulce Canyon, Bee Canyon (adjacent to Soledad Canyon), Elizabeth Lake Canyon, and Newhall. This species was not observed during the general or focused surveys of the study area and is not expected to occur due to limited amount of suitable habitat or substrate onsite.

Slender Mariposa Lily (*Calochortus clavatus* var. *gracilis*)

The slender mariposa lily is a federal species of concern and a CNPS List 1B species. This species is a short-stemmed, perennial herb found in the western portion of the San Gabriel and the Liebre mountains that typically blooms between March and May. This variety has a bright yellow flower with petals 30 to 40 mm (1.2 to 1.6 in) long and a sparsely hairy nectary surface. In addition, the plants usually have a straight, rather than a zig-zag stem, typical of subspecies *C. c. clavatus*. This variety is found generally in openings of chaparral and coastal sage scrub at lower elevations (below 1,524 meters [5,000 feet] above msl). In the Liebre Mountains, this species has been recorded in upper San Francisquito Canyon, Bear Canyon (Red Rock Mountain area), Bee Canyon (adjacent to Soledad Canyon), and Osito Canyon. This species was not observed during the general or focused surveys of the study area and is not expected to occur due to limited amount of suitable habitat or substrate onsite.

Plummer's Mariposa Lily (*Calochortus plummerae*)

The Plummer's mariposa lily is a federal species of concern and a CNPS List 1B species. This late-blooming mariposa lily is found in dry, rocky areas of alluvial fan sage scrub, chaparral, coastal sage scrub, and lower coniferous forest habitats. This species has been found from the Simi Valley and along the base to mid-elevational areas (below 1,524 meters [5,000 feet] above msl) of the San Gabriel, San Bernardino, and San Jacinto mountains. It is also known to occur in some of the foothill areas, including the Chino Hills and the northern Santa Ana Mountains. This species typically has a pinkish corolla with a purple margin at the tip of the petals. The inside surface of the petals is covered with dense yellow hairs. This species typically blooms between May and July. The Plummer's mariposa lily is very uncommon in the Liebre Mountains. It is currently known only from alluvial fans above Bee Canyon wash, near Soledad Canyon. This species was not observed during the general or focused surveys of the study area and is not expected to occur due to limited amount of suitable habitat or substrate onsite.

Peirson's Morning Glory (*Calystegia peirsonii*)

The Peirson's morning glory is a federal species of concern and a CNPS List 4 species. This species is typically found in openings in coastal sage scrub and chaparral, and is known to germinate after burns below 1,500 meters (4,950 feet) above msl. This species is a sprawling, perennial herb found predominately in the Liebre Mountains, but also in the mid-to west portion of the San Gabriel Mountains and on the Palos Verdes Peninsula. This species differs from *C. macrostegia* by the triangular, slightly glaucous leaves often slightly bluish in color, and with the sepal-like bracts that are attached to the calyx being elliptical or

oval. In the Liebre Mountains, Peirson's morning glory is widely distributed and recorded in San Francisquito Canyon, Mint Canyon, upper Pine Canyon, Bouquet Canyon, east of Bouquet Reservoir, Texas Canyon, Sierra Pelona ridgeline, Soledad Canyon, Portal Ridge, Fish Canyon, the summit of Warm Springs Mountain, Lake Hughes, Osito Canyon, Knapp Ranch, Vasquez Canyon, Bee Canyon (adjacent to Soledad Canyon), and Clearwater Canyon. A small population of this species was observed onsite within a berm located between Henry Mayo Parkway and SR 126, though a limited amount of suitable habitat was observed onsite.

San Fernando Valley Spineflower (*Chorizanthe parryi* var. *fernandina*)

The San Fernando Valley spineflower is a federal candidate for listing and a CNPS List 1B species. This species is a small, decumbent plant with white flowers. It is distinguished from the Parry's spineflower in having straight, rather than hooked, involucral teeth. Historically, it was thought that the habitat for this species was in sandy washes. However, a 1999 discovery found the species in annual grassland and grassland-sage scrub ecotonal habitats. These plants were found on mineral soils with reduced annual cover and well developed cryptogamic crusts. This species typically blooms between April and June. This species was historically known from valleys of Los Angeles and Orange Counties at elevations below 1,220 meters (4,000 feet) above msl. These sites included: a sandy wash in Castaic, Elizabeth Lake, the mouth of Little Tujunga wash, the Chatsworth area, Santa Ana, Ballona Creek, and the area near the lower San Fernando Dam. This species was thought to be extinct, until the discovery in 1999 of a population on Laskey Mesa in the Simi Hills. This species was also verified in the Newhall Ranch area in 2000. This species was not observed during the general or focused surveys of the study area and is not expected to occur due to limited amount of suitable habitat (e.g., presence of dense annual vegetation) or substrate (e.g., apparent lack of well-developed cryptogamic crusts) onsite.

Slender-horned spineflower (*Dodecahema leptoceras*)

The slender-horned spineflower is a federal and state endangered species and a CNPS List 1B species. This very small annual spineflower occurs in alluvial washes and is usually restricted to older bench habitats in Riversidian alluvial fan sage scrub at elevations below 760 meters (2,500 feet) above msl. It typically blooms between April and June. It is usually found on open sandy areas associated with leathery spine flower (*Chorizanthe coriacea*) and loeflingia (*Loeflingia squarrosa*). These benches are often very open with well-developed cryptogamic crusts. The slender-horned spineflower is known from the Santa Ana River, San Jacinto River, Cajon Wash, Bautista Canyon, Kolb-Arroyo Seco, and Temescal Creek in

the San Bernardino-Riverside area. It is also known from Tujunga wash and Bee Canyon in Los Angeles County. The only known locality in the Liebre Mountains is in Bee Canyon, near the confluence of Soledad Canyon. There are also historic collections from the Newhall area (Boyd, 1999). This species was not observed during the general or focused surveys of the study area and is not expected to occur due to limited amount of suitable habitat or substrate onsite.

Palmer's Grapplinghook (*Harpagonella palmeri*)

The Palmer's grapplinghook is a CNPS List 2 species. Clay vertisols with open, grassy slopes or open, coastal sage scrub below 830 meters (2,750 feet) above msl are typical habitats for this inconspicuous annual. This species was not observed during the general or focused surveys of the study area and is not expected to occur due to a lack of suitable habitat or substrate onsite.

Los Angeles Sunflower (*Helianthus nuttallii* ssp. *parishii*)

The Los Angeles sunflower, had been considered extinct until 2004, because it had not been observed since 1937. Los Angeles sunflower is a wetland indicator species that has typically been observed in marshes and swamps (coastal salt and freshwater), but potential habitat may include the margins of linear drainages (such as the Santa Clara River) as well. This sunflower is a perennial plant that occurs below 500 meters (1,650 feet) above msl and is expected to bloom from August to October. This plant was reportedly discovered in the Newhall area of the Santa Clara River in September 2002. However, due to similarities in morphological characteristics between several species and subspecies of *Helianthus* with the potential to occur in the project region, the specific taxonomic identity of this single population of plants has not been officially confirmed at this time. The Los Angeles sunflower is currently considered a CNPS List 1A species. However, if the plant discovered in the Newhall area is confirmed as ssp. *parishii*, it is likely that this plant would be moved to CNPS List 1B and listed as Endangered under the state or federal Endangered Species Act (ESA).

The initial vegetation surveys for this project performed in 1999 occurred during the expected blooming period of the Los Angeles sunflower (e.g., September 20 and October 4). The Los Angeles sunflower was not identified onsite during the 1999 general vegetation surveys, though it should have been identifiable if present. The annual sunflower (*Helianthus annuus*) was recorded at that time. Though in the same Genus, it is not a species that may be easily confused with the Los Angeles sunflower. The focused sensitive plant

species surveys onsite were performed in April and May 2000, which was outside the typical blooming period for the Los Angeles sunflower species, and would not have been expected to observe the species (if present) at that time. This species is not expected to occur due to limited amount of suitable habitat or substrate onsite. This species was not observed during the general or focused surveys of the study area and is not expected to occur due to the limited amount of suitable habitat or substrate onsite.

Short-joint Beavertail (*Opuntia basilaris* var. *brachyclada*)

The short-joint beavertail is a federal species of special concern and is listed as a CNPS List 1B species that typically blooms between April and June. This subspecies of beavertail cactus is found in chaparral, Joshua tree woodland, desert scrub, and pinyon juniper woodland in the San Gabriel and San Bernardino mountain ranges between 425 meters (1,400 feet) and 1,800 meters (5,900 feet) above msl. This species is known to occur in the Angeles National Forest. This species was not observed during general or focused surveys in the study area. Furthermore, the short-joint beavertail is not expected to occur in the study area due to lack of suitable chaparral and desert woodland habitat.

California Orcutt Grass (*Orcuttia californica*)

California Orcutt grass is a federal and state endangered species and a CNPS List 1B species. Vernal pools below 660 meters (2,200 feet) above msl are the preferred habitat of this inconspicuous prostrate grass. California Orcutt grass tends to grow in wetter portions of the vernal pool basins, but this annual does not show much growth until the basins become somewhat desiccated. This species was not observed during the general or focused surveys of the study area and is not expected to occur due to a lack of suitable habitat or substrate onsite.

Rayless Ragwort (*Senecio aphanactis*)

The rayless ragwort is a CNPS List 2 species that typically blooms between January and April. This annual herb grows in alkaline soils in cismontane woodland and coastal sage scrub below 800 meters (2,650 feet) above msl. The rayless ragwort is known from Southern California in several counties including Los Angeles County. This species is known to historically occur in drying alkaline flats in Saugus approximately 8.0 km (5 miles) from the study area. This species was not observed during general or focused surveys in the study area; furthermore, rayless ragwort is not expected to occur in the study area due to lack of suitable habitat.

Wildlife Species

Fifty special-status wildlife species are known to occur in the region. A brief description of these special-status wildlife species and their potential to occur in the study area is discussed below. Note that they are grouped by taxon and listed alphabetically according to their scientific name. Unless otherwise stated, the potential for a species to occur is considered the same regardless of whether the species is nesting/denning, foraging, or migrating through the habitat onsite.

Invertebrates

Quino Checkerspot butterfly (Euphydryas editha quino)

The Quino checkerspot is federally listed as endangered. The Quino checkerspot is associated with meadow habitats or clearings in scrub or chaparral communities often characterized by clay soils with low-growing herbaceous annuals including the larval host plants, dwarf plantain (*Plantago erecta*), and owl's clover (*Castilleja exserta*). These plants tend to be absent, or in very low densities, in disturbed areas supporting tall, non-native annual grasses and mustards. In undisturbed habitats, the host plants typically exhibit a very patchy distribution. Quino checkerspot larvae are "grazers" (i.e., they move from one host plant to another as they feed). Consequently, they require dense stands of one or both of the host plants. It is believed that high host-plant density is especially important in the case of *Plantago*-feeding colonies of Quino checkerspots (Ballmer and Hawks, 1997). Currently, the Quino checkerspot is known from only a few locations in southern San Diego County and western Riverside County in California, and northwestern Baja California (USFWS, January 25, 1999). The Quino checkerspot butterfly is not expected to occur onsite because it has not been observed in the project region for decades, and there is not suitable habitat in the study area.

Fish

Santa Ana sucker (Catostomus santaannae)

This species is a federally threatened species, and a California species of special concern. The Santa Ana sucker prefers clear, cool, rocky, and gravelly streams where it feeds on algae, diatoms, detritus, and small insect larvae. This species occurs in the Los Angeles, San Gabriel, and Santa Ana River systems and an introduced population in the Santa Clara River. Recent court decisions have resulted in the establishment of "critical habitat" for this species; however, this site is not located in or proximal to an area designated as "critical habitat" for this species. It has a patchy distribution along the Santa Clara River. In the 1970s, the Santa Ana sucker was known from the study area in the Santa Clara River between Castaic Creek and the I-5. However, it appears to be currently restricted upstream in the Santa Clara River between Bouquet Canyon Road and I-5 (San Marino Environmental

Associates, 1995). No Santa Ana Sucker was observed during surveys performed by Aquatic Consulting Services (Aquatic Consulting Services, 2002); however, the potential for the Santa Ana sucker to occur in the study area is considered to be moderate due to its known presence upstream in the Santa Clara River.

Unarmored threespine stickleback (Gasterosteus aculeatus williamsoni)

This species is a federal and state endangered species and a CDFG fully protected species. The stickleback occurs in weedy permanent pools or backwaters, and in slow-moving water along the margins of the stream. It occurs primarily in cool and clear water with mud or sand substrates. The unarmored threespine stickleback was once abundant throughout the Los Angeles Basin and is now known only in the upper Santa Clara River system and in San Antonio Creek in northern Santa Barbara County. The study area is included in the Del Valle Zone of the Santa Clara River, which was proposed for critical habitat for this species prior to the USFWS decision to refrain from designating critical habitat. The stickleback is known to be a year-round resident of the Santa Clara River from the confluence of the Santa Clara River and Castaic Creek to I-5, and a periodic seasonal resident of Castaic Creek when appropriate aquatic habitat is present (due to wet year runoff or sufficient agricultural/urban runoff) (San Marino Environmental Associates, 1995). In addition, the species is a periodic seasonal resident of San Francisquito Creek, a tributary to the Santa Clara River. Aquatic Consulting Services identified unarmored threespine stickleback at 3 of their 26 sampling points (3, 11, and 26) (Aquatic Consulting Services, 2002). Sampling point 26 was located approximately 0.81 Kilometer (0.5-mile) east of the interchange site; therefore, the potential for the unarmored threespine stickleback to occur in the study area is considered to be high.

Arroyo chub (Gila orcutti)

This species is a federal species of concern. The arroyo chub feeds on algae and prefers warm water temperatures and pool habitats with sand and mud bottoms. The chub is adapted to survive in widely fluctuating water temperatures and dissolved oxygen levels. The arroyo chub is now common at only three of its native locations: Santa Margarits and De Luz Creeks in San Diego County; Trabuco and San Juan Creeks in Orange County; and Malibu Creek in Los Angeles County (Swift et. al, 1993). The chub has also been introduced into several rivers and streams in Southern California. The arroyo chub is known to occur in this portion of the Santa Clara River (San Marino Environmental Associates, 1995). Aquatic Consulting Services identified arroyo chub in 20 of their 26 sampling locations, including number 26 (Aquatic Consulting Services, 2002). Therefore, the potential for the arroyo chub to occur in the study area is considered to be high.

Steelhead trout (Oncorhynchus mykiss)

In Southern California, this species is a federally endangered species and a California species of special concern. The Southern steelhead is identified as one of the 15 endangered Evolutionary Significant Unit (ESUs) within its range. On February 16, 2000, the National Oceanic and Atmospheric Administration (NOAA) Fisheries designated critical habitat for 19 ESUs of West Coast salmon and steelhead. The SR-126/Commerce Center Drive portion of the Santa Clara River was included within an area designated as an ESU. In April 2002, in a "Consent Decree" the (NOAA) agreed to withdraw ESU habitat designations for 19 salmon and steelhead populations on the West Coast. However, this action does not adversely affect the protection of listed steelhead since the steelhead is still protected under the Endangered Species Act. On December 10, 2004, the NOAA, proposed critical habitat designations for 5 ESUs of steelhead in California that are listed as Threatened or Endangered.

Southern steelhead are winter-run steelhead that persist in streams that have warm, dry lower reaches on the coastal plain, which present substantial migration passage problems to and from distant headwater spawning and rearing habitats. Most coastal streams from San Luis Obispo County southward are considered potential "southern steelhead streams" by the NOAA.

Southern steelhead have received little study, although the life-history characteristics of steelhead, in general, are well known. Juvenile steelhead remain in fresh water 1 to 4 years (usually 1 to 3 years in California) and then spend 1 to 5 years (usually 2 to 3 years in California) in the ocean (NOAA website, 2002). Southern steelhead, however, probably spend less time in fresh water because of the often inhospitable conditions in the lower reaches of Southern California streams; they may, therefore, migrate to the ocean or have greater dependence on coastal lagoons during their first year. Because of frequent droughts in Southern California, the streams may be inaccessible during some years so that adult steelhead are forced to spend additional years in the ocean before having a chance to spawn (NOAA website, 2002).

It has been surmised that steelhead in Southern California also rely heavily on estuaries because many of their streams seasonally had very low flows or dried completely in the alluvial fan areas. In addition, although many lowland stream areas were perennial, they also may have dried out during the driest years. Large numbers of juvenile southern steelhead, reportedly, could often be caught in coastal lagoons in the 1930s and earlier; however, estuaries are now typically much shallower and warmer than they were at that time (NOAA website, 2002).

Major streams in Southern California originate in the coastal mountains and often cross broad alluvial areas before flowing into the sea. These low-elevation alluvial flats present inhospitably warm and fluctuating temperatures, and the streams themselves may be intermittent. The higher-elevation headwaters, therefore, are the primary spawning and rearing areas for steelhead today, although lowland reaches once may have been important, especially in wet years. It is likely that the largest steelhead populations historically occurred in streams where the upstream spawning and rearing habitats were closest to the ocean, such as in the Ventura, Santa Clara and Santa Ynez Rivers (NOAA website, 2002).

No Southern California steelhead trout were observed during surveys performed by Aquatic Consulting Services (Aquatic Consulting Services, 2002). Therefore, the potential for the steelhead trout to occur in the study area is considered to be low. If during preconstruction surveys to identify special status fish species it is determined that steelhead are present in the area then an informal consultation will be made with the NOAA concerning this find regarding the potential impacts to the steelhead trout.

Amphibians

Arroyo toad (*Bufo microscaphus californicus*)

This species is a federally endangered species and a California species of special concern. Prior to a recent court decision remanding the action, the SR 126/ Commerce Center Drive project site was located within an area designated as “critical habitat” for the arroyo toad. The arroyo toad, a subspecies of the southwestern toad, is restricted to rivers with shallow, gravelly pools adjacent to sandy terraces. It forages on sandy terraces with complete canopy coverage by cottonwoods or willows. Adults excavate shallow burrows on terraces where they shelter during the day and during the dry season. This species historically occurred from San Luis Obispo to San Diego Counties along most major rivers. Currently, they are restricted to very small remnant populations in the headwaters of those rivers. Most of the remaining populations occur in the national forests. The arroyo toad is known to be present along Castaic Creek, both above and below the dam at Castaic Lake, on Department of Water and Power land and in the Angeles National Forest (USFWS, 1999). In 1994, this species was observed in the Santa Clara River, approximately 250 meters (820 feet) east of I-5 (CDFG, 2002). Impact Sciences reports sightings made in 2001 of adult arroyo toads in the Santa Clara River at the confluence of San Francisquito Creek (Impact Sciences, Inc., 2001). Aquatic Consulting Services identified arroyo toad tadpoles in 3 of their 26 sampling locations, including number 26 (Aquatic Consulting Services, 2002). Although adults of this species have not recently been found between I-5 and its confluence with Castaic Creek, it is known to occur upstream from the study area in both the Santa Clara River west of the I-5 and Castaic Creek (San Marino Environmental Associates, 1995; Impact Sciences, 2001;

Aquatic Consulting Services, 2002). Therefore, the potential for the arroyo toad to occur in the Commerce Center Drive interchange site is considered to be high (foraging) to moderate (breeding).

Western spadefoot (Scaphiopus hammondi)

The western spadefoot is a federal species of concern and a California species of special concern. The California range of this toad is the Central Valley and adjacent foothills, and the Coast Ranges from Point Conception, Santa Barbara County south to San Diego County (Stebbins, 1985; Zeiner et al., 1988). This species is typically a lowland species and is found in washes, river floodplains, alluvial fans, playas, and alkali flats (Stebbins, 1985). However, this species has been documented at elevations above 1,219 meters (4,000 feet) in the Chihuahua Valley and Boulevard areas of San Diego County (Jeff Galizio, 1999). It primarily inhabits grasslands, but does occur in other sparsely vegetated habitats (Zeiner et al., 1988). This species is rarely observed outside the breeding season. They breed in vernal pools and other seemingly ephemeral water bodies. The western spadefoot has declined substantially throughout its range; for example, greater than 80 percent of formerly occupied western spadefoot habitat from the Santa Clara River Valley, Los Angeles and Ventura Counties southward has been lost (Jennings and Hayes, 1994). The study area provides potentially suitable habitat for the western spadefoot, and it may occur. Aquatic Consulting Services did not identify this species in their 26 sampling locations (Aquatic Consulting Services, 2002). This species is considered to be present but uncommon in the Santa Clara River valley; therefore, the potential for the western spadefoot to occur in the Commerce Center Drive interchange site is considered to be moderate.

California red-legged frog (Rana aurora draytonii)

The California red-legged frog is a federally threatened species and a California species of special concern. This species requires riparian areas with deep ponds, or slow-moving waters that support dense stands of emergent vegetation such as cattails at the edge of the banks (Jennings, 1988). Adults feed primarily on aquatic and terrestrial invertebrates. There are historical records of the California red-legged frog in the Santa Clara River in Soledad and Placerita Canyons (CDFG and USACE, 1999). The California red-legged frog has not been observed in the Santa Clara River since the 1970s despite recent survey efforts. San Marino Environmental Associates surveyed both the entire San Francisquito and Santa Clara River drainages for this species (San Marino Environmental Associates, 1995). No evidence of California red-legged frogs was found; neither tadpoles nor adults were located. In summer 1999, a small population was reported in San Francisquito Canyon north of Santa Clarita by the U.S. Forest Service. Robert Fisher found that this population had increased to around 200 during surveys performed in the summer of 2002. Impact Sciences and Aquatic

Consulting Services did not observe any evidence of this species during focused surveys throughout the river (Impact Sciences, Inc., 2001; Aquatic Consulting Services, 2002). The project site provides habitat with a low potential to support California red-legged frog.

Reptiles

Silvery legless lizard (Anniella pulchra pulchra)

The silvery legless lizard is a federal species of concern and a California species of special concern. It is a small, secretive lizard that spends most of its life beneath the soil, under stones, logs, debris, or in leaf litter. The silvery legless lizard inhabits areas with moist sandy soil, including dry washes, woodlands, riparian, and scrub communities at elevations ranging from sea level to about 1,524 meters (5,000 feet) above msl (Stebbins, 1985). Though new focused surveys to identify the presence/absence of this species were not conducted for this report, the results of surveys performed by Aquatic Consulting Services in 2000 for fish, reptile, and amphibian species within this portion of the river were incorporated (Aquatic Consulting Services, 2002). The study area does provide potentially suitable habitat for this species. Therefore, the potential for the silvery legless lizard to occur in the study area is moderate. To conform to the terms and conditions of the NRMP, additional focused surveys for sensitive species (including the silvery legless lizard) will be conducted to obtain VRL approval from the USACE and CDFG.

Western pond turtle (Clemmys marmorata)

This species is a federal species of concern and a California species of special concern. The western pond turtle occurs primarily in freshwater rivers, streams, lakes, ponds, vernal pools, and seasonal wetlands; and it requires basking sites such as logs, banks, or other suitable areas above water level. The western pond turtle occurs from Monterey Bay south through the Coast Ranges to northern Baja California (Holland, 1991). The current range is similar to the historic range, but populations have become fragmented by agriculture and urban development. The western pond turtle is known to occur in the Santa Clara River between its confluence with Castaic Creek and I-5 (San Marino Environmental Associates, 1995). Impact Sciences and Aquatic Consulting Services both reported observations of this species proximal to the interchange site; therefore, the potential for the western pond turtle to occur in the study area is considered to be high (Impact Sciences, Inc., 2001; Aquatic Consulting Services, 2002).

Coastal western whiptail (Cnemidophorus tigris multiscutatus)

The coastal western whiptail is a federal species of concern. It is a moderately large, slender lizard typically found in open scrub, chaparral, and woodland communities in semiarid areas or where vegetation is sparse. The species is restricted to the western coast of North America

from Ventura County, south through the northern two-thirds of the Baja California peninsula. This species is expected to occur in undisturbed terraces of native habitat upland of the southern banks of the Santa Clara River; however, the study area provides limited suitable habitat. The potential for the coastal western whiptail to occur in the study area is considered to be moderate because it is expected to occur in habitat adjacent to the study area.

San Bernardino ringneck snake (Diadophis punctatus modestus)

The San Bernardino ringneck snake is a federal species of concern. It inhabits scrub, chaparral, native grassland, and woodland communities. This species is difficult to detect due to its secretive behavior. It occurs in elevations from sea level to 2,133 meters (7,000 feet) above msl (Stebbins, 1985). The study area provides potentially suitable habitat for this species. Therefore, the potential for the San Bernardino ringneck snake to occur in the study area is considered to be moderate.

Coastal rosy boa (Lichanura trivirgata)

The coastal rosy boa is a federal species of concern. The rosy boa is a rather secretive snake that is found from the deserts to the coast, but is generally uncommon throughout its Southern California range. The coastal subspecies occurs from Los Angeles County south into Baja, typically inhabiting rocky, chaparral-covered slopes and canyons up to about 1,372 meters (4,500 feet) above msl. Population declines in this subspecies are attributable to habitat loss and collecting, and it is now quite rare in much of its historic range. Although the coastal rosy boa was historically recorded in the Santa Clarita region, there are no recent records of it in the Santa Clara River (CDFG and USACE, 1999). The study area provides a limited amount of potentially suitable habitat for the coastal rosy boa. Therefore, the potential for the coastal rosy boa to occur in the study area is considered to be low.

Coast horned lizard (Phrynosoma coronatum)

The coast horned lizard is a federal species of concern and a California species of special concern. It is a small, spiny, somewhat rounded lizard that occurs primarily in open or sparse scrub and chaparral communities. This species prefers loose, friable soil for burrowing. Three factors have contributed to its decline: loss of habitat, overcollecting, and the introduction of exotic ants. In some places, especially adjacent to urban areas, the introduced ants have displaced the native species upon which the lizard feeds (Hix, 1990). This species is expected to occur in undisturbed terraces of native habitat upland of the southern banks of the Santa Clara River; however, the study area provides limited suitable habitat. Therefore, the potential for the coast horned lizard to occur in the study area is considered to be moderate because it is expected to occur in habitat adjacent to the study area.

Coast patch nose snake (Salvadora hexalepis virgultea)

The coast patch nose snake is a federal species of concern and a California species of special concern. It is a moderate-sized, active snake that inhabits open sandy areas with rocky outcrops in coastal sage scrub and chaparral habitats. The range of the coast patch nose snake, one of three recognized subspecies, is San Luis Obispo County south into Baja California. It occurs from sea level to about 2,133 meters (7,000 feet) above msl (Stebbins, 1985). Although the coast patch nose snake was historically recorded in the Santa Clarita region, there are no recent records of it in the Santa Clara River (CDFG and USACE, 1999). The study area provides a limited amount of suitable habitat for the coast patch nose snake. Therefore, the potential for the coast patch nose snake to occur in the study area is considered to be low.

Two-striped garter snake (Thamnophis hammondi)

The two-striped garter snake is a federal species of concern and a California species of special concern. It occurs primarily in wetlands and is found in freshwater marsh and riparian habitats with perennial water. The two-striped garter snake feeds on small fishes, frogs, and tadpoles. The two-striped garter snake occurs from Monterey County south to Rio Rosario in Baja California. This species was not observed during surveys conducted by San Marino Environmental Associates; however, it has been previously observed in the study area in the Santa Clara River between its confluence with Castaic Creek and I-5 (San Marino Environmental Associates, 1995). Aquatic Consulting Services did not observe this species at any of their sampling points; however, Impact Sciences reported observations of this species within the Santa Clara River near the Old Road crossing and the confluence with Castaic Creek (Aquatic Consulting Services, 2002; Impact Sciences, Inc., 2001). Therefore, the potential for the two-striped garter snake to occur in the study area is considered to be high.

Birds

Cooper's hawk (Accipiter cooperii)

The Cooper's hawk is a California species of special concern. Both resident and migratory populations exist in Los Angeles County. Wintering Cooper's hawks are often seen in wooded urban areas and native woodland communities. Preferred nesting habitats are oak and riparian woodlands dominated by sycamores and willows. Cooper's hawks in the region prey on small birds and rodents that live in woodland and occasionally scrub and chaparral communities. Cooper's hawks were observed rarely along the Santa Clara River in 1999 and may have nested just east of I-5 (Guthrie, 1999). W.M. Keck identified a single Cooper's hawk in both Area 1 (Santa Clara River from Old Road to the mouth of Castaic Creek) and Area 5 (Castaic Creek), and each sighting occurred on only one survey day in those areas

(W.M. Keck, 2001). The Cooper's hawk is expected to occur in the study area during the winter season and migration, but its potential to occur in the study area to nest is considered to be low. The potential for the Cooper's hawk to occur in the study area during the winter season for foraging is considered to be high.

Sharp-shinned hawk (Accipiter striatus)

The sharp-shinned hawk is a California species of special concern. It is a relatively uncommon species throughout Los Angeles County that prefers woodland communities, but can also be found in virtually any habitat as it passes through the area during migration. Oak and riparian areas are preferred habitats. Some individuals probably winter in the county, while others continue to northern South America. The sharp-shinned hawk is known to occur along the Santa Clara River in the study area (CDFG and USACE, 1999). The W.M. Keck focused bird surveys did not record observations of this species in Areas 1 or 5 (W.M. Keck, 2001). Therefore, the potential for the sharp-shinned hawk to occur in the study area is considered to be high potential for foraging, but no potential to nest in the study area.

Tricolored blackbird (Agelaius tricolor)

The tricolored blackbird is a federal species of concern and a California species of special concern. These colonially nesting birds prefer to breed in marsh vegetation of bulrushes and cattails and have also been recorded nesting in willows, blackberries, and mustard (Beedy et. al., 1991). During winter months, they are often found foraging in wet pastures, agricultural fields, and seasonal wetlands. Tricolored blackbirds are nomadic, wandering during the nonbreeding season and occupying colony sites intermittently (Unitt, 1984). In 1995, a colony of 200 tricolored blackbirds was observed nesting along the Santa Clara River at its confluence with Castaic Creek (CDFG and USACE, 1999). W.M. Keck identified a single tricolored blackbird in its Area 1 on only one survey day in the Santa Clara River (W.M. Keck, 2001). The potential for the tricolored blackbird to forage in the study area is considered to be high, and the potential for the tricolored blackbird to nest in the study area is considered to be moderate.

Southern California rufous-crowned sparrow (Aimophila ruficeps canescens)

The Southern California rufous-crowned sparrow is a federal species of concern and a California species of special concern. In coastal Southern California, rufous-crowned sparrows are considered fairly common in scrub communities and other habitats vegetated with grasses and widely spaced low shrubs. They also prefer slopes with rock outcroppings. This subspecies is present throughout the year in Southern California. This species was observed in upland habitats in the vicinity of the study area, on Newhall Ranch (CDFG and USACE, 1999). W.M. Keck identified four rufous-crowned sparrows in their Area 1 on only

one survey day in the Santa Clara River (W.M. Keck, 2001). Therefore, the potential for the Southern California rufous-crowned sparrow to occur in the study area is considered to be moderate because it is expected to occur in habitat adjacent to the study area.

Bell's sage sparrow (Amphispiza belli belli)

The Bell's sage sparrow is a federal species of concern and a California species of special concern. This coastal subspecies is an uncommon to fairly common local resident in the interior foothills of coastal Southern California. The Bell's sage sparrow breeds in low, dense chamise chaparral and in dry scrub communities, often with stands of cactus (Garrett and Dunn, 1981). Limited suitable habitat for this subspecies is present in the study area. The W.M. Keck focused bird surveys did not record observations of this species in Areas 1 or 5 (W.M. Keck, 2001). Therefore, the potential for the Bell's sage sparrow to occur in the study area is considered to be low.

Golden eagle (Aquila chrysaetos)

The golden eagle is a California fully protected species, a California species of special concern, and is also protected by the federal Bald Eagle Act. Habitat for this species generally consists of grasslands, deserts, savannahs, and early successional stages of forest and shrub habitats. The golden eagle has been known to forage in the study area (CDFG and USACE, 1999). The W.M. Keck focused bird surveys did not record observations of this species in Areas 1 or 5 (W.M. Keck, 2001). Therefore, the potential for the golden eagle to forage in the study area is considered to be moderate. However, the golden eagle is not expected to nest in the study area.

Long-eared owl (Asio otus)

The long-eared owl is a California species of special concern. This species is a rare resident of Los Angeles County. This species nests in oak and willow woodlands and forages in scrub and grassland communities. Long-eared owls have declined throughout California, but the most pronounced reductions have occurred in the southwestern part of the state where a minimum 55 percent decline has been documented (Bloom, 1996). The W.M. Keck focused bird surveys did not record observations of this species in Areas 1 or 5 (W.M. Keck, 2001). The study area supports potentially suitable nesting and foraging habitat for this species; however, the potential for it to forage and nest on the site is extremely low.

Ferruginous hawk (Buteo regalis)

The ferruginous hawk is a federal species of concern and a California species of special concern. Ferruginous hawks occur in Los Angeles County from mid-fall through early spring, and forage over grasslands and the ecotone between coastal sage scrub and

grasslands. The distribution of the ferruginous hawk in Los Angeles County has been greatly reduced as a result of the loss of wintering grounds. The study area provides suitable foraging habitat for this species. The W.M. Keck focused bird surveys did not record observations of this species in Areas 1 or 5 (W.M. Keck, 2001). Therefore, the potential for the ferruginous hawk to forage in the study area is considered to be moderate; and it has no potential to nest in the study area.

Swainson's hawk (Buteo swainsoni)

The Swainson's hawk is a state threatened species. This species formerly nested in Los Angeles County, but has since been extirpated as a breeding species. The Swainson's hawk forages over the grassland and ruderal communities in the County during migration to and from South America, primarily feeding on small rodents, reptiles, and some insects in these habitats. The W.M. Keck focused bird surveys did not record observations of this species in Areas 1 or 5 (W.M. Keck, 2001). The Swainson's hawk is not expected to occur in the study area for foraging or nesting, but it may occur as a rare migrant.

Northern harrier (Circus cyaneus)

The northern harrier is a California species of special concern. It is a regular winter migrant and also occasionally breeds in Los Angeles County. It can be expected at any month of the year and can be seen foraging in grassland, scrub, and riparian communities. While once a relatively common species during fall, winter, and spring in undeveloped areas of Los Angeles County, the northern harrier population is now greatly reduced and localized in distribution. The W.M. Keck focused bird surveys did not record observations of this species in Areas 1 or 5 (W.M. Keck, 2001). Therefore, the potential for the northern harrier to forage in the study area is considered to be high; but the potential for it to nest in the study area is considered to be low.

Western yellow-billed cuckoo (Coccyzus americanus occidentalis)

Formerly a rare summer resident, this species is now extirpated from much of Southern California. The state designated the western yellow-billed cuckoo as endangered in 1988. Occasional sightings in coastal Southern California suggest that a very few breeding pairs may persist despite extensive habitat loss (Unitt, 1984). Breeding yellow-billed cuckoos are restricted to extensive deciduous riparian thickets or forest with dense, low-level or understory foliage that occur along slow-moving watercourses, backwaters, or seeps. Willows are almost always a dominant component of western yellow-billed cuckoo nesting habitat. In the 1970s, this species nested in the Santa Clara River in the vicinity of the study area; however, the cuckoo has not been observed nesting in the vicinity since that time (CDFG and USACE, 1999). Two cuckoos that were considered to be migrants were

observed upstream from the study area along the Santa Clara River near the McBean bridge in 1998 (Guthrie, 1999). W.M. Keck did not identify yellow-billed cuckoo during any of their surveys in 2001 (W.M. Keck, 2001). Therefore, the potential for the western yellow-billed cuckoo to occur and to nest in the study area is considered to be low.

Western Yellow Warbler (Dendroica petechia brewsteri)

The subspecies of yellow warbler that breeds in Southern California is *D.p. brewsteri* (Dunn and Garrett, 1997). The CDFG has included this subspecies on its list of California Species of Special Concern. *D.p. brewsteri* occurs in coastal areas from northwestern Washington south to western Baja California (Dunn and Garrett, 1997). In Southern California, yellow warblers breed locally in riparian woodlands. In 1999, yellow warblers were found along the continuously wet sections of the Santa Clara River during the nesting season, and were observed in the outer dry sections during migration (Guthrie, 1999). W.M. Keck identified one or more yellow warblers during every survey day in their Area 1, and all but one survey day in Area 5 (W.M. Keck, 2001). The potential for the western yellow warbler to occur and nest in the study area is considered to be moderate. The potential for western yellow warbler migrants to occur in the study area is considered to be high.

White-tailed kite (Elanus leucurus)

The white-tailed kite is a California fully protected species. White-tailed kites, while readily observable in undeveloped portions of Los Angeles County, have begun to decline sharply in the region within the last decade. Reasons for this decline have been identified as loss of foraging habitat, roost sites, and nesting habitat. Kites typically nest in oaks, willows, and sycamores, and forage in grassland and scrub communities. White-tailed kites show strong site fidelity to nest groves and trees. The most abundant prey species of this raptor include California vole, western harvest mouse, and house mouse. In 1999, a pair of white-tailed kites successfully nested near the confluence of the Santa Clara River and Castaic Creek (Guthrie, 1999). W.M. Keck identified a single white-tailed kite in their Area 1 on only one survey day in the Santa Clara River (W.M. Keck, 2001). Therefore, the potential for the white-tailed kite to occur in the study area is considered to be high for foraging and moderate for nesting.

Southwestern willow flycatcher (Empidonax traillii extimus)

The southwestern willow flycatcher is a federal and state endangered species. This subspecies was once considered a common breeder in coastal Southern California. However, this subspecies has declined drastically due to a loss of breeding habitat and nest parasitism by brown-headed cowbirds. This species occurs in riparian habitats along rivers, streams, or

other wetlands where dense growths of willows (*Salix* sp.), baccharis (*Baccharis* sp.), arrowweed (*Pluchea* sp.), tamarisk (*Tamarix* sp.), or other plants are present, often with a scattered overstory of cottonwood (*Populus* sp.) (USFWS, 1995). A pair of southwestern willow flycatchers nested in the vicinity of study area in 1995. However, all observations in the vicinity of the study area since then have been of nonbreeding transients and migrants (CDFG and USACE, 1999). W.M. Keck did not observe willow flycatcher in their Area 1; however, they did record an individual during one survey day in Area 5 (W.M. Keck, 2001). According to Newhall Land, focused protocol surveys for this species were performed this year by Dr. Dan Guthrie. No records of this species at the site were made during this survey effort. The potential for the southwestern willow flycatcher to nest in the study area is considered to be low due to its small population in Southern California and the presence of better quality potential nesting habitat in the immediate project area. However, the willow flycatcher (including all subspecies) is expected to occur regularly in the study area as a migrant.

California horned lark (Eremophila alpestris actia)

The CDFG has included this subspecies on its list of California species of special concern. The California horned lark is found along the coast of Northern California, in the San Joaquin Valley, in the coast ranges south of San Francisco Bay, and in Southern California west of the deserts. In Southern California, this subspecies is a fairly common breeding resident in grasslands and other dry, open habitats. During the winter season, other subspecies occur in Southern California; and the horned lark (including all subspecies) can be locally common in the region. W.M. Keck reported observations of multiple individuals on a single day during their surveys in Area 5 (W.M. Keck, 2001). This species is known to occur in plowed fields and grassland habitat in the study area (Guthrie, 1999). The potential for California horned lark to occur in the study area is considered to be high.

Merlin (Falco columbarius)

The merlin is a California species of special concern. In California, the merlin prefers vast open-space areas such as estuaries, grasslands, and deserts where it hunts small flocking birds such as sandpipers, larks, sparrows, and pipits. In Los Angeles County, merlins are uncommon winter migrants. The study area provides potentially suitable habitat for the merlin. The W.M. Keck focused bird surveys did not record observations of this species in Areas 1 or 5 (W.M. Keck, 2001). The potential for the merlin to occur in the study area is low, and there is no potential for the merlin to nest in the study area.

Prairie falcon (Falco mexicanus)

The prairie falcon is a California species of special concern. Because of winter and nesting habitat loss, few areas remain in Los Angeles County where prairie falcons can be consistently observed. Preferred foraging habitat in Los Angeles County includes grasslands, scrub communities, and estuaries. The study area provides suitable foraging habitat, but no nesting habitat. The W.M. Keck focused bird surveys did not record observations of this species in Areas 1 or 5 (W.M. Keck, 2001). Therefore, the potential for the prairie falcon to occur in the study area is considered to be low for foraging; and there is no potential for the prairie falcon to nest in the study area.

Yellow-breasted chat (Icteria virens)

The yellow-breasted chat is a California species of special concern. This large warbler was once a fairly common summer resident in riparian woodlands throughout California, but is now much reduced in numbers, especially in Southern California (Remsen, 1978). For nesting, this species requires dense, brushy tangles near water and riparian woodlands supporting a thick understory. The yellow-breasted chat was observed nesting along wet sections of the Santa Clara River in 1999 (Guthrie, 1999). W.M. Keck identified multiple yellow-breasted chats on four survey days in their Area 1 and one individual on one day in Area 5 (W.M. Keck, 2001). Therefore, the potential for yellow-breasted chat to occur in the study area is considered to be high.

Loggerhead shrike (Lanius ludovicianus)

The loggerhead shrike is a federal species of concern and a California species of special concern. This species is a fairly common resident of lowlands and foothills in Southern California. Shrikes inhabit grasslands and other dry, open habitats. They can often be found perched on fences and posts from which prey items (large insects, small mammals, lizards) can be seen. The loggerhead shrike was observed just outside the study area in mixed sage scrub along I-5. The W.M. Keck focused bird surveys did not record observations of this species in Areas 1 or 5 (W.M. Keck, 2001). Because the loggerhead shrike is known to occur in nearby upland habitat, the potential for it to occur in the study area is considered to be high.

Summer tanager (Piranga rubra)

The summer tanager is a California species of special concern. This species is an uncommon summer resident and breeder in desert riparian habitat. It occurs in cottonwoods and willows, especially older, dense stands along rivers and streams. The decline of this species is attributed to loss and fragmentation of mature cottonwood and willow stands. Suitable habitat for this species is found in the study area, and there are historical records of this

species in the Santa Clara River (CDFG and USACE, 1999). The W.M. Keck focused bird surveys did not record observations of this species in Areas 1 or 5 (W.M. Keck, 2001). However, the summer tanager is very uncommon and has a low potential to occur in the study area.

Coastal California gnatcatcher (Polioptila californica californica)

The coastal California gnatcatcher is listed as a federally threatened and a California species of special concern. This species occurs in most of the Baja California arid regions, but is extremely localized in the United States, where it occurs predominantly in coastal regions of highly urbanized Los Angeles, Orange, Riverside, and San Diego Counties (Atwood, 1992). In California, this species is an obligate resident of several distinct subassociations of the coastal sage scrub plant community. Brood parasitism by brown-headed cowbirds and loss of habitat to urban development have been cited as causes of the coastal California gnatcatcher population decline (Unitt, 1984; Atwood, 1990). The W.M. Keck focused bird surveys did not record observations of this species in Areas 1 or 5 (W.M. Keck, 2001). The coastal California gnatcatcher is not expected to occur in the study area due to a lack of suitable habitat.

Burrowing Owl (Speotyto cunicularia)

The burrowing owl is a federal species of concern and a California species of special concern. In Los Angeles County, burrowing owls breed and forage in grasslands and prefer flat to low rolling hills in treeless terrain. They are small owls that nest in burrows in usually open habitats most often along banks and roadsides. The burrowing owl is a widespread species throughout the western United States, but has declined in this and many other areas due to habitat modification, poisoning of its prey items, and introduced nest predators. It has not been observed in the Newhall Ranch, or along San Francisquito Creek, despite recent survey efforts (CDFG and USACE, 1999). The W.M. Keck focused bird surveys did not record observations of this species in Areas 1 or 5 (W.M. Keck, 2001). Potentially suitable habitat is present on the site; however, the potential for burrowing owl to occur onsite is considered to be low.

Least Bell's vireo (Vireo bellii pusillus)

The least Bell's vireo is a federal and state endangered species. The vireo is now a rare and local summer resident of the Southern California lowland riparian woodlands. While destruction of lowland riparian habitats has played a large role in driving this species to its present precarious situation, brood parasitism by brown-headed cowbirds is the most important factor in its decline (Garrett and Dunn, 1981). Local cowbird control programs have been very effective in maintaining some populations; the species has begun to recover

(Small, 1994). Based on information from the USFWS, approximately 1,500 territories were located in 1995 (Hays, 1995). An individual least Bell's vireo has been observed in the Santa Clara River between I-5 and its confluence with Castaic Creek over the years (CDFG and USACE, 1999); and at least one pair nested in the Santa Clara River in 1996 (Guthrie, 1996). W.M. Keck identified a one or two individuals in their Area 1 during 4 different survey days in the Santa Clara River (W.M. Keck, 2001). Observations of least Bell's vireo breeding behavior has been reported recently in Castaic Creek near the Santa Clara River (Daniels, 2002). The project is located in an area of the Santa Clara River designated as "critical habitat" for this species. The potential for the least Bell's vireo to occur and nest in the study area is considered to be high to moderate due to the availability of potential habitat and its small population size in Southern California.

Mammals

Pallid bat (*Antrozus pallidus*)

The pallid bat is a California species of special concern. It most commonly occurs in mixed oak and grassland habitats. This large bat roosts in rock crevices and in cavities of trees, especially oaks. The steep hills and slopes in the project region provide potentially suitable roosting habitat for this species, while it prefers open habitats in which to hunt for insects. No evidence of bat day or night roosting was incidentally observed during the general wildlife surveys. This species is not expected to roost within the study area, though any population that does occur with the project region would have a moderate potential to forage for insects within the proposed project footprint.

Pale Townsend's big-eared bat (*Corynorhinus townsendii pallescens*)

The pale Townsend's big-eared bat is a federal species of concern and a California species of special concern. It occurs in Southern California in a variety of habitats, including oak woodlands, arid deserts, grasslands, and high-elevation forests and meadows. This bat is known to roost in mines, caves, and buildings; therefore, the project region provides potentially suitable roosting habitat for this species. No evidence of bat day or night roosting was incidentally observed during the general wildlife surveys; therefore, although suitable foraging habitat for this species was observed in the study area, no roosting habitat is available for this species. The potential for the pale Townsend's big-eared bat to forage in the study area is considered to be low.

Spotted bat (*Euderma maculatum*)

The spotted bat is a rare species that is very striking in appearance, but is poorly known. It is a state and a federal species of concern. Although more widespread in the deserts of

Southern California, the range of the spotted bat includes parts of the coastal slope of the Transverse and Peninsular Mountain Ranges from Ventura to San Diego Counties. Known roosting habitat for this species consists of rock crevices. The project region provides potentially suitable roosting habitat for this species; however, no evidence of bat day or night roosting was incidentally observed during the general wildlife surveys. The study area provides potentially suitable foraging habitat, but no potential roosting habitat for this species; therefore, the potential for the spotted bat to occur in the study area is considered to be low.

California mastiff bat (Eumops perotis californicus)

The California mastiff bat is a federal species of concern and a California species of special concern. This species, the largest bat in the United States, is a very wide-ranging and high-flying insectivore that typically forages in open areas with high cliffs. This species roosts in small colonies in crevices on cliff faces. The project region provides potentially suitable roosting habitat for this species; however, no evidence of bat day or night roosting was incidentally observed during the general wildlife surveys. The study area provides potentially suitable foraging habitat, but no potential roosting habitat for this species; therefore, the potential for the California mastiff bat to occur in the study area is considered to be low.

California leaf-nosed bat (Macrotus californicus)

The California leaf-nosed bat is a federal species of concern and a California species of special concern. This species is known from Riverside, Imperial, San Diego, and San Bernardino Counties south to the Mexican border. Former populations have disappeared from coastal basins, from Los Angeles to San Diego Counties. Habitat for this species includes desert riparian, desert wash, desert scrub, desert succulent scrub, alkali desert scrub, and palm oases. This species prefers to roost in caves and mines, but may also roost in bridges or buildings. Because the species is no longer found in Los Angeles County and only limited suitable roosting habitat is available, the California leaf-nosed bat is not expected to occur in the study area.

Small-footed myotis (Myotis ciliolabrum)

The small-footed myotis is a federal species of concern. This bat occurs throughout much of the western United States occupying a variety of habitats. This species feeds among trees or over brush and roosts in cavities of cliffs, trees, or rocks and in caves or mines. The project region provides potentially suitable roosting habitat for this species; however, no evidence of bat day or night roosting was incidentally observed during the general wildlife surveys. The

study area provides potentially suitable foraging habitat, but no potential roosting habitat for this species; therefore, the potential for the small-footed myotis to occur in the study area is considered to be moderate.

Yuma myotis (Myotis yumanensis)

The Yuma myotis is a federal species of concern. It is a relatively small bat that occurs throughout California, except for much of the deserts. This species is closely associated with water and wooded canyon bottoms throughout its range. Caves and old buildings are preferred roosting habitat, with roosts numbering up to 2,000 individuals. The project region provides potentially suitable roosting habitat for this species; however, no evidence of bat day or night roosting was incidentally observed during the general wildlife surveys. The study area provides potentially suitable foraging habitat, but no potential roosting habitat for this species; therefore, the potential for the Yuma myotis to occur in the study area is considered to be low.

San Diego blacktailed jackrabbit (Lepus californicus bennettii)

The San Diego blacktailed jackrabbit is a federal species of concern and a California species of special concern. The San Diego subspecies of the widespread blacktailed jackrabbit is restricted to the Pacific slope from Santa Barbara County to northwestern Baja California. This nocturnal species prefers relatively open areas with sparse shrub cover. This species is known to occur in upland areas adjacent to the Santa Clara River (CDFG and USACE, 1999). Therefore, the potential for the San Diego black-tailed jackrabbit to occur in the study area is considered to be high.

San Diego desert woodrat (Neotoma lepida intermedia)

The San Diego desert woodrat is a federal species of concern and a California species of special concern. This species occupies arid areas with sparse vegetation types, especially those comprised of cactus and other xeric plants, such as open chaparral and coastal sage scrub. This subspecies of desert woodrat is restricted to the Pacific slope in a range that stretches from San Luis Obispo County to northwestern Baja California. This species prefers to nest in rock crevices. Diagnostic woodrat sign was observed during the general wildlife surveys performed on the site, though the exact species of woodrat could not be discerned. Though this site appears to be located within the range of the San Diego desert woodrat, it is also located within the range of the dusky-footed woodrat (*Neotoma fuscipes*). The dusky-footed woodrat prefers wooded or forested habitats where it feeds and nests in the brushy understory. The riparian vegetation associated with the river at this site would appear to be

more hospitable to the dusky-footed woodrat than the San Diego desert woodrat; therefore, the sign observed is not expected to have been that of the San Diego woodrat due to the density and type of vegetation observed onsite. This species is not expected to occur because no suitable habitat is present in the study area. It is anticipated that a survey performed in support of the VRL would confirm the absence of potential habitat for this species. Should this VRL survey determine that habitat with the potential to support this species has developed on the site, then an additional focused survey for this species would be conducted at the appropriate time of year consistent with the requirements of the NRMP USACE and CDFG permit.

Southern grasshopper mouse (Onychomys torridus ramona)

The southern grasshopper mouse is a federal species of concern and a California species of special concern. It is a territorial predatory rodent of grassland and sparse scrub communities that prefers sandy soils and ranges from Los Angeles County to northwestern Baja California. Although potentially suitable habitat for this species is present in the study area, the potential for the southern grasshopper mouse is considered to be low due to its limited distribution.

American badger (Taxidea taxus)

Although not formally considered a special-status species, the American badger is considered locally rare. This species occupies a wide variety of habitats and ranges throughout the state except for the coastal redwood forests of the extreme northwest. In Southern California, this species is most commonly associated with grasslands and other relatively open habitats with friable, uncultivated soils. Suitable habitat for this species is present in the study area, and the potential for the American badger to occur in the study area is considered to be moderate.

3.9.2 Permanent Impacts

Special-Status Plant Species

Project implementation may result in impacts to special-status plant species; however, the presence or absence of these species potentially present cannot be determined without focused surveys. A focused plant survey, conducted in 2003, located one population of Peirson's morning glory that consisted of approximately 38 plants on a berm, between Henry Mayo Parkway and SR 126. No other special-status species were observed during the focused survey. Impacts to special-status plants observed onsite are limited to the Peirson's morning glory. No other impacts to special-status plants are anticipated because none were observed during either general or focused surveys performed onsite.

Special-Status Wildlife Species

The project would result in the loss of habitat for several special-status wildlife species expected to occur in the study area, but were otherwise not observed during focused surveys due to their secretive nature or limited distribution. For those species not observed but expected to occur, potential impacts were evaluated for the habitat the species is expected to occupy.

Invertebrates

The Quino checkerspot is not expected to occur in the study area. Therefore, project implementation would not result in any impacts to the Quino checkerspot.

Fish

The Santa Ana sucker, unarmored three-spine stickleback, arroyo chub, and steelhead trout occur in the Santa Clara River, with the stickleback and chub known to occur between I-5 and the Santa Clara River confluence with Castaic Creek. Recent observations of Santa Ana sucker or steelhead trout have not been recorded within the project area. Because the proposed project would impact only one bank on the upper terrace of the Santa Clara River, no direct impacts to these fish are expected.

Amphibians

The study area provides potentially suitable habitat for the arroyo toad. The study area also provides potentially suitable habitat for the western spadefoot. The proposed project would impact 4.12 hectares (10.17 acres) of potential estivating habitat for these species, and individuals of this species could be harmed or their reproduction disrupted by construction or operation of the project, if the species is present on site. The loss of arroyo toad, if present, would represent an adverse impact, requiring mitigation. The loss of western spadefoot, if present, would represent an adverse impact, requiring mitigation.

The California red-legged frog is not expected to occur in the study area. Therefore, project implementation would not result in any impacts on the California red-legged frog.

Reptiles

Special-status reptile species potentially occurring in the study area include the silvery legless lizard, western pond turtle, coastal western whiptail, San Bernardino ringneck snake, coastal rosy boa, coast horned lizard, coast patch nose snake, and the two-striped garter snake. The coastal western whiptail, coast horned lizard, coastal rosy boa, and coast patch nose snake primarily occur in upland habitats. Because the proposed project would not impact any native upland habitat, project implementation would not result in adverse impacts

on the coastal western whiptail, coast horned lizard, coast patch nose snake, and the coastal rosy boa.

The silvery legless lizard, western pond turtle, San Bernardino ringneck snake, and two-striped garter snake may use the riparian habitats on the site. The proposed project would impact approximately 4.12 hectares (10.17 acres) of riparian habitat for these species. None of these species are listed as threatened or endangered by state or federal resource agencies; however, the western pond turtle and two-striped garter snake meet the criteria in Section 15380 of CEQA. The silvery legless lizard and San Bernardino ringneck snake do not meet the criteria in Section 15380. The loss of western pond turtle and two-striped garter snake would represent an adverse impact, requiring mitigation.

Birds

A variety of bird species that are considered special status, but not listed as threatened or endangered by state or federal resources agencies, occur or potentially occur in the study area. The federal Migratory Bird Treaty Act (MBTA) prohibits the “take” of migratory birds, unless permitted. This regulation can constrain construction activities that have the potential to affect nesting birds either through vegetation removal and land clearing, or through other construction- or operation-related disturbance. The MBTA protects most nesting birds except introduced or exotic species. The species likely affected include the tri-colored blackbird, Southern California rufous-crowned sparrow, Bell’s sage sparrow, yellow warbler, California horned lark, yellow-breasted chat, loggerhead shrike, and summer tanager. The Southern California rufous-crowned sparrow and Bell’s sage sparrow primarily occur in upland habitats not present in the study area. Therefore, project implementation would not result in impacts on these species. The proposed project would result in a loss of 13.21 hectares (32.64 acres) of disturbed/ruderal, and agricultural land that would be used by the tricolored blackbird, California horned lark, and loggerhead shrike. The proposed project would result in the loss of 4.12 hectares (10.17 acres) of riparian habitat for the summer tanager, tricolored blackbird, western yellow warbler, and yellow-breasted chat. Due to the abundance of similar habitat nearby, impacts to these species would be negligible.

The western yellow-billed cuckoo, southwestern willow flycatcher, coastal California gnatcatcher, and least Bell's vireo are listed as either threatened or endangered by state and federal resource agencies. The coastal California gnatcatcher occurs in upland habitat not present in the study area. Therefore, project implementation would not result in impacts on this species. The proposed project would impact approximately 4.12 hectares (10.17 acres) of riparian habitat for the western yellow-billed cuckoo, southwestern willow flycatcher, and least Bell’s vireo. None of these species is known to nest in the Santa Clara River during the

1999 breeding season. However, the southwestern willow flycatcher is known to have nested in the Santa Clara River in 1995, while the least Bell's vireo is known to have nested there in 1998. The least Bell's vireo and willow flycatcher (including other subspecies) have been observed in the Santa Clara River and judged to be migrants in both 1998 and 1999 (Guthrie, 1995; 1998; 1999). In addition, with habitat loss, noise from construction could discourage or disrupt nesting in the vicinity. The western yellow-billed cuckoo is thought to have been extirpated as a breeding species in the Santa Clara River, but individuals judged to be migrants have been observed in or near the study area in recent years (Guthrie, 1998). However, the project could impact this species, should the western yellow-billed cuckoo establish nests within the immediate project area prior to the implementation of project construction. The loss of habitat or individuals, or disruption of breeding activities for these species would represent an adverse impact, requiring mitigation.

The proposed project would result in the loss of suitable foraging and/or nesting habitat for a variety of raptor species including the Cooper's hawk, sharp-shinned hawk, golden eagle, long-eared owl, ferruginous hawk, Swainson's hawk, northern harrier, white-tailed kite, merlin, prairie falcon, and burrowing owl. Of these species, the Swainson's hawk is state threatened; and the golden eagle and white-tailed kite are considered CDFG fully protected species. The loss of foraging habitat for these species would cumulatively contribute to the ongoing regional and local loss of foraging habitat. However, a relatively substantial amount of similar foraging habitat is available in the region.

The Cooper's hawk, long-eared owl, northern harrier, white-tailed kite, and burrowing owl, in addition to common raptor species, have potential to nest in the study area. The burrowing owl is considered to meet the criteria in Section 15380 in CEQA. Should a burrowing owl nest be found onsite, measures to minimize harm will be implemented to reduce potential impacts to a level that will not be adverse. Should an active raptor nest (of any raptor species) be found onsite, the loss of the nest would be considered a violation of the California Fish and Game Code 3505.5. The loss of active raptor nests would represent an adverse impact, requiring mitigation.

Mammals

Special status mammal species potentially present in the study area include the pallid bat, pale Townsend's big-eared bat, spotted bat, California mastiff bat, San Diego black-tailed jackrabbit, small-footed myotis, Yuma myotis, and southern grasshopper mouse. The proposed project would result in the loss of upland habitat for the San Diego black-tailed jackrabbit, southern grasshopper mouse, and American badger. Due to the low status of

these species and the limited amount of habitat loss relative to the availability of similar habitat nearby, impacts on these species would be considered negligible.

The proposed project would impact potential foraging habitat for the six bat species. The loss of potential foraging habitat for these species would cumulatively contribute to the ongoing regional and local loss of foraging habitat for these species. However, similar foraging habitat is available nearby. The pallid bat and the small-footed myotis also have potential to roost in the study area. However, due to limited amount of habitat loss relative to the availability of similar habitat nearby, impacts on roosting habitat for these species would be negligible.

3.9.3 Temporary Impacts

Noise Impacts

Noise levels in the study area would increase over present levels during construction of the proposed project. During construction, temporary noise impacts have the potential to disrupt foraging, nesting, roosting, and denying activities for a variety of wildlife species. Figure 3.9-1 illustrates the noise contours at 60 dBA and 65 dBA for pile driving and roadway construction noise impacts. Most species in the vicinity of the study area are not listed as threatened or endangered by state or federal resource agencies. However, if the western yellow-billed cuckoo, southwestern willow flycatcher, least Bell's vireo, and several common and special-status raptor species, including white-tailed kite and burrowing owl, establish nests within or contiguous to the project site prior to implementation of construction, then construction-related noise would have the potential to result in temporary short-term impacts to these species. Impacts from construction noise may result in the temporary displacement of birds from their nests to adjacent habitat areas due to these disturbances, thus leaving the nests unprotected and subject to predation or infestation by nest parasites such as the brown-headed cowbird. Noise impacts on these species nests, or nesting activities, may occur because these species are protected by federal and state wildlife laws and by Section 15380 of CEQA.

Noise would also increase over present levels when the traffic on roads adjacent to the riverbed increases (see Figure 3.9-1). Therefore, habitat remaining onsite adjacent to development would be considered disturbed. Wildlife stressed by noise may be dispersed from the remaining onsite natural open space, leaving only wildlife tolerant of human activity. Chronic (permanent) noise would contribute to an incremental loss of habitat, it but would not likely reduce wildlife populations to below self-sustaining levels at the project site.

Increased Dust and Urban Pollutants

Grading activities would disturb soils and result in the accumulation of dust on the surface of the leaves of trees, shrubs, and herbs. The respiratory function of the plants in the area would be impaired when dust accumulation is excessive. This effect of project construction on the native vegetation in the immediate vicinity of the construction area would not reduce plant populations below self-sustaining levels.

Additional impacts to biological resources in the area could occur as a result of changes in water quality. Urban runoff from the proposed project containing petroleum residues and the potential for improper disposal of petroleum and chemical products from construction equipment (temporary) or infrastructure areas (i.e., vehicles, improper disposal of chemicals) (permanent) could adversely affect water quality. This, in turn, would affect populations of aquatic species (including common and special-status fish, amphibian, and reptile species) and other species that use riparian areas (including common and special-status amphibian, reptile, birds, and mammal species). Water quality could also be adversely affected by runoff of nutrients from project landscape features. These impacts could impact the Santa Ana sucker, unarmored three-spine stickleback, arroyo chub, arroyo toad, southwestern pond turtle, and two-stripe garter snake, and could reduce the biological value of riparian habitats in the immediate project area. Impacts to federal or state listed species or Species of Special Concern would represent an adverse impact, requiring mitigation. Standard BMPs implemented through the SWPPP and NPDES permit would reduce the level of impact.

3.9.4 Measures to Minimize Harm

Significant Ecological Areas

SEAs were established in 1976 by Los Angeles County to designated areas with sensitive environmental conditions and/or resources. SEA boundaries are general in nature, and broadly outline the biotic resources of concern. The Los Angeles County General Plan allows development in SEAs as long as development is “highly compatible” with the identified resources (CDFG and USACE, 1999).

The Santa Clara River Significant Ecological Area (SEA 23) is defined by the County of Los Angeles as the “essential watershed system” of the Santa Clara River. The portions of the project site within SEA 23 may be roughly described by the bed and bank of the Santa Clara River and Castaic Creek. The Santa Clara River SEA is protected as a regionally significant biological resource. The value of this SEA is derived from the inherent value of the wetland habitat and associated species, and from its function as a regional wildlife corridor. The river was designated as an SEA primarily because of the threat of loss of suitable habitat for the unarmored threespine stickleback. The Santa Clara River is unique in

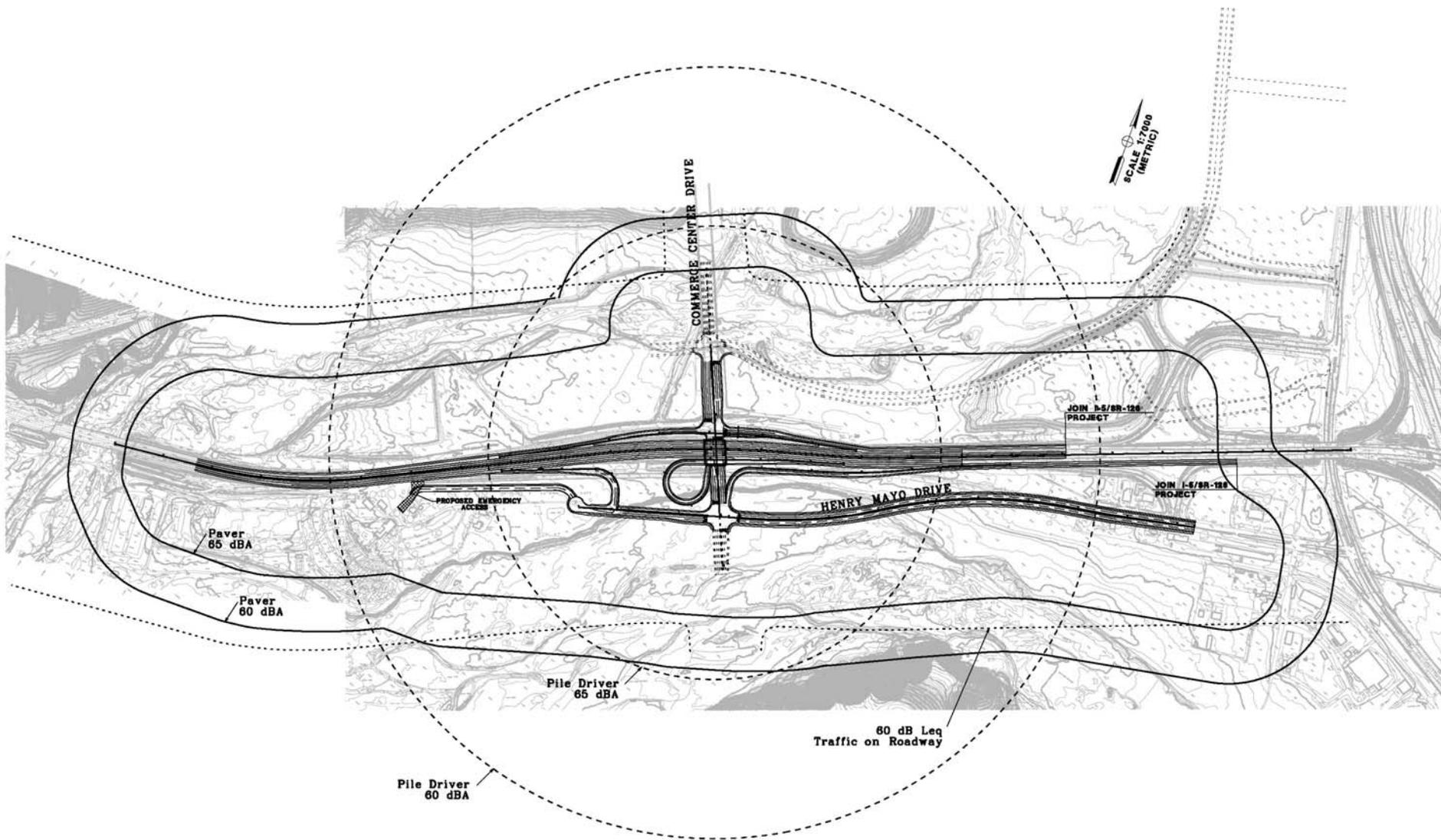


Figure 3.9-1
 Construction and Permanent Traffic
 Noise Contours
 SR 126/Commerce Center Drive Interchange
 07-LA-126 KP R6.8-R9.2 (PM R4.2-R5.7)

being the only major river draining the San Gabriel Mountains that has not been channelized. The broad wash is unlike that found in steeper mountain canyons and is exceedingly difficult to find in the Los Angeles basin. Uses normally allowed in the corresponding land use classification would continue to be permitted unless a finding is made that the proposed project would have an adverse affect on the SEA (Los Angeles County Department of Regional Planning 1990).

Critical Habitat and Evolutionary Significant Unit

Critical habitat identifies specific areas that are essential to the conservation of a listed species and, with respect to areas within the geographic range occupied by the species, that may require special management considerations or protection. The USFWS does not designate critical habitat on lands covered by an existing, legally operative, incidental take permit for the arroyo toad under section 10(a)(1)(B) of the Act, except for one area that has activities not covered by the Habitat Conservation Plan (HCP). Subsection 4(b)(2) of the Act allows the USFWS to exclude from critical habitat designation in areas where the benefits of exclusion outweigh the benefits of designation, provided the exclusion will not result in the extinction of the species.

Least Bell's Vireo Critical Habitat primary constituent elements, as designated by the USFWS, are those habitat components that are essential for the primary biological needs of foraging, breeding, growth of juveniles, intra-specific communication, dispersal, migration, genetic exchange, and sheltering of the species. All areas designated as critical habitat for the least Bell's vireo contain one or more of the primary constituent elements.

The Santa Clara River was included within a Steelhead Trout ESU for this species in February 2000 by the NOAA. The Southern steelhead is identified as one of the 15 endangered ESUs within its range. On February 16, 2000, the NOAA Fisheries designated critical habitat for 19 ESUs of West Coast salmon and steelhead. In April 2002, in a "Consent Decree" the NOAA agreed to withdraw ESU habitat designations for 19 salmon and steelhead populations on the West Coast. The move was in response to litigation challenging the process by which this agency established critical habitat (see www.nwr.noaa.gov/1press/CHdecree.html). However, this action does not adversely affect the protection of listed steelhead since the steelhead is still protected under the Endangered Species Act. On December 10, 2004, the NOAA, proposed critical habitat designations for 5 ESUs of steelhead in California that are listed as Threatened or Endangered. Measures to minimize harm to avoid or minimize environmental impacts have been incorporated and have been included as special conditions of the 404 permit. Monitoring of these measures will be required. A summary of measures to minimize harm is provided below.

Aquatic Species Protection

Measures to protect the unarmored threespine stickleback and several other special-status fish and aquatic species include the following measures (among others): (1) preconstruction surveys and temporary fish relocation by the USFWS or its agents; (2) restoration of adversely affected streams after construction; (3) diversion of streamflow around active construction sites in the river; and (4) use of sedimentation retention ponds, where needed. If during preconstruction surveys to identify special status fish species it is determined that steelhead are present in the area then an informal consultation will be made with the NOAA concerning this find regarding the potential impacts to the steelhead trout.

Bird Species Protection

Measures to avoid adverse impacts to the least Bell's vireo and southwestern willow flycatcher and other special-status bird species include the following measures: (1) conduct preconstruction surveys to determine presence or absence, (2) prohibit construction within 91 meters (300 feet) of an active nest, (3) discourage human and pet entry into sensitive habitat areas, and (4) replace vireo habitat that must be removed (consistent with the ratios recommended in the Riparian Habitat Mitigation Program of the NMRP).

Restoration of Temporarily Disturbed Areas

After the installation of the bank protection, the riverbed would be restored to its original elevation. Salvaged native vegetative debris would be spread out over the disturbed area to allow seeds and propagules to become established naturally. In addition, large trees would be replaced with 1- and 5-gallon native container stock at a 3:1 ratio.

Riparian Habitat Mitigation Program

The Riparian Habitat Mitigation Program is designed primarily to create new riparian habitat that would mitigate for the loss of riparian habitat. The habitat acreage replacement ratio would be 1:1 if the replacement occurred 2 years prior to project construction, or would be 2:1 or 3:1 (depending upon habitat values) if the habitat replacement were implemented concurrently with project construction. Newhall Land would have the option of removing the invasive giant reed from infested riparian habitat with prior approval from the USACE or CDFG. Riparian habitat would be created in selected, appropriate bare riverbed areas that exhibit suitable hydrology (not too dry and not within a scour zone). Riparian restoration and weeding success would be monitored annually, with specific performance criteria to be evaluated at 3 and 5 years after implementation.

Upland Habitat Mitigation Program

Measures to protect nonlisted, but otherwise considered special-status upland species and their habitat include preconstruction surveys to locate and remove individuals from construction sites and replacement of such habitats in the upland habitat buffer zone.

Habitat remaining immediately adjacent to the proposed project would be considered disturbed by the increased noise levels by the proposed project (primarily pile driving). The wildlife within these noise disturbance areas would incur an increase level of stress (inability to communicate effectively/efficiently during breeding season, masking mating/warning vocalizations, etc.). Although these noise impacts would have some potential to contribute to an incremental loss of wildlife habitat, the impact would not reduce the local wildlife population. Using simple divergence over distance (6-dBA reduction per doubling of distance), resulting estimated pile driver noise level would be 80 dBA at 700ft. This estimate is for an impact pile driver. Depending on soil conditions in the area, alternative pile driving methods, such as vibratory pile driving, may be practical, which would result in a reduction of 5 dBA in noise levels (75 dBA). Additional noise reduction could be realized through shielding provided either by natural terrain or by placement of temporary barriers or excess soil generated through construction between the noise source(s) and receiving areas.

Construction activity will be limited to normal construction time window for the area (7:00 AM to 7:00 PM weekdays and 8:00 AM to 6:00 PM Saturdays).

Water Quality Protection

The Newhall Land Company Drainage Plan will ensure that adverse water quality impacts will not occur from construction site erosion and municipal stormwater. The design and implementation of the water quality measures must meet current standards established by the RWQCB, and cannot adversely impact waters of the United States.

Environmental Protection and Maintenance

The river maintenance procedures have been designed to avoid impacts on Endangered species and minimize impacts on other riparian resources through the use of preconstruction surveys, limitations on areas where work can be performed, relocation of special-status species from work areas, and seasonal restrictions on work near Endangered species habitats.

The NRMP will have a beneficial impact by reducing the project-by-project authorizations by the USACE, which will result in more efficient use of staff resources. It will also provide long-term, agreed-upon mitigation and monitoring standards and a conservation easement (in favor of CDFG) for a 485.6-hectare (1,200-acre) area involving approximately 20.9 km (13 miles) of riverbed property. In addition, it will reduce in-stream channeling and

maintenance activities by LACDPW as compared to the level that would occur if such activities were undertaken in the traditional fashion of clearing vegetation to increase capacity.

An EIR/EIS was prepared and certified for the NRMP, which programmatically addressed the impacts expected to result from the Commerce Center Drive at SR 126 project. Section 7 consultation occurred with, and a Biological Opinion was issued by the USFW during the ACOE permitting component of the NRMP. If the implementation of this project is consistent with the previous analysis as well as the terms and conditions of issued entitlements and permits issued for the NRMO, then Section 7 consultation with the USFW need not be reinitiated.

The USFWS considers the Santa Clara population of the Santa Ana Sucker to be an introduced population. Therefore, the USFWS does not include the Santa Clara population with the other Threatened populations in the Los Angeles River, San Gabriel River, and Santa Ana River drainage systems (USFWS, April 12, 2000). Recent court decisions have resulted in the establishment of “critical habitat” for this species; however, this site is not located within or proximal to an area designated as “critical habitat” for this species.

The USFWS issued a Biological Opinion (BO) on November 27, 1998, that concluded that the NRMP is not likely to jeopardize the continued existence of the stickleback, vireo, or flycatcher, or adversely modify critical habitat designated for the vireo or proposed for the stickleback. Another BO was issued on November 15, 2002, that concluded that the NRMP would not likely jeopardize the continued existence of the arroyo toad. It is anticipated that subsequent BOs would be issued, as appropriate, in the event that NRMP required an amendment to include other species not covered in the NRMP as approved. The 404 permit and the NRMP will be effective through December 2018.

Special-Status Plant Species Mitigation

The proposed project has the potential to adversely impact a small population (<40 individuals) of the CNPS List 4 plant Peirson’s morning glory. Necessary mitigation would occur consistent with NRMP BIO-4, or NRMP BIO-5 mentioned in Sections 3.6.5 and 3.7.5, as appropriate. Mitigation may include surveys for special-status plant species prior to construction. If any of these species is present in the study area, then appropriate measures to minimize harm shall be developed. During the spring prior to grubbing or grading (or as determined by the Project Biologist), the limits of individual populations of Peirson's morning glory to be impacted shall be flagged and individual plants shall be marked with pin flags to facilitate the locating of individual plants. Prior to construction,

seeds shall be collected from Peirson's morning glory plants from approximately May through June from ripened seed heads, for later propagation, by personnel experienced in collection of native seed and native plant propagation. This seed shall be stored by a certified seed bank. An appropriate site within the project right-of-way shall be identified for the seeding of this species by the Project Biologist. The site shall have similar soils, slope, aspect, and microhabitat characteristics as the site with occupied Peirson's morning glory to support this species. Other appropriate measures to minimize harm may include relocation or purchase of offsite populations for inclusion to adjacent open-space areas.

Special-Status Wildlife Species Mitigation

The proposed project would result in potential direct impacts on several special status wildlife species that may occur within the Fremont cottonwood riparian forest and uplands of the proposed project footprint. These species may include, but are not limited to, the arroyo toad, two-striped garter snake, southwestern pond turtle, silvery legless lizard, and San Diego desert woodrat. Implementation of the measures required by the NRMP previously referenced or listed in Section 3.8.5 to minimize harm. Specifically these include NRMP mitigation measures BIO-2 (for potential impacts to unarmored threespine stickleback, arroyo chub, Santa Ana sucker, arroyo toad, two-striped garter snake, and southwestern pond turtle); BIO-3 (for potential impacts to least Bell's vireo, southwestern willow flycatcher, western yellow-billed cuckoo, and potentially foraging bats); BIO-4 (for restoration of temporarily disturbed habitats); BIO-5 (for permanent impacts to riparian habitat); BIO-20 (for burrowing owl); BIO-21 (for tricolored blackbirds); and BIO-22 (for nesting raptors).

3.10 Floodplains

The following section is based on a technical report titled, *Final Location Hydraulic Study*, prepared by CH2M HILL in August 2004 (CH2M HILL, 2004a).

3.10.1 Affected Environment

As discussed in the Floodplain Evaluation (CH2M HILL, 2004d) and Location Hydraulics Study (CH2M HILL, 2004a), land adjacent to the Santa Clara River and Castaic Creek is located in the Federal Emergency Management Agency (FEMA) base floodplain, and in the Capital Floodplain designated by the LACDPW. The project improvements are located in FEMA Flood Zone "A" and County Adopted Floodway Map (43-ML27). The Capital

Floodplain includes all land subject to flooding during a Capital Flood¹. According to the County Floodplain Ordinance, land development in the Capital Floodplain can occur if appropriate flood protective measures are implemented according to the requirements of the LACDPW. These measures require that the bottom elevations of all structures be at least one foot above the design flood. The flood depth for the 100-year storm will be mitigated based on FEMA Guidelines. Usually, the depth increase will not be adverse if it is a depth less than one foot; and no mitigation would be required. In addition, any structures that would increase the design flood more than 0.3 meter (1 foot) must be offset by nearby approved stream improvements. As shown in Figure 3.10-1, the proposed project is located within the 100-year floodplain.

3.10.2 Permanent Impacts

As discussed in the Floodplain Evaluation Report, written under the guidance of Section 23, CFR Section 650.111, and shown in Figure 3.10-1, the proposed project is located within the base floodplain of the Santa Clara River, although not the base floodplain for Castaic Creek (CH2M HILL, 2004d). Encroachment into the floodway will require a Conditional Letter of Map Revision (CLOMR) and a revision to the County Adopted Floodway Map, which must be adopted by the Los Angeles County Board of Supervisors. As part of the project, the Commerce Center Drive/Henry Mayo Drive intersection would be relocated 125 meters (410 feet) to the south of the proposed SR 126/Commerce Center Drive interchange, placing the Commerce Center Drive/Henry Mayo Drive intersection, as well as part of Henry Mayo Drive itself, into the Santa Clara River floodplain. Approximately 3.79 hectares (9.37 acres) of the floodplain would be affected by components of the project. Consequently, the project would result in impacts to natural and beneficial floodplain values, which may include impacts to fish, wildlife, plants, open space, natural beauty, water quality maintenance, and groundwater recharge. Impacts to the natural and beneficial floodplain values will be prevented through the use of BMPs and mitigated in the NRMP prepared by the Valencia Company in 1998 (now Newhall Land) with the oversight and approval of the CDFG and USACE.

The 404 Permit and 1603 Streambed Alteration Agreement for portions of the Santa Clara River have been identified in the NRMP. Under the NRMP each project (including this project) is required to complete the verification request letter (VRL) process under the Valencia Company's master 1603 Lake or Streambed Alteration Agreement, California Incidental Take Permit, and ACOE 404 permit. Where appropriate, the measures to

¹ A Capital Flood is defined as the discharge resulting from a hypothetical 4-day storm with a 50-year return period falling on a saturated watershed with debris from a wildfire. The Capital Flood discharge greatly exceeds the 100-year discharge

minimize harm from the NRMP were used to ensure that this project is consistent with the 404 permit issued to Valencia Company in December 1998 and are referenced as described in the *Mitigation Monitoring and Reporting Program, Valencia Company, Revised Natural River Management Plan*. The NRMP analyzes impacts resulting from Newhall Land projects for the next 20 years and shows mitigation for approximately 11.3 hectares (28 acres) of the riverbed that would be filled for bank protection and land development. The document also provides a mitigation program for several proposed projects adjacent to the Santa Clara River, including this project. The mitigation sited in the NRMP is through post-construction restoration. Up to 39.3 hectares (97 acres) of uplands would be located within the new bank protection, and could be excavated to create new riverbed habitat as part of the riparian habitat mitigation program. The net result of these actions would be a potential gain of 15.8 hectares (69 acres) of riverbed. The habitat acreage replacement ratio would be 1:1 if the replacement occurred two years prior to project construction, or would be 2:1 or 3:1 (depending upon habitat values) if the habitat replacement were implemented concurrent with project construction.

The proposed project is low risk, and would not put any property at risk of flooding. The proposed project would not result in permanent land use development that is incompatible or inconsistent with the Los Angeles County General Plan and Zoning, and would not support incompatible floodplain development as defined in the General Plan. The closest structural improvements that could be affected by the proposed project include some scattered residential, industrial, and business buildings at Castaic Junction, located upstream or east of the project site. These structures are located more than 100 meters away from the northern 100-year floodplain limits of the Santa Clara River. The foundations of these structures are more than 3 meters (9.9 feet) higher than the 100-year water surface. In addition, the roadway embankment feature would not affect water surface elevations that would result in loss of life or property. Once constructed, a major storm event is not likely to cause substantial damage to the embankment because riprap will be installed to protect the slope. There is no adverse risk associated with implementation of this project; therefore, the project is considered a low-risk project. Additionally, submittal of a Flood Insurance Rate Map (FIRM) Revision to FEMA by the project sponsor would enable the project to be consistent with the Los Angeles County Watershed Management Program.

Erosion impacts will be avoided around the bridge by constructing a concrete soil bank along the riverbank just under the bridge and extending out on either side.

calculated by FEMA.

Concrete soil will be utilized along the banks of the floodplain that fall within the project boundaries. The purpose of the concrete soil is to use the natural soil in a concrete mixture that blends into the surrounding soil. This mixture is much stronger than the normal soil and will greatly diminish the potential erosion of the riverbank that may be caused by rising waters from a 100-year storm. The concrete soil will eliminate the potential for the riverbank to be greatly eroded.

3.10.3 Temporary Impacts

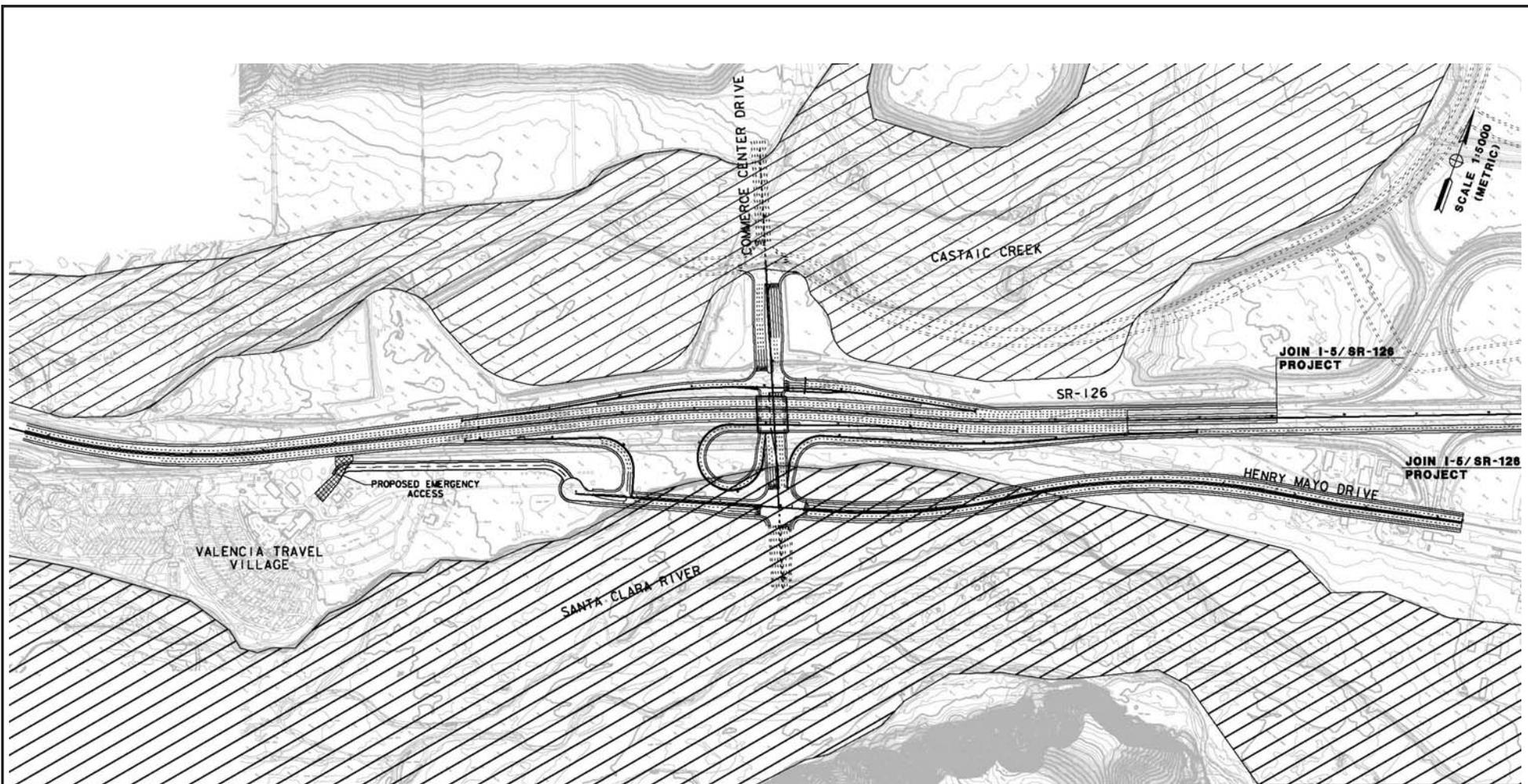
Construction Phase Impacts

Construction activities associated with the proposed interchange project would impact portions of the Santa Clara River floodplain (relocation of the Commerce Center Drive/Henry Mayo Drive intersection, and reconfiguration of Henry Mayo Drive into the Santa Clara River floodplain). Approximately 3.79 hectares (9.37 acres) of the floodplain would be affected by components of the project. Riparian habitat around the project area falls both within and outside of the affected floodplain. Components of the project are anticipated to affect approximately 4.12 hectares (10.17 acres) of riparian habitat. Construction-related impacts to the natural and beneficial floodplain values will be prevented through the use of BMPs and mitigated in the NRMP.

3.10.4 Measures to Minimize Harm

As discussed above, impacts to the natural and beneficial floodplain values resulting from the proposed project have been analyzed in the NRMP. Consequently, all necessary measures to minimize harm for impacts created by the project are included in the NRMP and are listed below.

Additionally, implementation of the NRMP would result in a gain of approximately 39.3 hectares (97 acres) of potential new riverbed because 39.3 hectares (97 acres) of uplands



SOURCE: NATIONAL FLOOD INSURANCE PROGRAM,
 FLOOD INSURANCE RATE MAP,
 LOS ANGELES COUNTY, CA
 (UNINCORPORATED AREAS) PANELS 340 & 345 OF 1275.
 DEC. 2, 1980

 FLOODPLAIN



Figure 3.10-1
 Floodplain Locations
 SR 126/Commerce Center Drive Interchange
 07-LA-126 KP R6.8-R9.2 (PM R4.2-R5.7)

will be lowered to the elevation of the riverbed and used to create a new riverbed habitat for mitigation purposes. Hence, the NRMP could result in an overall net gain of 27.9 hectares (69 acres) of riverbed².

Permanent measures

- a. Installation of structures shall not impair water flow. Bottoms of permanent culverts shall be placed below channel grade.
- b. If a stream channel has been altered, the low-flow channel shall be returned as nearly as practical to preproject topographic conditions.

Construction measures

- a. Construction activities shall be limited to the following areas of temporary disturbance: a 25.9-meter (85-foot) zone that extends into the river from the base of the riprap or gunite bank protection where it intercepts the river bottom, 6.09 meter (20-foot) wide temporary access ramps and roads to reach the construction sites. The locations of these temporary construction sites and the routes of all access roads shall be shown on maps submitted with the VRL that is submitted to the CDFG and USACE. Any variation from these limits shall be noted, with a justification for a variation. The construction plans should indicate what type of vegetation, if any, would be temporarily disturbed, and the postconstruction activities to facilitate natural revegetation of the temporarily disturbed areas. The boundaries of the construction site and any temporary access roads within the riverbed shall be marked in the field with stakes and flagging. No construction activities, vehicular access, equipment storage, stockpiling, or substantial human intrusion shall occur outside the work area and access roads.
- b. Equipment shall not be operated in areas of ponding or flowing water unless there are no practicable alternative methods to accomplish the construction work, and only after prior approval by the CDFG and the USACE. Approval shall be acquired by submitting a request to CDFG and USACE no later than 30 days prior to construction. The request must contain a biological evaluation demonstrating that no sensitive fish, amphibians, and/or reptiles are currently present, or likely to be present during construction, at the construction site, or along access roads. This request may be included in the VRL that is submitted to the CDFG and USACE.

² The Natural River Management Plan includes impacts and mitigation for eight new bridges, one replacement bridge, and six widened bridges, including the SR 126/Commerce Center Drive interchange project. The net gain in riverbed area discussed above results from the mitigation of impacts of all NRMP projects.

- c. Temporary sediment retention ponds shall be constructed downstream of construction sites that are located in the riverbed under the following circumstances: (1) when the construction site contains flowing or ponded water that drains offsite into the undisturbed streamflow or ponds, as allowed for certain areas under Item (a) above or (2) when streamflow is diverted around the construction site, but the work is occurring in the period from November 1 through April 15 when storm flows could inundate the construction site. The sediment ponds shall be constructed of riverbed material and shall prevent sediment-laden water from reaching undisturbed ponds or streamflows. To the extent feasible, ponds shall be located in barren or sandy river bottom areas devoid of existing riparian scrub, riparian woodland, or aquatic habitat. The ponds shall be maintained and repaired after flooding events, and shall be restored to preconstruction grades and substrate conditions within 30 days after construction has ended at that particular site. The location and design of sediment retention ponds shall be included in the SWPPP prepared by the project applicant for all construction activities that require a NPDES General Construction Activity Storm Water Permit.
- d. Installation of structures shall not impair water flow. Bottoms of temporary culverts shall be placed at or below channel grade.
- e. Water containing mud, silt, or other pollutants from construction activities shall not be allowed to enter a flowing stream or placed in locations that may be subject to normal storm flows during the period November 1 through April 15.
- f. Temporary structures and associated materials not designed to withstand high seasonal flows shall be removed to areas above the high-water mark before such flows occur.
- g. Staging/storage areas for construction equipment and materials shall be located outside the high-water mark.
- h. Any equipment or vehicles driven and/or operated within or adjacent to the stream shall be checked and maintained daily to prevent leaks of materials that, if introduced to water, could be deleterious to aquatic life.
- i. Stationary equipment such as motors, pumps, generators, and welders will not be located within the riverbed construction zone.
- j. The project applicant shall use best efforts to ensure that no debris, bark, slash sawdust, rubbish, cement or concrete or washing thereof, oil, petroleum products, or other organic material from any construction, or associated activity of whatever nature shall be allowed

to enter into, or be placed where it may be washed by rainfall or runoff into, the Santa Clara River or Castaic Creek. When construction operations are completed, any excess materials or debris shall be removed from the work area and properly disposed.

- k. No equipment maintenance or fueling shall be conducted within 15.2 meters (50 feet) of a watercourse.

With the implementation of these measures to minimize harm, impacts to the Santa Clara River floodplain would be reduced.

3.11 Coastal Zone

The federal Coastal Zone Management Act and the California Coastal Act (CCA), along with local coastal access and protection plans, recognize the importance of protecting coastal resources and provide the framework for the coastal zone impact analysis presented in this section. The coastal zone in the vicinity of a project area would extend approximately 0.9 km (1,000 yards) from the ocean.

The proposed project is not located in the coastal zone, but within the vicinity of the Santa Clara River, which originates in Soledad Canyon in the San Gabriel Mountains, approximately 49.9 kilometers (31.0 miles) east-southeast of the project site. The river drains an area of about 1,036 square kilometers (400 square miles) at its confluence with Castaic Creek. Within the project area, the river flows west, crossing I-5 south of the existing SR 126/ Commerce Center Drive intersection, to the coast where it drains into the Pacific Ocean near the City of San Buenaventura.

According to Section 3.1 – Hydrology, Water Quality, and Stormwater Runoff, the project area is not located within the coastal zone management program area; and no coastal barriers are located within the project area.

Since the proposed project is not located within the Coastal Zone, no impacts to the Coastal Zone would occur with project implementation.

3.12 Wild and Scenic Rivers

According to Section 3.1 – Hydrology, Water Quality, and Stormwater Runoff, the Santa Clara River is not a wild or scenic river, as designated by the National Wild and Scenic Rivers System (National Park Service, 1999).

A review of the most current list of Wild and Scenic Rivers by the National Park Service (NPS) reveals that portions of the following California rivers have been classified as wild and scenic:

American (lower)	Klamath
American (North Fork)	Merced
Big Sur	Sespe Creek
Eel	Sisquoc
Feather	Smith
Kern	Trinity
Kings	Tuolumne

The proposed project is not located in the vicinity of and does not involve any construction in, across, or adjacent to a river designated as a component of, or proposed for inclusion in, the National System of Wild and Scenic Rivers (NPS, 2002). No impacts to rivers designated as wild and scenic would occur as a result of implementing any of the project alternatives.

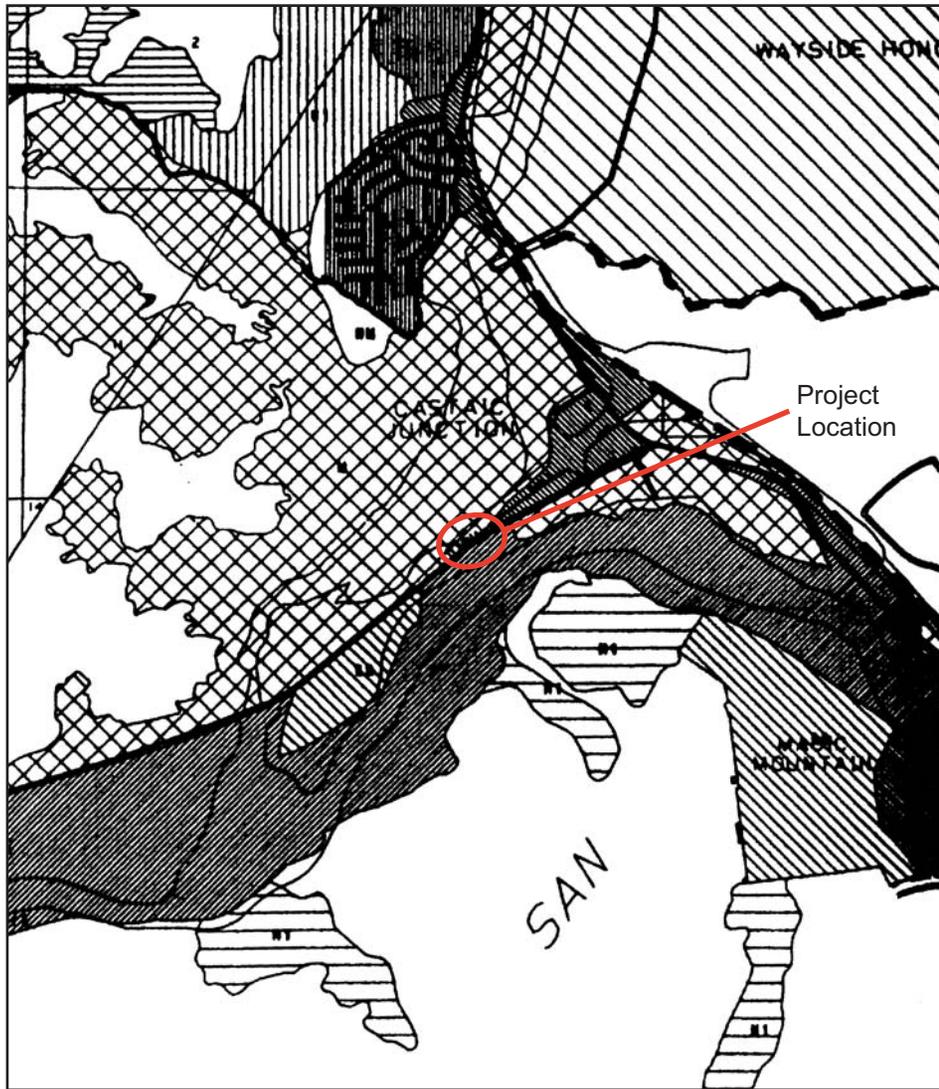
3.13 Land Use, Planning, and Growth

The proposed project is located in a fast-growing area within unincorporated Los Angeles County, in the northwest portion of the Santa Clarita Valley, northwest of the City of Santa Clarita. To the southeast of the SR 126/Commerce Center Drive interchange is the community of Valencia, within the City of Santa Clarita. Valencia is a master-planned community that is being developed in accordance with a plan that was designed in the early 1960s to create a unified urban environment on property owned by the Newhall Land and Farming Company.

3.13.1 Affected Environment

Existing Land Uses

In general, current land use patterns within the proposed project area reflect a mixture of open space, urban, and rural use. The immediate project area has commercial and industrial properties, agriculture and recreational uses, and vacant land consisting of either undeveloped commercial and industrial areas, hills, or floodplains. There are no permanent residential properties within the proposed project area (see Figure 3.13-1).



LEGEND:

	N1	NONURBAN 1	(0.5 DU/AC)
	N2	NONURBAN 2	(1.0 DU/AC)
	U1	URBAN 1	(1.1 TO 3.3 DU/AC)
	U2	URBAN 2	(3.4 TO 6.6 DU/AC)
	U3	URBAN 3	(6.7 TO 15.0 DU/AC)
	U4	URBAN 4	(15.0 TO 40.0 DU/AC)
	C	COMMERCIAL	
	RR	RESORT RECREATIONAL	
	M	INDUSTRY	
	P	PUBLIC SERVICE FACILITIES	
	HM	HILLSIDE MANAGEMENT	
	S	SIGNIFICANT ECOLOGICAL AREAS	
	W	FLOODWAY/FLOODPLAIN	

Source: Santa Clarita Valley Area Plan.
 Department of Regional Planning,
 County of Los Angeles. February 1984.



Figure 3.13-1
Land Use Designations
 SR 126/Commerce Center Drive Interchange
 07-LA-126 KP R6.8-R9.2 (PM R4.2-R5.7)

The surrounding urbanized development supports a variety of commercial and industrial businesses within the Valencia Commerce Center, located north of the SR 126/Commerce Center Drive intersection. The Valencia Commerce Center is an ongoing, major expansion of the Valencia Industrial Center on approximately 581 hectares (1,436 acres). It includes 284 hectares (702 acres) of industrial park, with approximately 102 hectares (252 acres) of industrial space, 12 hectares (30 acres) of general commercial area, and 37 hectares (91 acres) of office park. The area also has plans for a 4.5-hectare (11-acre) recreational area, jogging trails, and an equestrian trail.

There are no public utilities or facilities within the project vicinity. A newly constructed Caltrans Maintenance Facility is located southeast of the SR 126/Commerce Center Drive intersection, east of The Old Road. No pedestrian or bicycle facilities are located within the area. A bike path is currently being researched for future build out that would run along the Santa Clara River. If approved this project will incorporate the bike path design..

Proposed Developments

There are no plans for new residential, commercial, or industrial developments within the immediate project area. However, the Valencia Commerce Center is currently developing planned expansions immediately north of the project area, as discussed in Section 2.3. The City of Santa Clarita is also developing plans for the North Valencia Annexation project. This project would involve the annexation of 347 hectares (858 acres) of land into the City of Santa Clarita and approval for a mixed residential, commercial, office, industrial, conservation, and recreation development project.

Local and Regional Land Use Plans

The proposed project is located within the jurisdiction of Los Angeles County. As such, the proposed project is subject to the General Plan policies and Zoning Ordinances of Los Angeles County. Policies of the General Plan are presented in the Santa Clarita Valley Area Plan, developed in 1984 and amended in 1990.

The Santa Clarita Valley Area Plan is a portion of the Los Angeles County General Plan, which provides a framework to guide decisionmakers in developing policies for the unincorporated areas of the Santa Clarita Valley. The following policies from the Santa Clarita Valley Area Plan are relevant to the proposed project.

Land Use Element

Policy 9.4—Encourage the development of a public transportation system to meet resident requirements for access to public and private services, employment, and activity centers consistent with demand.

Economic Development Element

Policy 1.3—Support infrastructure improvements in appropriate locations that contribute to development or expansion of employment-producing uses.

Circulation Element

Policy 2.3—Encourage the State of California to expand the access to the freeway system as needed to serve the area and to maximize freeway capacity.

The City of Santa Clarita has its own General Plan (1991), which provides guidance for the development of the City. The following policy from the City of Santa Clarita General Plan is also relevant to the proposed project.

Land Use Element

Policy 7.1—Ensure demand for public facilities and services does not exceed the ability to provide and maintain such facilities and services; necessary facility improvements should precede or be coordinated with future development.

Consistency with Plans and Policies

County of Los Angeles General Plan

Under the Build Alternative, the proposed interchange would be consistent with Policy 9.4 (Land Use Element), Policy 1.3 (Economic Development Element), and Policies 2.1 and 2.3 (Circulation Element). The proposed interchange would meet existing and future local residential needs by providing adequate roadway and intersection capacity to existing and planned employment centers (Valencia Commerce Center).

City of Santa Clarita General Plan

Policy 7.1 states that “...necessary public facility improvements should precede or be coordinated with future development...” Construction of the Build Alternative is consistent with this policy in that it is tied with the future expansion of the Valencia Commerce Center, which is planned to be a 1.2-million-square-meter (12-million-square-foot) employment center at its buildout.

For the above reasons, the Build Alternative is consistent with local land use plans and policies.

3.13.2 Permanent Impacts

Compatibility with Existing Land Uses and Proposed Developments

The proposed project would continue to be consistent with the existing land uses in the project area (a mixture of open space, urban, and rural uses). The project is within the existing SR 126 corridor, and will enhance the capacity of the existing SR 126/Commerce Center Drive at-grade intersection. The existing uses would not be impaired by the proximity of the proposed interchange, and are already well integrated with the transportation facilities in the area.

The proposed interchange would be compatible with the planned developments in the area; most likely with the Valencia Commerce Center and the Newhall Ranch land development. Without the proposed interchange, local as well as regional circulation, through the SR 126/Commerce Center Drive at-grade intersection, would be constrained due to high-forecast traffic volumes. With the proposed interchange, the existing and proposed land uses would be served as shown through improved traffic levels of service (see also Section 3.18, Traffic Transportation/Pedestrian and Bicycle Facilities).

Reconstruction and realignment of the eastbound SR-126 off-ramp and Travel Village Frontage Road will require the permanent acquisition of approximately 15 recreational vehicle campsites or spaces within Valencia Travel Village. Valencia Travel Village provides 303 campsites year-round, with daily, weekly, and monthly rentals, as well as phone internet, TV, group and handicap facilities, propane, and dump station. See Section 3.15 (Community Impacts).

3.13.3 Temporary Impacts

Construction of the proposed interchange is expected to occur within the right-of-way boundaries of the existing Commerce Center Drive intersections of Hancock Lane (proposed), SR 126, and Henry Mayo Drive. Offsite staging areas are likely to be required; and construction vehicles, equipment, and material would be transported between the staging areas and construction site. Because the majority of the project area is vacant, and because construction staging would be temporary, substantial compatibility impacts or direct property impacts are not anticipated.

3.13.4 Measures to Minimize Harm

No measures to minimize harm are required. See Section 3.15 (Community Impacts)

3.14 Farmlands/Agricultural Lands

3.14.1 Affected Environment

Cultivated farmland, consisting of a variety of row crops, is located south of SR 126 and Henry Mayo Drive. Uncultivated land that contains soils suitable for farming is also located within the proposed project area. Both the cultivated and uncultivated land has been classified as prime and unique farmland and farmland of statewide importance by the U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS), as required by the Farmland Protection Policy Act (FPPA) in 1981. The farmland areas are shown in Figure 3.14-1.

3.14.2 Permanent Impacts

Congress enacted the FPPA in 1981. It is intended to minimize the extent to which federal activities contribute to the conversion of agricultural land to nonagricultural uses. It also seeks to ensure that federal policies are administered in a manner that would be compatible with state, local, and private policies that protect farmland. The FPPA requires federal agencies to examine the impact of their programs before they approve any activity that would convert farmland.

To rate the relative impact of projects on sites subject to FPPA, federal agencies fill out a Farmland Conversion Impact Rating Form (Form AD-1006). The rating form is based on a Land Evaluation and Site Assessment (LESA) system, which is a numerical system that measures the quality of farmland. LESA systems have two components. The Land Evaluation element rates soil quality. The Site Assessment component measures other factors that affect the viability of a farm including, but not limited to, proximity to water and sewer lines and the size of the parcel. Sites receiving a combined score of less than 160 points do not require further evaluation. Alternatives should be proposed for sites with a combined score greater than 160. On the basis of this analysis, a federal agency may, but is not required to, deny assistance to private parties and state and local governments undertaking projects that would convert farmland.

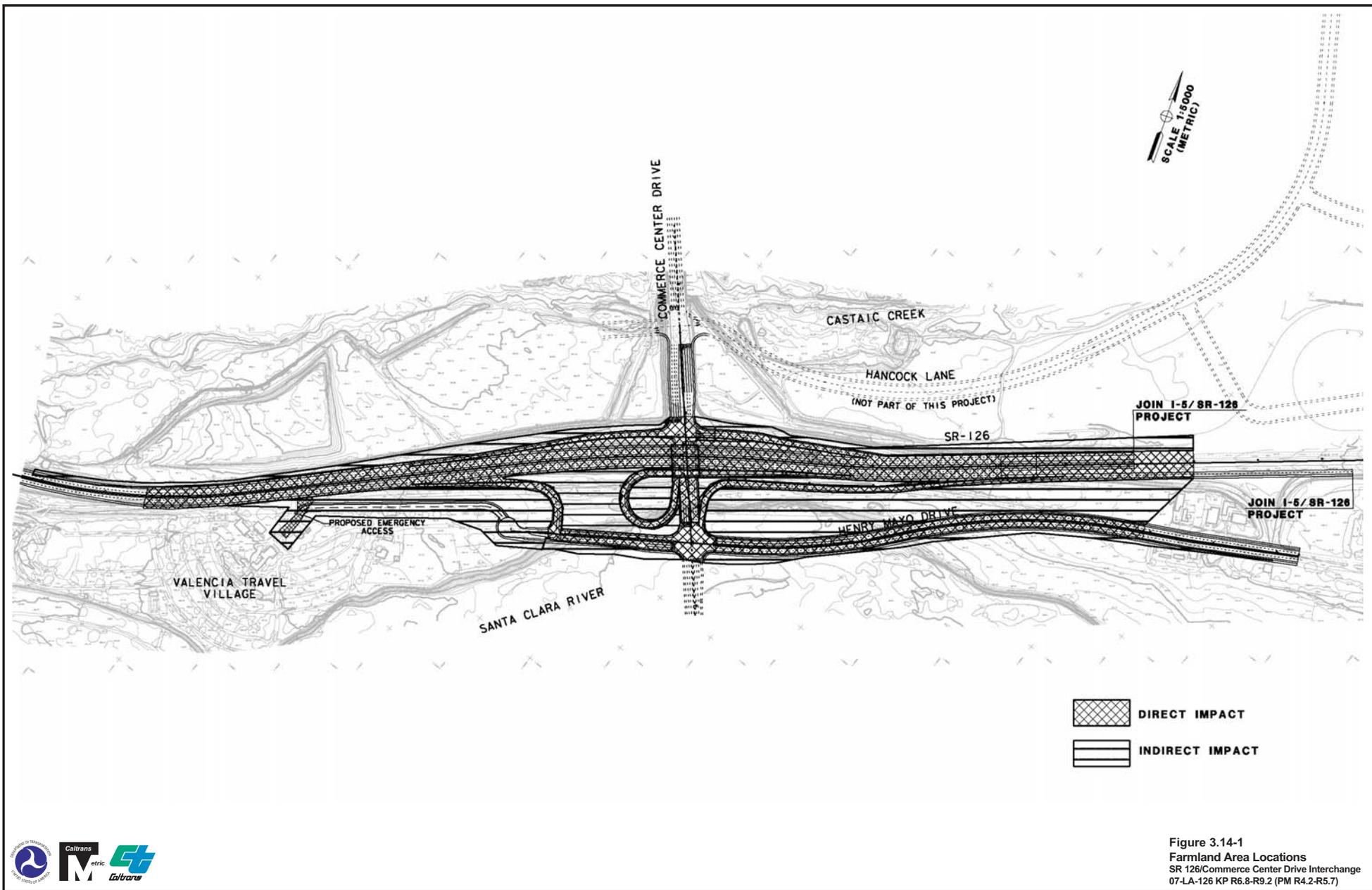


Figure 3.14-1
 Farmland Area Locations
 SR 126/Commerce Center Drive Interchange
 07-LA-126 KP R6.8-R9.2 (PM R4.2-R5.7)

Appendix D contains the Farmland Conversion Impact Rating Form for the proposed project. Active farmland is present both north and south of SR 126 and Henry Mayo Drive, west of The Old Road. This property has been zoned by Los Angeles County as Urban 4 (with 15.0 to 40.0 dwelling units per acre). The proposed project rated a combined score of 91 points on the Farmland Conversion Impact Rating Form. This score is below the threshold of 160; therefore, the acquisition of this farmland would not be considered a adverse impact. Additionally, according to the FPPA, farmland does not include those lands that a state or local government has designated, by planning or zoning, for commercial, industrial, or residential use. Therefore, the acquisition of prime farmland or farmland of statewide importance would not be adverse due to the zoning of the project site and the combined score of 91 on the Farmland Conversion Impact Rating Form.

3.14.3 Temporary Impacts

As discussed above, the acquisition of farmland within the project boundaries would not be considered a adverse impact; therefore, no temporary impacts would occur.

3.14.4 Measures to Minimize Harm

No measures to minimize harm are necessary because there are no adverse impacts to farmland.

3.15 Community Impacts (Social, Economic) and Environmental Justice

Executive Order 12898, Federal Actions to Address Environmental Justice in Minority and Low-Income Populations, signed on February 11, 1994, directs federal agencies to take the appropriate and necessary steps to identify and address disproportionately high and adverse human health or environmental effects of federal projects and programs on minority and low-income populations to the greatest extent practicable and permitted by law. The term “minority” includes persons who identify themselves as Black, Asian/Pacific Islander, Native American, or of Hispanic origin. The term “low-income” includes persons whose household income is at or below the U.S. Department of Health and Human Services (HHS) poverty guidelines. A different threshold (e.g., U.S. Census Bureau poverty threshold) may be utilized as long as it is not selectively implemented and is inclusive of all persons at or below the HHS poverty guidelines. In addition, the proposed project's design will comply with the American Disabilities Act of 1990, by incorporating the conforming slope, grade, width, and ramp design elements into the project.

3.15.1 Affected Environment

Population

Since incorporation, the nearby City of Santa Clarita has continued to grow at a relatively rapid rate. According to the U.S. Census Bureau, the City of Santa Clarita is currently home to about 131,000 residents; and it is expected to grow to over 188,000 by 2020, representing a 1.6 percent average annual growth rate.

The proposed project lies proximate to the northeastern boundary of Census Tract 9203.27 in Los Angeles County. Census Tract 9203.27 is bordered to the north by SR 126 and Tract 9201.06 (the Val Verde community), Potrero Canyon Road to the south and west, and I-5 to the east. According to statistics from the 2000 Census, the total population of Census Tract 9203.27 is 6,439 people.³ Approximately 57 percent of the tract population lie within an urban area, while the remaining 43 percent lie within a rural/nonfarm area.

Low-Income Populations

Census 2000 family income data for Census Tract 9203.27 indicate that the median household income for Tract 9203.27 is \$99,575 annually. In the neighboring Val Verde area to the north (Tract 9201.06), the median household income is \$50,500 annually. According to Census 2000, the median household income for the entire county of Los Angeles is \$42,189 annually. Both the project Census Tract 9203.27 and neighboring Tract 9201.06 are above the median household income line. In addition, of the 2,100 samples in Tract 9203.27, approximately 13 percent of the samples in the tract are below the County median.

Minority Populations

Table 3.15-1 shows the breakdown of minority population data from the 2000 Census. The following race/ethnicity percentages for Census Tract 9203.27 are as follows.

As shown in the table, Census Tract 9203.27 has a predominantly White race/ethnicity (65.8 percent). The next two larger groups are Asian (14.2 percent) and Hispanic or Latino (11.8 percent).

³ U.S. Census Bureau, 2000.

Table 3.15-1. Ethnic/Racial Distribution for Census Tract 9203.27

Race/Ethnicity	Census Tract 9203.27	
	Persons	Percent of Total
Total Population	6,439	100.0
White	4,239	65.8
Black or African American	142	2.2
American Indian or Alaska Native	29	0.5
Asian	918	14.2
Native Hawaiian and other Pacific Islander	0	0.0
Some other race	56	0.9
Two or more races	296	4.6
Hispanic or Latino	759	11.8

Source: U.S. Census Bureau, 2000

Housing

The rapid growth of the Santa Clarita Valley is expected to continue until current economic or housing conditions change. The valley is perceived as a very attractive place to live, and there is a strong housing market (Valencia Company, 1999). Growth in the number of housing units within the Santa Clarita Valley is supported by the goals of the Santa Clarita Area Plan and the City General Plan, which seek to create a balance of jobs and housing. At the present time, there is an imbalance of jobs and housing. The County Santa Clarita Area Plan includes approximately 4,047 hectares (10,000 acres) of proposed new development outside the City of Santa Clarita. This land is planned for single- and multiple-family residences, and specific areas are also planned for the needed industrial and commercial land uses (the 1.2-million-square meter [13.3-million-square-foot] Valencia Commerce Center).

Employment

Although the Santa Clarita Valley is largely recognized as a suburban residential community, the City of Santa Clarita and surrounding development within the jurisdiction of Los Angeles County include a diversity of employment opportunities. The largest employers in the area include Six Flags Magic Mountain (3,000 employees), Henry Mayo Newhall Memorial Hospital (1,072 employees), and the William S. Hart Unified School District (650 employees). The local labor force of about 43,000 is employed in a range of occupations. The largest occupational types include professional/technical (20.2 percent of the labor force), management (17.2 percent), clerical (16.8 percent), and sales (14.3 percent).

The Valencia Commerce Center is located northeast of the I-5/SR 126 interchange. As discussed in Section 2.3, it is a major expansion of the Valencia Industrial Center and is forecast to grow from the existing 200,000 square meters (4.9 acres) to approximately 1.2 million square meters (297 acres) by the year 2020. This equates to a labor force of approximately 24,000 employees.⁴

3.15.2 Permanent Impacts

The proposed project would not negatively affect local or regional employment, industry, or commerce, or require the displacement of businesses. It would, however, have a positive effect for local and regional businesses, which would benefit from improved traffic operations at the SR 126/Commerce Center Drive and Commerce Center Drive/Henry Mayo Drive interchanges. The proposed interchange would also accommodate planned growth within the Valencia Commerce Center. Impacts to the Valencia Travel Village resulting from the loss of direct access are discussed in Section 3.17.

The construction of a new grade-separated interchange at SR 126 and Commerce Center Drive would result in minimal changes in local access and circulation. The presence of this new interchange would facilitate efficient and safe access for existing and approved future land uses in the vicinity.

Additionally, access to the Valencia Travel Village would no longer be provided directly from SR 126; instead, traffic would enter via the Commerce Center Drive/Henry Mayo Drive intersection. The new route would maximize operation and increase safety; however, it may initially be unfamiliar to campers. Signage would be provided along SR 126 to redirect travelers, and to minimize potential confusion or traffic delays.

Reconstruction and realignment of the eastbound SR-126 off-ramp and Travel Village Frontage Road will require the permanent acquisition of approximately 15 recreational vehicle campsites or spaces within Valencia Travel Village. Valencia Travel Village provides 303 full and partial hook-up camping/recreational sites. Valencia Travel Village accommodates all lengths of recreational vehicles, and provides 238 sites with full hookups (water, electricity, sewer, phone, TV, etc.) 150 of which are pull-through sites. There are also approximately 800 storage spaces available to store larger vehicles and boats. The Travel Village has been in operation for over 30 years and has three swimming pools, laundry facilities, arcade room, store, recreational room, play-ground, phone, internet, TV,

⁴ The approximate labor force of 24,000 employees is based on trip rates converted from the Institute of Transportation Engineers, 1997.

group and handicap facilities, propane, and a dump station. The RV spaces are available to rent on a daily, weekly, and monthly basis. No vehicle is allowed to stay more than 90 days during any one visit.

Environmental justice

Low-Income Populations

Based on review of data for Census Tract 9203.27 and neighboring Tract 9201.06, the median household incomes for both tracts are above the median household income for Los Angeles County. Therefore, the project area does not contain low-income population.

Minority Populations

According to Census data, Census Tract 9203.27 has a predominantly White race/ ethnicity (65.8 percent), while the next two larger groups are Asian (14.2 percent) and Hispanic or Latino (11.8 percent). Therefore, the project area is not a minority population area.

3.15.3 Temporary Impacts

Construction activities would result in temporary, localized, site-specific disruptions to the population and housing in the proposed project area, primarily related to: construction-related traffic changes from trucks and equipment in the area; partial and/or complete street and lane closures, with some requiring detours; increased noise and vibration; lights and glare; and changes in air emissions. The traffic, air quality, and noise analyses for the proposed project alternatives provide additional detail on these types of temporary construction effects.

Because the project construction activities would be temporary in duration and would not be likely to have effects substantially different than the same types of nuisance-like effects associated with typical construction activities throughout Southern California, no adverse effects to the local population and housing are expected to result.

3.15.4 Measures to Minimize Harm

CI-1 For right-of-way and acquisition of the 15 recreational vehicle spaces impacts, relocation assistance payments and counseling will be provided to persons and businesses in accordance with the Federal Uniform Relocation Assistance and Real Properties acquisition Policies Act (as amended) and the California Government Code Chapter 16, Section 7260, et seq. (State Uniform Relocation Act) to ensure adequate relocation and a decent, safe, and sanitary home for displaced residents. All eligible displacees will be entitled to moving expenses, and all benefits and services will be provided equitable to all residential and business relocatees without regard to race, color, religion, age, national origins and disability as specified under Title VI of the Civil Rights Act of 1964.

3.16 Utilities/Emergency Services

3.16.1 Affected Environment

The utilities within the project limits of the Build Alternative have been identified according to as-built plans and plans available from the County of Los Angeles. The utilities along SR 126 are mostly located on the south side of the road. Existing utilities include: 200-mm gas lines, an underground telephone line, a 200-mm oil line, and a 300-mm water line. In addition, SCE overhead power line crosses SR 126 west of the hook ramps at Henry Mayo Drive. Based on preliminary field observations, the overhead power line does not appear to be in conflict with the proposed improvements.

3.16.2 Permanent Impacts

Implementation of the Build Alternative would not result in the need to relocate any existing utilities. Additionally, no emergency facilities (police, fire, or hospitals) would be directly affected.

3.16.3 Temporary Impacts

Emergency services could experience temporary, short-term traffic delays during construction. Any road closures and detours would be advertised in advance and signed to minimize adverse impacts to both the travelling public and emergency service operators. A Traffic Management Plan (TMP) will be required that would minimize impacts to emergency services. Section 3.17, Traffic Transportation/Pedestrian and Bicycle Facilities, provides a description of the TMP. This impact would be a temporary and short-term impact.

3.16.4 Measures to Minimize Harm

As discussed in Section 3.17, Traffic Transportation/Pedestrian and Bicycle Facilities, a TMP will be developed during the design phase of the project. The objective of the TMP is to mitigate the impact construction activities will have on freeway and roadway users (including emergency-service providers), and it may include the following strategies:

- Real-time communication with motorists, including changeable message signs and highway advisory radio announcements to alert motorists of upcoming construction impacts, detours, and travel conditions
- Provisions for tow-truck service during peak hours to remove stalled vehicles within the construction zone

Additionally, construction activities along SR 126 and at the SR 126/Commerce Center Drive intersection will be coordinated with other construction activities that will be taking place nearby at around the same time. The TMP will be closely coordinated with the City, the County, Newhall Land, and the public to ensure that traffic along SR 126 and the surrounding streets remains at an acceptable level of operation during construction.

3.17 Traffic Transportation/Pedestrian and Bicycle Facilities

3.17.1 Affected Environment

SR 126 extends westward from the I-5 interchange in Los Angeles County to U.S. 101 in Ventura County and is included in the State Freeway and Expressway System. The route is used heavily between I-5 and the Ventura Coast. East of the I-5/SR 126 interchange at the I-5 northbound off-ramp, SR 126 will connect to Newhall Ranch Road as part of the ongoing Newhall Ranch Road construction project (completion date estimated at 2005).

As part of the completed (in 1999) SR 126 Widening and Improvement Project, SR 126 was realigned to the north to accommodate an ultimate grade-separated interchange at Commerce Center Drive. This realignment was necessary to minimize the impact to the environmentally sensitive areas of Castaic Creek to the north and Santa Clara River to the south of the SR 126/Commerce Center Drive intersection.

In early 2000, Commerce Center Drive was extended to the south from Franklin Avenue over Castaic Creek to form a signalized intersection with SR 126. As part of the same construction project, Commerce Center Drive was extended further south to intersect with Henry Mayo Drive. Henry Mayo Drive, a County arterial, was extended westerly to intersect with Commerce Center Drive to form a three-way-stop controlled intersection.

The existing hook ramps on SR 126, located east of Commerce Center Drive, provide access to the local streets and businesses south of SR 126. Access to Henry Mayo Drive is currently provided by the eastbound hook ramps from SR 126. These ramps will be removed as part of this project to eliminate the existing weaving conflicts and allow for better operation with the proposed improvements. Henry Mayo Drive will provide access to Valencia Travel Village, located in the southwest quadrant of the SR 126/Commerce Center Drive Interchange. Currently, access to Valencia Travel Village, a recreational vehicle camping area located south of SR 126, is provided directly from SR 126, which will be eliminated as part of the proposed improvements.

3.17.2 Permanent Impacts

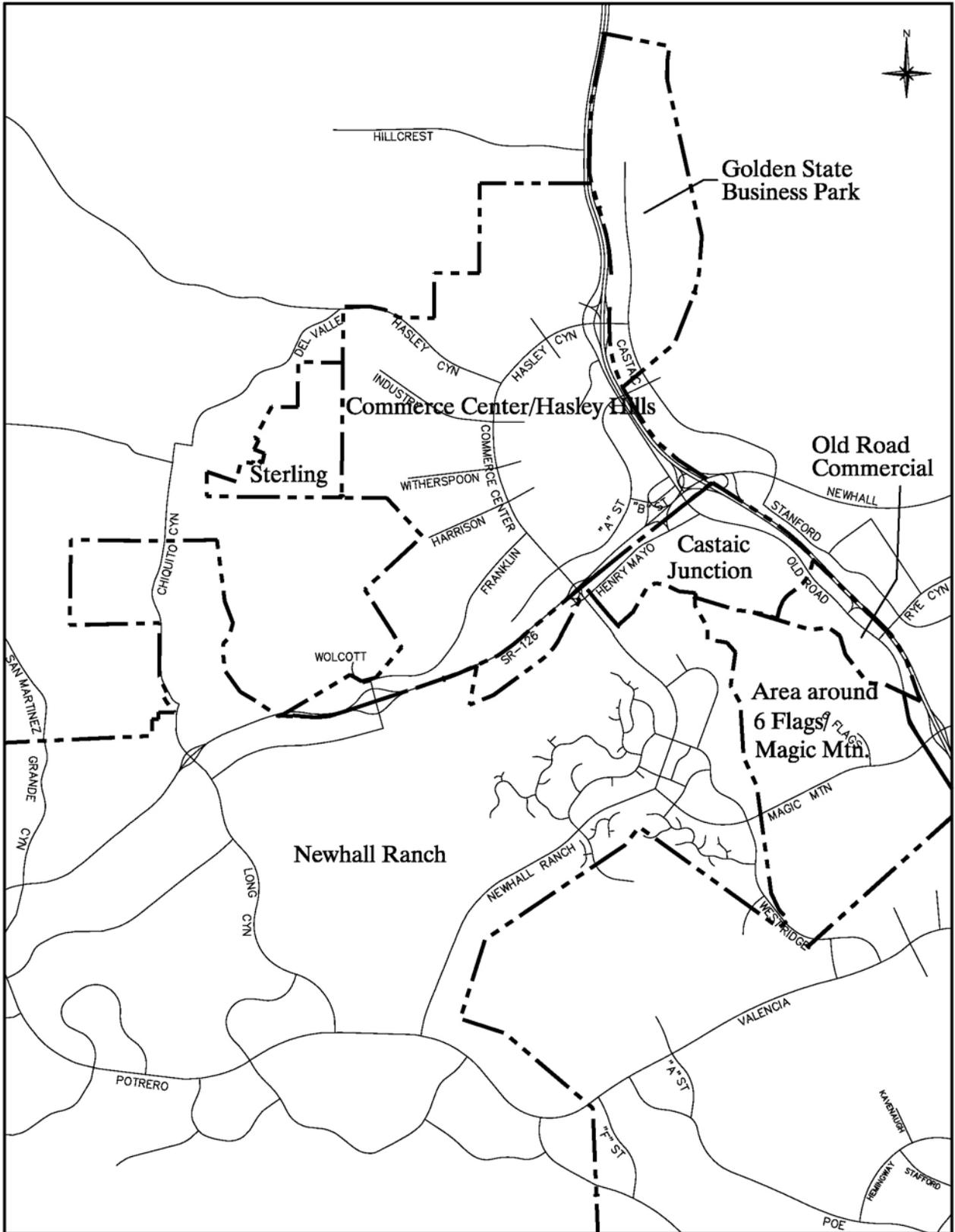
No Build Alternative

The population of the Santa Clarita Valley is expected to grow to approximately 500,000 people by 2020. The area will experience a considerable increase in traffic from regional and inter-regional growth projections, as well as buildout of local developments. Newhall Land has developed residential and commercial properties along the I-5 corridor near SR 126 during recent years, with additional development activities planned in the future.

The following project traffic analysis is based on a report prepared by Austin-Foust Associates, Inc. (AFA, 2003). Forecast traffic volumes for the No Build and Build Alternatives were extracted from the Santa Clarita Valley Consolidated Transportation Model (SCVCTM) and analyzed according to Caltrans-prescribed methodologies. The recent traffic model runs of the SCVCTM have been updated and approved by Caltrans and local agencies (City of Santa Clarita and Counties of Los Angeles and Ventura), and include updated land use buildout statistics in the model study area and traffic volume consistency between the regional traffic forecasting models of Ventura and Los Angeles Counties.

The Valencia Commerce Center, a major commercial/industrial development located north of SR 126 (see Figure 3.17-1), is forecasted to grow from approximately 480,000 square meters (119 acres) today to approximately 1.3 million square meters (321 acres) by the year 2025. This will add approximately 50,000 trips per day, a majority of which will be served by SR 126 and the SR 126/Commerce Center Drive intersection.

The Newhall Ranch development project located southwest of the SR 126/Commerce Center Drive intersection proposes the construction of over 21,000 dwelling units and over 525,000 square meters (130 acres) designated for commercial and industrial use. These additional developments will add approximately 350,000 trips per day, with many of those using SR 126 and the SR 126/Commerce Center Drive intersection.



Source: Austin-Foust Associates, Inc., January 2003

Figure 3.17-1
SCVCTM Land Use Areas
 SR 126/Commerce Center Drive Interchange
 07-LA-126 KP R6.8-R9.2 (PM R4.2-R5.7)



Proposed developments within the Santa Clarita Valley would also generate additional traffic on SR 126 and Commerce Center Drive. The developments within the Santa Clarita Valley, including the Valencia Commerce Center and Newhall Ranch development project, are expected to add approximately 540,000 trips per day to the area.

By the year 2025, the projected traffic within the study area will increase greatly. The year 2025 No Build forecasted traffic volumes are shown in Figure 2.2-1. These volumes assume the long-range arterial highway system (i.e., Commerce Center Drive extended south over the Santa Clara River to Magic Mountain Parkway) and assume an at-grade intersection at SR 126. In the P.M. peak hour, the volume on southbound Commerce Center Drive would increase from 778 vehicles to 2,168 vehicles; and the volume on eastbound SR 126 would increase from 1,123 vehicles to 3,537 vehicles. In general, the volume on the roadway network within the study area would triple over the next 20 years.

An ICU analysis was conducted for the SR 126/Commerce Center Drive interchange. The ICU values for the Commerce Center Drive intersections at future Hancock Street, SR 126, and Henry Mayo Drive have been calculated and are summarized in Table 3.17-3. As demonstrated by the ICU values of 1.31 (A.M.) and 1.40 (P.M.), the SR 126/Commerce Center Drive intersection cannot accommodate the forecasted growth. In addition, the forecasted peak-hour directional volumes on SR 126 between Commerce Center Drive and I-5 are nearly 4,000 vehicles, which exceed the capacity of the available two lanes. The existing roadway network cannot accommodate the buildout of the planned development based upon the forecasted traffic volumes.

This alternative does not satisfy the purpose and need of the project as described in Chapter 1. It would:

- Not provide capacity for forecasted traffic volumes
- Not improve local access and traffic circulation
- Decrease driver safety
- Increase fuel consumption and vehicle emissions
- Not incorporate planned infrastructure improvements consistent with local and regional planning efforts
- Not accommodate planned growth within the study area

Levels of Service

LOS is a qualitative indicator of the operating condition of an intersection as represented by traffic congestion, delay, and the v/c ratio. For signalized intersections, it is measured from LOS A (excellent conditions) to LOS F (very poor conditions), with LOS D (v/c of 0.90, fair conditions) typically considered to be the threshold of acceptability. The relationship between v/c ratio and LOS for signalized intersections is shown in Table 3.17-1.

Table 3.17-1. Relation Between LOS and V/C Ratio

V/C Ratio	LOS	Traffic Conditions
0 to 0.60	A	Little or no delay/congestion
>0.601 to 0.70	B	Slight congestion/delay
>0.701 to 0.80	C	Moderate delay/congestion
>0.801 to 0.90	D	Significant delay/congestion
>0.901 to 1.00	E	Extreme congestion/delay
1.00 +	F	Intersection failure/gridlock

For signalized intersections under the jurisdiction of the County of Los Angeles, LOS values were determined by using the ICU method. Stop-controlled intersections were analyzed using methodologies contained in the *Highway Capacity Manual* (HCM) in which LOS is based on average control delay (Transportation Research Board, 2000). The relationship between delay and LOS is presented in Table 3.17-2 for stop-controlled intersections (two-way and multiway stops).

Table 3.17-2. Relation Between LOS and Average Control Delay

Level of Service (LOS)	Average Control Delay (sec/vehicle)
A	0 – 10
B	> 10 – 15
C	> 15 – 25
D	> 25 – 35
E	> 35 – 50
F	> 50

Build Alternative

The Build Alternative for the SR 126/Commerce Center Drive intersection proposes a grade-separated interchange at the SR 126/Commerce Center Drive intersection and widening of SR 126. A new structure would be built over Commerce Center Drive to allow for uninterrupted flow on SR 126. The interchange would provide full movement for traffic from Commerce Center Drive and along SR 126.

Table 3.17-3 shows the LOS at the signalized intersections along Commerce Center Drive based upon the ICU analysis for the No Build and proposed project conditions. A lane capacity of 1,600 vehicles per hour per lane (vphpl) was used, except for the dual left-turn lanes at both Hancock Street and Henry Mayo Drive where 1,440 vphpl were used. With the construction of the Build Alternative, the improved SR 126/Commerce Center Drive interchange would be forecasted to operate at LOS D or better, an improvement from the forecasted No Build LOS F.

Table 3.17-3. Intersection LOS Summary

Location	2025 No Build				2025 Build Alternative			
	A.M.		P.M.		A.M.		P.M.	
	v/c	LOS	v/c	LOS	v/c	LOS	v/c	LOS
Commerce & SR 126	1.31	F	1.40	F	-	-	-	-
Commerce & SR 126 WB	-	-	-	-	0.83	D	0.65	B
Commerce & Henry Mayo	0.78	C	0.62	B	0.81	D	0.73	C
Commerce & Hancock St.	0.90	D	0.74	C	0.90	D	0.74	C

Source: Austin-Foust, 2003

SR 126 would be widened to four lanes in each direction, with auxiliary lanes as needed, to accommodate the increase in traffic. The 2025 peak-hour volumes for the Build Alternative would be 3,938 vehicles in the eastbound direction and 3,021 vehicles in the westbound direction. Figure 3.17-2 shows the 2025 peak-hour traffic volumes and lane configurations for the Build Alternative.

The proposed improvements would add the necessary capacity to accommodate the future buildout within the area. A comparison of the operational conditions of the Build and No Build Alternatives for the year 2025 indicates that the proposed improvements would alleviate several of the potential operational and safety problems identified in the analysis of the No Build Alternative.

The construction of a new grade-separated interchange at SR 126 and Commerce Center Drive would result in minimal changes in local access and circulation. The presence of this new interchange would facilitate efficient and safe access for existing and approved future land uses in the vicinity.

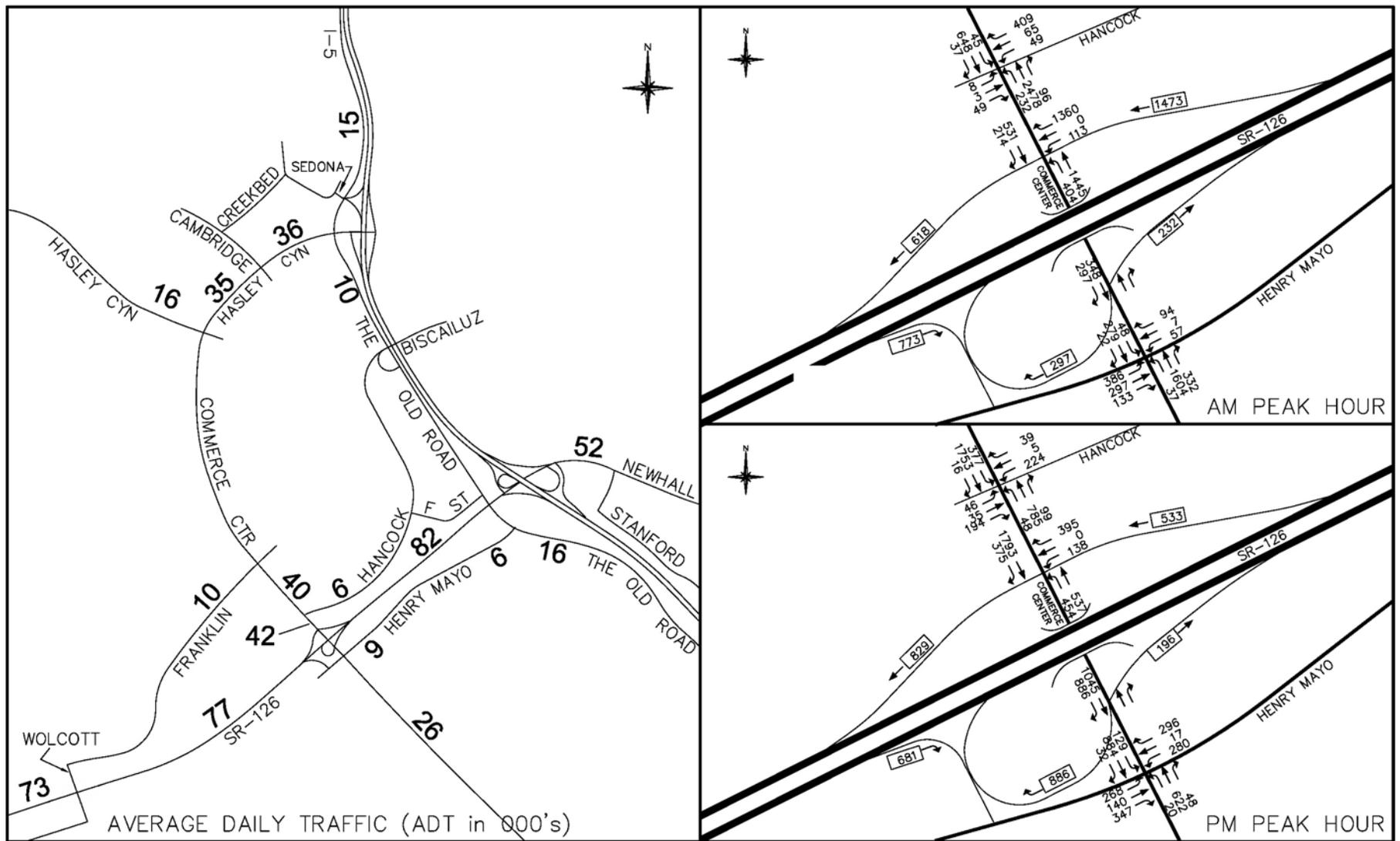
Additionally, access to the Valencia Travel Village would no longer be provided directly from SR 126; instead, traffic would enter via the Commerce Center Drive/Henry Mayo Drive intersection. The new route would maximize operation and increase safety; however, it may initially be unfamiliar to campers. Signage would be provided along SR 126 to redirect travelers and to minimize potential confusion or traffic delays. Any possible impacts to travelers from the proposed improvements are considered negligible. On a local and regional basis, there would be no additional traffic generated as a direct result of the project.

In summary, the proposed SR 126/Commerce Center Drive interchange improvements and the widening of SR 126 would satisfy the purpose and need of the project (Chapter 1) and would result in the following beneficial traffic and circulation effects:

- Availability of a full-service interchange that meets FHWA and Caltrans standards
- Increased capacity along SR 126
- Reduction of existing weaving conflicts
- Improved intersection LOS
- Enhanced safety

3.17.3 Temporary Impacts

During the construction phases of the Build Alternative, certain lanes and sections of SR 126, Commerce Center Drive, and Henry Mayo Drive may be temporarily closed to allow specific construction activities to occur. Lane closures and detour routes will be designed to minimize impacts on peak-hour traffic flow to mainline SR 126.



Source: Austin-Foust Associates, Inc., January 2003

Figure 3.17-2
Year 2025 Preferred Alternative
Traffic Volumes
 SR 126/Commerce Center Drive Interchange
 07-LA-126 KP R6.8-R9.2 (PM R4.2-R5.7)



3.17.4 Measures to Minimize Harm

To minimize traffic delays as a result of construction of the Build Alternative, a TMP will be developed during the design phase of the project for review and approval from Caltrans District 7.

The objective of the TMP is to mitigate the impact construction activities will have on freeway and roadway users, and it may include the following strategies:

- A public awareness campaign prior to and during construction
- Real-time communication with motorists, including changeable message signs and highway advisory radio announcements to alert motorists of upcoming construction impacts, detours, and travel conditions
- Promotion of ridesharing and public transit
- Identification of park-and-ride and other public transit modes to encourage use of ridesharing and public transit
- Provisions for tow-truck service during peak hours to remove stalled vehicles within the construction zone

The TMP divides the project into five stages, with sub-stages detailing traffic handling for short periods. All five stages maintains existing access, but may reduce capacity by shifting traffic to one side of the roadway or the other. Additional access will be provided to the Travel Village and a temporary westbound on/off ramp to Commerce Center Drive will be provided during construction to increase accessibility in the area.

Construction activities along SR 126 and at the SR 126/Commerce Center Drive intersection will be coordinated with other construction activities that will be taking place nearby at around the same time. The I-5/SR 126, Hasley Canyon Road and Magic Mountain Parkway interchanges, and the I-5 bridge of the Santa Clara River will also be under construction.

The TMP will be closely coordinated with the City, the County, Newhall Land, and the public to ensure that traffic along SR 126 and the surrounding streets remains at an acceptable level of operation during construction.

3.18 Visual/Aesthetics

3.18.1 Affected Environment

The Santa Clarita Valley consists of a mixture of undeveloped and developed landscapes. It is a rapidly growing region that has experienced considerable changes in land use over the past 10 years with the continual expansion of urban land usage. The valley has been transformed from a landscape dominated by croplands on the floodplain with undeveloped hills to a complex urban landscape with scattered open space.

The project area is bounded by low hillsides, which are the dominant visual features in the project area. The lands north of the Santa Clara River include a mixture of agricultural land along The Old Road, limited commercial development along Henry Mayo Drive, and recreational area (Valencia Travel Village). Undeveloped open space on steep hills occurs west of the Six Flags Magic Mountain Amusement Park and south of the river.

The riverbed is relatively wide, with steep banks and very dense woodland vegetation. There are noteworthy hills with native vegetation along the south side of the river that provide a scenic background. The developing Valencia Commerce Center along the north side of the river contrasts sharply with the natural landscape south of SR 126.

3.18.2 Permanent Impacts

From the driver's perspective along SR 126, the Build Alternative would not substantially change the scenic environment within the project area. The Santa Clara River represents an important visual feature; however, views of the river are often obscured because: (1) it is a low-lying element of the landscape; (2) the visual elements of the river are mostly low and diffuse, such as barren sand and low-growing shrubs; (3) the viewing locations for the river and its tributaries are relatively limited; and (4) many portions of the river are adjacent to busy urban roadways where views are mostly obscured or unavailable because motorists' attention is directed to the roadway. Additionally, the interchange would not obstruct the view of any scenic vista, or create an aesthetically offensive site.

Public viewing locations of the Build Alternative include the Valencia Travel Village along SR 126 and the commercial properties north and south of SR 126. The project area is not within a visually sensitive setting due to the developing commercial area and restricted views of the Santa Clara River.

3.18.3 Temporary Impacts

Construction of the Build Alternative would necessitate grading of the area and would also temporarily result in a disruption of the natural environment surrounding the SR 126/Commerce Center Drive interchange and Henry Mayo Drive. After construction of the project, the area would be revegetated, thereby minimizing the level of impact.

3.18.4 Measures to Minimize Harm

No measures to minimize harm are necessary because there are no adverse project impacts.

3.19 Historical Resources

3.19.1 Affected Environment

A study to identify potentially historic properties in the Area of Potential Effects (APE) (Figure 3.19-1) of the project and to evaluate the eligibility of any identified properties for listing in the National Register of Historic Places (NRHP) was conducted in November 1999 and July 2002 (Greenwood & Associates, 2002). The Historic Property Survey Report (HPSR) (CH2M HILL, 2004e) prepared for the project indicates that no apparent historic resources exist in the project area. The HPSR is summarized below and herein incorporated by reference. The HPSR is based upon regulations for implementing Section 106 of the National Historic Preservation Act (36 CFR 800) as it applies to FHWA projects and cultural resources. It is used to identify all historic and cultural/archaeological resources that may be affected by a proposed undertaking, evaluate the eligibility of these resources for the NRHP, and apply criteria of Effect and Adverse Effect (36 CFR 800.9) to eligible properties that may be affected.

Archival research for the individual structures was conducted at the Los Angeles County Assessor's Office, the LACDPW, Building and Safety section (building permit records), and local libraries. Interviews of local historians, building owners, and residents were conducted as well. None of the structures was found to be historically or architecturally important. A physical examination of the surface area did not indicate the presence of culturally sensitive resources, although these resources may be located in subsurface deposits within the project area.

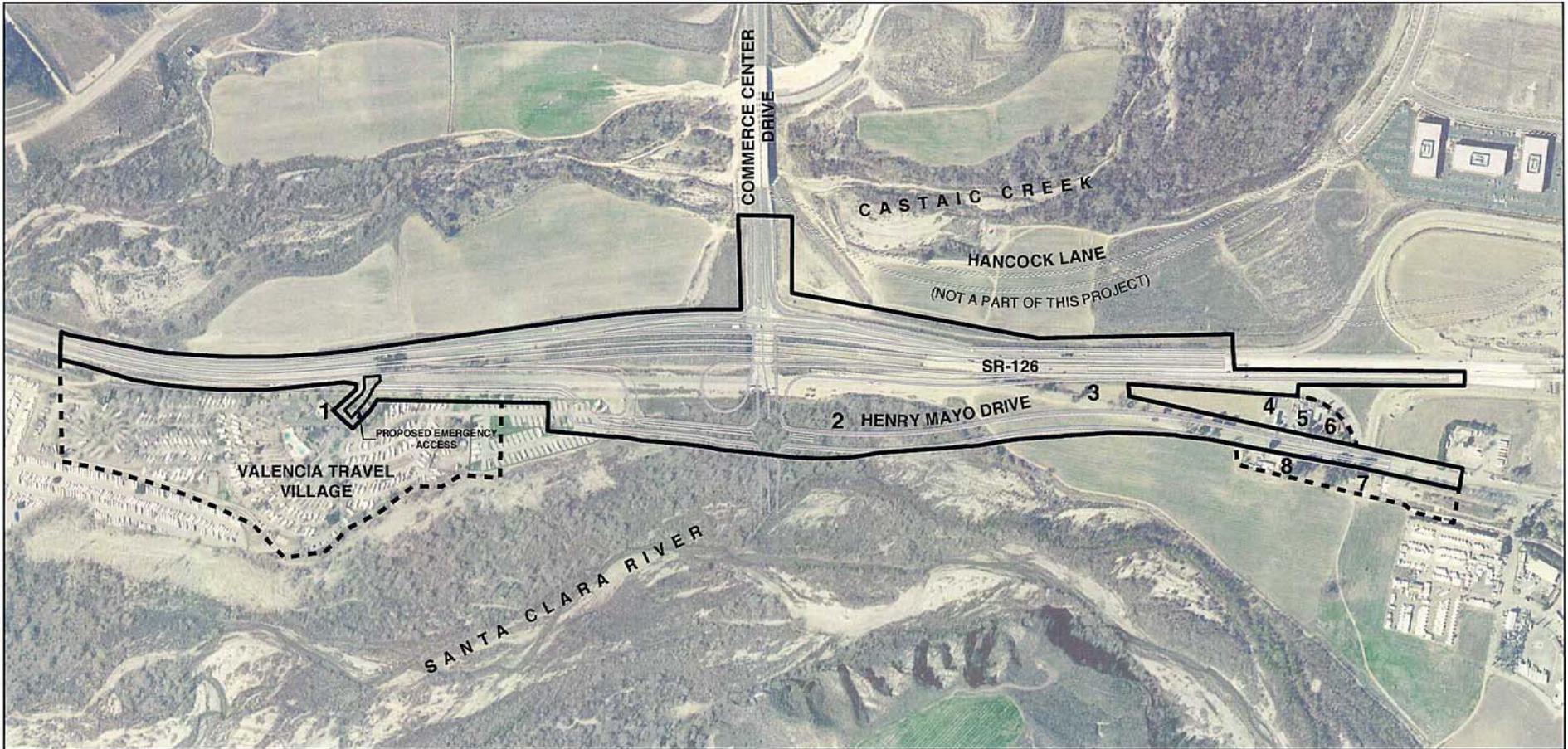
3.19.2 Permanent Impacts

The HPSR, prepared to identify any impacts of the Build Alternative on archaeological or historical resources, indicates that no historic resources exist in the project area (CH2M HILL, 2004e).

An Historic Architectural Survey Report (HASR) was completed by an Architectural Historian from Greenwood & Associates in July 2002. The HASR, as included in the HPSR, is used to identify important historic and/or architectural resources within APE of the project and to evaluate these structures according to NRHP eligibility criteria. This report is based on Section 106 of the National Historic Preservation Act and its implementing regulations, 36 CFR Part 800; the California Environmental Quality Act, Public Resources Code 5024, et seq.; and Governor's Executive Order W-26-92 as they apply to FHWA projects and cultural resources and is subject to review by the SHPO.

The HASR identified eight properties within the APE. Four of the properties predate 1957. None is currently listed in the NRHP. All four of the pre-1957 properties retain a substantial level of architectural integrity and were inventoried. These investigations concluded that none was eligible for inclusion in the State or National Registers. Of the four buildings and structures within the APE that postdate 1957, none is viewed as possessing the overriding qualities of design or historical association that would merit their addition to the State or National Registers. The properties have been treated in accordance with the provisions of the December 1989 "Memorandum of Understanding (MOU) Regarding Post-1945 Buildings, Moved Pre-1945 Buildings, and Altered Pre-1945 Buildings," updated in the interim Post-1945 guidelines of July 7, 1997, to include properties dating to 1950 (Between the FHWA and Caltrans).

All properties have been evaluated in accordance with Section 15064.5(a)(2)-(3) of the CEQA Guidelines, using the criteria outlined in Section 5024.1 of the California Public Resources code; and it has been determined that they are not historical resources for the purpose of CEQA. The Caltrans PQS determined that the document is accurate and appropriate in respect to the January 1, 2004 Programmatic agreement among the Federal Highway administration, the Advisory Council on Historic Preservation the California State Historic Preservation Officer and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act (106) Programmatic Agreement). A copy of the memo from the Caltrans PQS is located in Appendix A.



	LEGEND
<p>SCALE 1:6000 1cm = 60m 1" = 500'</p>	<p>— DIRECT</p> <p>- - - - - INDIRECT</p>
	

Figure 3.19-1
**Area of Potential Effect Map
 and Properties**
 SR-126 / Commerce Center Drive Interchange
 07-LA-126 KP R6.8 - R9.2 (PM R4.2 - R5.7)

3.19.3 Temporary Impacts

As discussed in Section 3.19.2, Permanent Impacts, the HASR prepared for the project determined that no historic resources exist in the project area. Therefore, there would be no temporary impacts to historic resources associated with the project.

3.19.4 Measures to Minimize Harm

No measures to minimize harm are required.

3.20 Archaeological Resources

3.20.1 Affected Environment

A record search was undertaken in September 1999 by the South Central Coastal Information Center at the University of California, Los Angeles. A second search was undertaken in June 2002 by the South Central Coastal Information Center at California State University, Fullerton. The record searches revealed no previously recorded historic or prehistoric resources within a 1.6-kilometer (1-mile) radius of the project area (Figure 3 in HASR).

3.20.2 Permanent Impacts

During a field survey conducted by Greenwood & Associates on September 20, 1999, no cultural resources were observed.

To further confirm that no cultural resources are located within the proposed project area, the staff of the Native American Heritage Commission were requested to provide the names and addresses of Native American individuals and/or organizations who they suggested might be able to provide further information regarding cultural resources in the proposed project area. Their names are provided below:

Ti'At Society	Robert F. Dorme (Gabrielino/Tongva)
Cindi Alvitre (Gabrielino)	Delia Dominguez (Yowlumne, Kitanemuk)
Kern Valley Indian Community	Diane Garcia Napoleone (Chumash)
Ron Wermuth (Tubatulabal, Kawaiisu, Koso, Yokut)	Jim Velasquez (Gabrielino)
Paul (Valenzuela) Varela (Chumash, Tataviam, Kitanemuk, Tongva, Serrano)	Charles Cook (Chumash, Gabrielino, Yokut, Kitanemuk)
Gabrielino/Tongva Tribal Council	Beverly Salazar Folkes (Chumash, Tataviam, Fernandeño)
Ernest P. Salas (Gabrielino/Tongva)	Owl Clan
Island Gabrielino Group	Dr. Kote & Lin A-Lul'Koy Lotah (Chumash)
John Jeffredo (Gabrielino)	Samuel H. Dunlap (Gabrielino)

Melissa M. Para-Hernandez (Chumash,
Yaqui)
San Fernando Mission Indians
Rudy Ortega (Gabrielino, Chumash,
Tataviam, Yaqui)
Julie Lynn Tumamait (Chumash)
Patrick Tumamait (Chumash)

Dwayne Vigil (Chumash)
Mark Steven Vigil (Chumash)
Anwa Wilanii (Tataviam)
Owl Clan
Qun-tan Shup (Chumash)
Art Alvitre (Gabrielino)

These individuals and/or organizations were sent a letter notifying them of the proposed project and that they were being consulted to ensure that any areas of sacred or spiritual significance to Native American groups were considered during the planning process. A copy of this letter is included in Appendix A. To date, no detailed information regarding cultural resources or sacred sites within the project area has been received; therefore, the project would not impact any known cultural resources.

3.20.3 Temporary Impacts

Although there appears to be no known archaeological resources in the project area, project-related construction activities may unearth cultural remains and/or artifacts.

3.20.4 Measures to Minimize Harm

The project area is not considered as having a high potential for archaeological or other cultural resources therefore, no archeological or Native American monitor will be required on-site during any ground disturbing activities. If cultural materials appear during construction, work will stop in the immediate area. The Caltrans cultural resource staff will be notified upon such discovery, and appropriate measures will be performed to mitigate impacts to the resource. Contract specifications will identify procedures for encountering cultural resources, including human remains. Work may only resume with approval from the Caltrans archaeologist. If human remains are exposed during construction, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the county coroner has made the necessary findings as to origin and disposition, pursuant to Public Resource Code 5097.98. Upon such discovery, the Caltrans Division of Environmental Planning shall be notified immediately. Prior to resuming work, the appropriate measures to minimize harm will be implemented and coordinated with through the Caltrans Division of Environmental Planning.

3.21 Unavoidable Adverse Impacts

Based on the environmental analysis of the Build Alternative (above), no unavoidable adverse impacts to the study area environmental are anticipated to occur.

Chapter 4 Cumulative Impacts

4.1 Introduction

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.

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. Cumulative-impact analyses are typically difficult to thoroughly assess due to lack of definitive information on future development projects. This analysis uses the best available information to assess the potential cumulative and indirect impacts of the Build Alternative as it relates to the surrounding environmental resources.

4.2 Projects Contributing to Cumulative Impacts

There are other related projects in the vicinity of the Build Alternative. These related projects, described in Chapter 2 of this document, are in varied degrees of planning, design, and construction. They include:

- Newhall Ranch
- Newhall Ranch Road Connection (Construction Concluded)
- I-5/SR 126 Interchange Project (Under Construction)
- I-5/Magic Mountain Parkway Interchange Project (Under Construction)
- I-5/Rye Canyon Road Ramp Improvement Project (Construction Completed)
- I-5/Valencia Boulevard Interchange Improvements (Construction Completed)
- I-5/Hasley Canyon Road Interchange Project (Construction to be Complete Next Year)
- Commerce Center Drive Bridge (Construction Completed)
- Santa Clara River Bridge (Under Construction)
- Valencia Commerce Center Expansion (Construction Completed)
- SR-126 Roadway Widening Los Angeles/Ventura County Line at P.M. 0.0 (K.P. 0.0) to west of Commerce Center Drive at P.M. 4.6 (K.P. 7.4) (Feasibility Study)

Table 4.1-1 Cumulative Projects

Project	Description	Project Status
Valencia Commerce Center	Newhall Land is developing 284.1 hectares (702 acres) north of the SR 126/Commerce Center Drive intersection as a major industrial, office, and supporting commercial-use center named Valencia Commerce Center. Approximately 40 percent (113 hectares, or 280 acres) of the area is being preserved as open space and hillside management area.	50 percent complete.
I-5/SR 126 Interchange	The existing I-5/SR 126 interchange, located northwest of the City of Santa Clarita in Los Angeles County, is currently being reconfigured and this work will be completed in early 2004. The interchange will be reconfigured to provide missing directional movements, improve traffic operations on the interchange, increase capacity, improve local access and circulation in the region and in the local area, enhance the safety of the interchange, and accommodate planned growth.	This project is under construction, to be completed by August 2005.
I-5/Magic Mountain Parkway Interchange	Phase 1 (under construction) will modify the I-5/Magic Mountain Parkway interchange. Phase 2 is planned to include the reconstruction of the I-5/Magic Mountain Parkway Interchange area and realignment of the Old Road at Magic Mountain Parkway, west of I-5. Phase 3 realigns and widens Magic Mountain Parkway east of I-5 to eight lanes from the I-5/SR 126 Interchange to the Fairway Shopping Center entrance. Magic Mountain Parkway will be restriped from six to eight lanes between the Fairway entrance and McBean Parkway.	This project is under construction, to be completed in 2005. Phase 2 of this project is in design.
Santa Clara River Bridge Replacement	The project will replace the existing northbound and southbound structures of the Santa Clara River Bridge with a single structure. The new structure will have four lanes in each direction	Construction of this project is in its last stages of completion
I-5/Valencia Boulevard Interchange Improvements	This project widened Valencia Boulevard through the interchange with I-5; modified the ramp configuration, which improved the overall operation of the interchange; replaced the existing bridge; and constructed a new southbound direct on-ramp.	Construction of this project was completed in February 2002
Caltrans Newhall Maintenance Station	Caltrans constructed a new maintenance facility (Newhall Maintenance Station) between The Old Road and I-5, south of SR 126	Environmental clearance for this project was completed mid-2004.
I-5/Rye Canyon Road Feasibility Study	Relocation of the I-5/Rye Canyon Road hook ramps approximately 0.137 km (137 meters) to the north of their existing location (1.6 kilometers [1600 m] south of the I-5/SR 126 interchange)	Construction is planned to begin in later this year (2005).
I-5/Hasley Canyon Road Interchange Project	Improvements will include replacement of the bridge overpass, realignment and reconstruction of the existing ramps, and intersection approach widening.	Project is in design, and is scheduled for completion this year
SR-126 Roadway Widening; Los Angeles/Ventura County Line to west of Commerce Center Drive	This Feasibility Study Report discusses the proposed roadway improvements of a 4.6 mile (7.4 kilometer) segment of State Route 126 (SR-126). The improvements are needed to accommodate forecasted corridor growth and provide access to proposed Newhall Land commercial and residential developments along the highway.	Feasibility Study is currently underway.

As noted in Chapter 3, construction activities associated with the Build Alternative would result in some temporary, localized disruptions related to access and circulation; noise and vibration; air quality; and aesthetics. To the extent that other related projects in the area would be constructed during periods of time that overlap with construction of the Build Alternative, a short-term cumulative impact may arise. Because, however, the duration of any such cumulative impact would be temporary and because project-specific mitigation would be employed, cumulative impacts would not be considered adverse.

The following discussion of potential cumulative impacts is presented by environmental resource areas. No cumulative impact discussion is provided for coastal zone, wild and scenic river areas, and farmland, due to no anticipated build alternative impacts.

4.3 Cumulative Impacts

4.3.1 Hydrology/Water Quality/Stormwater Runoff

The proposed project would contribute to regional cumulative impacts due to siltation, and water quality from the following past, present, or reasonably foreseeable projects:

- Newhall Ranch Road Connection (siltation and water quality)
- I-5/SR 126 Interchange Project (siltation and water quality)
- I-5/Magic Mountain Parkway Interchange Project (siltation only)
- I-5/Rye Canyon Road Ramp Improvement Project (siltation only)
- I-5/Valencia Boulevard Interchange Improvements (siltation only)
- I-5/Hasley Canyon Road Interchange Project (siltation and water quality)

Siltation and Water Quality

These regional cumulative impacts would result from the increased rate of erosion and/or siltation of exposed soils in waters downstream of the project site. Eroded soils would be transported in runoff and would settle out of the water downstream, increasing siltation. While suspended, these soil particles may prevent sunlight from reaching aquatic plants, clog fish gills, or choke other organisms. Other pollutants common in soils near highways such as heavy metals, oil and grease, fertilizers, and pesticides would adhere to these soil particles and would be transported downstream with them. These adsorbed pollutants would degrade water quality and would harm aquatic life by causing algal blooms, or interfering with photosynthesis, respiration, growth, and reproduction (EPA, 1995).

The proposed SR 126/Commerce Center Drive Interchange Project, as well as the above-listed projects (where noted), would cause siltation and water quality impacts. Additionally, each of these projects stated that BMPs would be implemented. These projects could, nonetheless, contribute to regional, cumulative siltation, and water quality impacts.

Stormwater Runoff

In combination with the development of the cumulative projects listed above, the additional stormwater runoff contributed by the proposed project would have the potential to contribute to adverse cumulative stormwater runoff impacts. However, standard drainage design practices to minimize scour and sedimentation, and implementation of BMPs would avoid or minimize the stormwater runoff impacts for each project.

Siltation and water quality impacts from the proposed SR 126/Commerce Center Drive Interchange Project, as well as the above-listed projects, would not be adverse. Additionally, each of these projects stated that BMPs would be implemented and impacts fully mitigated. These projects could, nonetheless, contribute to regional, cumulative siltation and water quality impacts. However, the contribution of the SR 126/Commerce Center Drive Interchange Project to regional cumulative impacts is not expected to be substantial.

4.3.2 Hazardous Waste/Materials

The primary types of hazardous material-related impacts attributable to the construction of the proposed interchange are from the handling of contaminated soil encountered during construction. Because any contaminated material encountered during the construction of the Build Alternative, or any of the others in the vicinity would be handled, transported, and disposed in accordance with all applicable laws, regulations, and agency oversight, cumulative adverse impacts are not anticipated.

4.3.3 Air Quality

The Build Alternative, along with the other transportation improvement projects in the vicinity, are planned to accommodate the traffic demand associated with future development of the project area and would not generate additional traffic. Localized impacts would be less than the ambient air quality standards. Therefore, the contribution of the project to cumulative regional air quality impacts would not be consequential. As a result of congestion reduction that would result from this project, the project would have a beneficial impact on air quality and would not contribute to cumulative impacts.

The screening analysis for localized CO impacts included traffic volumes projected by Austin-Foust Associates for the year 2025. These traffic projections were derived from the SCVCTM using future land use and travel patterns that account for the cumulative growth of

the project area. As stated above, localized impacts would be less than the ambient air quality standards. In addition, measures to minimize harm will be implemented to minimize construction-related emissions. Therefore, it is concluded that localized cumulative impacts would not be consequential.

4.3.4 Noise

The operational noise impacts analysis is predicated on future traffic projections, and those future projections assume the other projects in the vicinity (see Chapter 2) to be in place and functioning as planned. No additional cumulative impacts, therefore, are expected beyond those that already might be disclosed in the impact noise analysis and for which abatement has been proposed.

Based on the cumulative project impacts traffic noise levels for both the Build and No-Build conditions approach and exceed the 66-dBA criterion at all selected receiver locations within Valencia Travel Village. Increases in peak-hour traffic noise levels from existing to future No-Build condition are expected to be in the 3 to 6 dBA range. Under the future Build condition, peak-hour noise levels would increase by 4 to 9 dBA. Such increases are primarily due to considerable increases in peak-hour traffic volumes in the project area (more than three-fold increase in traffic by 2025), the fact that the proposed SR 126 alignment would place traffic closer to the Valencia Travel Village, and elimination of shielding by the berm on the east end of the project near the Commerce Center interchange.

4.3.5 Energy

For purposes of this environmental document, cumulative impacts to energy would occur if the selected interchange alternative, in conjunction with other related projects (see Chapter 2), collectively result in excessive and inefficient energy use. Development types of related projects in the project area would have a tendency to result in increased local energy consumption; whereas, the SR 126/Commerce Center Drive interchange project and other transportation-related projects are expected to result in improved or less energy consumption associated with improved traffic flow. In either case, cumulative energy consumption is not expected to be excessive or inefficient due to the relatively high cost of energy.

4.3.6 Wetlands and Other Waters of the U.S.

Cumulative impacts to waters of the U.S. or wetlands would occur if the selected interchange project, in conjunction with other related projects (see Chapter 2), collectively result in substantial impacts to these resource areas. The USACE, RWQCB, and CDFG will have to issue permits for the individual projects; and the permits could be conditioned. Issuance of the respective permits and associated conditions by the jurisdictional agencies would ensure

that substantial cumulative impacts would not occur. Total project related construction impacts to jurisdictional wetlands is 4.12 hectares (10.17 acres). Implementation of measures to minimize harm and jurisdictional permit conditions would reduce impacts to less than adverse. Measures to minimize harm are included in Section 3.6.4.

4.3.7 Vegetation

The SR 126/Commerce Center Drive project is one of many infrastructure projects proposed for the project vicinity. The section of SR 126 west of the proposed project was recently widened to accommodate higher traffic volumes in the region. The I-5/SR 126 interchange and the I-5/Hasley Canyon on- /off-ramps are also currently proposed for improvements to accommodate higher traffic volumes. The Commerce Center Bridge across Castaic Creek is currently under construction, and a bridge across the Santa Clara River is also planned. In addition to roadway improvements, a high volume of commercial and industrial projects is currently under construction or is proposed for development.

Future operation and maintenance activities may have the potential to result in temporary impacts in the project area; however, it is anticipated that these impacts would be minimized and mitigated consistent with the terms and conditions of the NRMP and other necessary project approvals. Specific allowances for the operation and maintenance of infrastructure include the provisions described below.

Upon completion of the bank protection, bridges, drain outlets, and grade stabilizers, Newhall Land will transfer these facilities to the LACDPW in unincorporated areas and to the City of Santa Clarita in the city limits. These public agencies will have responsibility for maintaining the facilities. Maintenance of bank protection, bridges, and storm drain outlets will involve periodic inspection to ensure that the structures are intact, and monitoring of vegetative growth at or near the structures to ensure that the integrity of the structures is intact and that necessary conveyance capacity is present. Vegetation will be removed when the design capacity has been reduced. The NRMP is designed so that the routine vegetation removal from the river will not be required in the project area, except near existing bridges and as necessary to protect the integrity of the exposed gunite or riprap and storm drain outlets. The maintenance elements of the 404 Permit and the 1601/1603 Agreement will be transferable to LACDPW and the City of Santa Clarita for their use. The maintenance program includes the following components:

- Periodic clearing of vegetation immediately upstream and downstream of certain existing bridges that were not designed in accordance with the NRMP

- Periodic removal of woody vegetation from riprap to protect its structural integrity
- Periodic clearing of storm drain outlets to ensure proper drainage
- Periodic removal of ponded water that causes odor problems
- As-needed repairs of bridges
- As-needed repairs of bank protection
- As-needed clearing of vegetation from water quality filters and wetlands

All maintenance activities will be subject to the notification procedures and mitigation measures described in the 404 Permit and the 1601/1603 Agreement.

Emergency maintenance, repairs, or reconstruction are not included in the NRMP. These activities will be carried out by LACDPW and the City of Santa Clarita in accordance with the USACE and CDFG emergency approval processes (as they are amended over time).

These impacts would be reduced with the implementation of NRMP mitigation measures provided in Section 7.0, and are considered necessary components of this project to conform with the terms and conditions of the NRMP.

The NRMP analyzed impacts that would result from the proposed development of the Newhall Land and similar projects from the present to the year 2018. Impacts on vegetation resources of the Santa Clara River and its tributaries were found to be less than adverse with the incorporation of appropriate mitigation measures. Because the SR 126/Commerce Center Drive interchange project would be consistent with the projects considered under the NRMP with the incorporation of appropriate measures to minimize harm provided below, in Section 7.0, there would be no cumulative impacts resulting from the proposed project.

4.3.8 Wildlife

Cumulative impacts to additional species may occur if project implementation occurs concurrently with other projects in the immediate vicinity. Indirect noise impacts from concurrent multiple projects may discourage breeding of the tricolored blackbird in suitable habitat along the Santa Clara River. Implementation of measures to minimize harm are included in Section 3.8.5 and will mitigate direct, indirect and cumulative biological impacts to a level that is less than adverse.

4.3.9 Special-Status Species

The NRMP analyzed impacts that would result from the proposed development of the Valencia Company (now Newhall Land) and similar projects from present to the year 2018. Impacts on special-status species of the Santa Clara River and its tributaries were found to be

acceptable with the incorporation of appropriate measures to minimize harm by the Army Corp of Engineers and the United States Fish and Wildlife Service. Impacts to the Special-Status Species resulting from development of the SR 126/Commerce Center Drive interchange are part of the impacts in the NRMP; therefore, all measures to minimize harm are included in the NRMP and listed in Section 3.9.4.

Construction of the Santa Clara River Bridge (Commerce Center Drive over Santa Clara River) is anticipated to occur in 2008. To avoid cumulative impacts to the Santa Clara River, the proposed project is anticipated to be constructed and in operation before the construction of the bridge over the Santa Clara River.

Direct and indirect impacts to most special-status species have been addressed above. However, an additional species may incur cumulative impacts if project implementation occurs concurrently with other projects in the immediate vicinity. Indirect noise impacts from multiple projects may discourage breeding of the tri-colored blackbird in suitable habitat along the Santa Clara River. Future operation and maintenance activities may have the potential to result in temporary impacts in the project area. However, it is anticipated that these impacts would be minimized; and measures to minimize harm will be consistent with the terms and conditions of the NRMP and other necessary project approvals. These impacts would be reduced with the implementation of NRMP measures to minimize harm mentioned below, and are considered necessary components of this project to conform with the terms and conditions of the NRMP.

A single sighting of the tricolored blackbird took place during an initial project area survey. This species has a high likelihood to forage in the area and a moderate likelihood of nesting within the study area. Potential cumulative indirect noise impacts to this species may discourage breeding of the tricolored blackbird in suitable habitat along the Santa Clara River. However, to minimize this potential impact, a qualified biologist shall conduct a survey 30 days prior to construction activities in all riparian areas to determine if any tricolored blackbirds are present at the site, and the status of nesting. If no nesting is occurring, construction work can proceed. If nesting is occurring, construction work shall be delayed until fledglings have left the nest. If a riparian or wetland habitat used by blackbirds for nesting is to be removed, it shall be replaced following the procedures listed in Section 3.9.4.

4.3.10 Floodplains

Impacts to the natural and beneficial floodplain values of the Santa Clara River are part of the impacts in the NRMP; therefore, all measures to minimize harm are included in the NRMP

and listed in Section 3.10.4. Cumulative impacts to the Santa Clara River floodplain resulting from both the I-5/Valencia Boulevard Interchange Improvements Project and the I-5/Santa Clara River Bridge Replacement Project would not be substantial. In fact, the Location Hydraulic Study for the I-5/Santa Clara River Bridge Replacement Project determined that it was a “Low Risk Project.” These projects would, nonetheless, contribute to regional, cumulative losses of floodplain acreage. However, these projects would not raise the elevation of the (100-year) base flood.

4.3.11 Land Use

Although the Valencia Travel Village already coexists with the adjacent SR 126, the incremental effects of the project must be considered within the context of the effects of other past, past present, and reasonably foreseeable transportation-related changes in the area. One of the primary objectives of the Build Alternative is to accommodate planned growth within the study area. The planned development projects in the immediate area as described in Chapter 2 (i.e., Valencia Commerce Center and Newhall Ranch) will introduce substantial new construction activities throughout the area, as well as an increased level of growth and traffic into the future. It is very probable that land development would continue with or without the Build Alternative and other similar transportation improvements. It should also be noted that the Build Alternative would improve an existing transportation corridor. Thus, no adverse cumulative land use impacts are anticipated.

4.3.12 Community Impacts

Construction of the proposed project would occur concurrently with other ongoing and planned projects in the vicinity. The Build Alternative would not generate long-term additional employment, income, or housing opportunities in the region. The Build Alternative would only create additional jobs in the area during construction. All the related projects planned for the project area, are consistent with land use policies and designations of the County of Los Angeles and City of Santa Clarita General Plans. Planned development in the project vicinity, and in conjunction with the Build Alternative, would not result in adverse cumulative community impacts. Thus, no adverse cumulative land use impacts are anticipated.

4.3.13 Utilities/Emergency Services

The Build Alternative would not require utility relocations in the immediate project vicinity and the extended area. However, some disruption to service may occur during construction. Cumulative impacts are expected to be negligible because service disruptions would be minimal and because excavation activities must coordinate with local services to minimize accidental service disruptions.

Construction of the proposed interchange would result in a reduction of solid waste municipal landfill capacity. However, this capacity reduction is not expected to be substantial because the wastestreams of construction and demolition debris are usually segregated and recycled to take advantage of differential disposal fees. Municipal landfill fees are generally on the higher end of the scale; consequently, construction and demolition wastes are taken to municipal solid waste landfills when they cannot be recycled.

The Build Alternative, in conjunction with other transportation-related projects (see Chapter 2, Alternatives), would result in an improved transportation system that is expected to enhance capacity along SR 126 at Commerce Center Drive. During construction of the Build Alternative, in conjunction with other related projects, there could be delays to emergency-response providers related to multiple construction projects occurring concurrently. Although project coordination with police and fire stations is required so that alternative routes can be planned, alternative routes may still increase response times.

4.3.14 Traffic Transportation/Pedestrian and Bicycle Facilities

The operation of the proposed SR 126/Commerce Center Drive Interchange Project, as well as the above-listed projects, would result in cumulative impacts to traffic and circulation within the Santa Clarita Valley. These impacts would result from either the generation of additional traffic within the area (e.g., Valencia Commerce Center Expansion and Commerce Center Drive Extension and Bridge over Castaic Creek), or from short-term lane closures and traffic detours (e.g., other listed projects). For all projects listed, impacts resulting from lane closures or traffic detours would be mitigated through the use of appropriate staging to avoid long duration closures; development of TMPs; cooperation among Caltrans, City of Santa Clarita, and Los Angeles County staff; and implementation of signage programs. Despite these measures to minimize harm, these projects would, nonetheless, contribute to regional, cumulative traffic, and circulation impacts. However, the contribution of the SR 126/Commerce Center Drive Interchange Project to regional cumulative impacts including the City of Santa Clarita and the unincorporated surrounding areas is not expected to be adverse. Additionally, the SR 126/Commerce Center Drive Interchange Project would not generate additional traffic.

4.3.15 Visual/Aesthetics

Overall, the visual effect of the construction of the Build Alternative and other roadway projects in the vicinity (i.e., I-5/SR 126 and I-5/Hasley Canyon Road interchanges) would be temporary in nature and would not have an adverse cumulative effect. The project area is not within a visually sensitive setting due to the developing commercial area and restricted views

of the Santa Clara River. Therefore, the development of the Build Alternative will have no adverse cumulative impacts to visual resources.

4.3.16 Cultural Resources

As previously discussed, there are no known archaeological or cultural resources in the project area. However, construction of the preferred interchange alignment, in conjunction with other related projects (i.e., I-5/SR 126 and I-5/Hasley Canyon Road interchange projects), could encounter important archaeological resources. In the event that human remains and/or artifacts are found during the construction of the project, the site will be protected until it can be evaluated by a qualified archaeologist.

4.4 Measures to Minimize Harm

Cumulative impacts resulting from this project being constructed in conjunction with the other nearby projects will be mitigated through the development of a Construction Management Plan by Caltrans, which prevents overlapping of relevant projects in the same region. Construction activities along SR 126 and at the SR 126/Commerce Center Drive intersection will be coordinated with other construction activities that will be taking place nearby at around the same time to prevent overlapping construction schedules. The I-5/SR 126, Hasley Canyon Road and Magic Mountain Parkway interchanges, and the I-5/bridge of the Santa Clara River will also be under construction.

All projects and maintenance activities that have been identified in the NRMP will be subject to the notification procedures and environmental mitigation measures described in the 404 Permit and 1601/1603 Agreement. More specific measures to minimize harm are identified in Chapter 3 of this IS/EA for each environmental concern analyzed. These measures address both temporary as well as permanent impacts.

Chapter 5 California Environmental Quality Act Evaluation

5.1 CEQA Environmental Checklist

The following checklist identifies physical, biological, social, and economic factors that might be affected by the Locally Preferred Alternative (Build Alternative) and is a requirement under CEQA. The CEQA impact levels include potentially significant impact, less-than-significant impact with mitigation, less-than-significant impact, and no impact. Please refer to the following for detailed discussions regarding impacts:

CEQA:

- Guidance: Title 14, Chapter 3, California Code of Regulations, Sections 15000 et seq. (http://www.ceres.ca.gov/topic/env_law/ceqa/guidelines/)
- Statutes: Division 13, California Public Resource Code, Sections 21000-21178.1 (http://www.ceres.ca.gov/topic/env_law/ceqa/stat/)

CEQA requires that environmental documents determine significant or potentially significant impacts. In many cases, background studies performed in connection with the project indicate no impacts. A “no impact” reflects this determination. Any needed discussion is included in the section following the checklist.

Chapter 3 – Affected Environment, Environmental Consequences, and Mitigation Measures contains the detailed environmental analysis for each environmental topic under NEPA and CEQA. Where appropriate, specific sections of Chapter 3 will be referenced for the environmental analysis of a certain environmental topic. This chapter will provide the CEQA findings and discussions.

Potentially significant impact	Less-than-significant impact with mitigation	Less-than-significant impact	No impact
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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"/>
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b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic building within a state scenic highway?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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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"/>
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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"/>
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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 nonagricultural use?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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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"/>
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c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to nonagricultural use?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Potentially significant impact	Less-than-significant impact with mitigation	Less-than-significant impact	No impact
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AIR QUALITY - Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Potentially significant impact	Less-than-significant impact with mitigation	Less-than-significant impact	No impact
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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"/>
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c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment 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"/>
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d) Expose sensitive receptors to substantial pollutant concentration?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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e) Create objectionable odors affecting a substantial number of people?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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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"/>
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b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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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"/>
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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?

Potentially significant impact	Less-than-significant impact with mitigation	Less-than-significant impact	No impact
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<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Potentially significant impact	Less-than-significant impact with mitigation	Less-than-significant impact	No impact
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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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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COMMUNITY RESOURCES - Would the project:

a) Cause disruption of orderly planned development?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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b) Be inconsistent with a Coastal Zone Management Plan?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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c) Affect life-styles, or neighborhood character or stability?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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d) Physically divide an established community?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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e) Affect minority, low-income, elderly, disabled, transit-dependent, or other specific interest group?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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f) Affect employment, industry, or commerce, or require the displacement of businesses or farms?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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g) Affect property values or the local tax base?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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h) Affect any community facilities (including medical, educational, scientific, or religious institutions), ceremonial sites or sacred shrines?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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i) Result in alterations to waterborne, rail, or air traffic?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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j) Support large commercial or residential development?

Potentially significant impact	Less-than-significant impact with mitigation	Less-than-significant impact	No impact
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k) Affect wild or scenic rivers or natural landmarks?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

l) Result in substantial impacts associated with construction activities (e.g., noise, dust, temporary drainage, traffic detours, and temporary access, etc.)?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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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"/>
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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"/>
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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"/>
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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"/>
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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:

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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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"/>
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ii) Strong seismic ground shaking?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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	Potentially significant impact	Less-than-significant impact with mitigation	Less-than-significant impact	No impact
	<input type="checkbox"/>	<input type="checkbox"/>	<input 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"/>
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 offsite 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 wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Potentially significant impact	Less-than-significant impact with mitigation	Less-than-significant impact	No impact
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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 checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous material, 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"/>
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 checked="" type="checkbox"/>	<input 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"/>

Potentially significant impact	Less-than-significant impact with mitigation	Less-than-significant impact	No impact
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HYDROLOGY AND WATER QUALITY - Would the project:

a) Violate any water quality standards or waste discharge requirements?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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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 checked="" type="checkbox"/>	<input type="checkbox"/>
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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 offsite?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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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 offsite?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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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"/>
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f) Otherwise substantially degrade water quality?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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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"/>
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Potentially significant impact	Less-than-significant impact with mitigation	Less-than-significant impact	No impact
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h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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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"/>
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j) Inundation by seiche, tsunami, or mudflow?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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LAND USE AND PLANNING - Would the project:

a) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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b) Conflict with any applicable habitat conservation plan or natural community conservation plan?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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MINERAL RESOURCES - Would the project:

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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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"/>
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NOISE - Would the project:

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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

Potentially significant impact	Less-than-significant impact with mitigation	Less-than-significant impact	No impact
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<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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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"/>
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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"/>
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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"/>
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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"/>
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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"/>
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PUBLIC SERVICES -

Potentially significant impact	Less-than-significant impact with mitigation	Less-than-significant impact	No impact
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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"/>

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 checked="" type="checkbox"/>	<input type="checkbox"/>
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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"/>
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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"/>
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Potentially significant impact	Less-than-significant impact with mitigation	Less-than-significant impact	No impact
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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"/>
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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"/>
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d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incomplete uses (e.g., farm equipment)?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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e) Result in inadequate emergency access?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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f) Result in inadequate parking capacity?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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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"/>
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UTILITY 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"/>
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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"/>
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c) Require or result in the construction of new stormwater drainage 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"/>
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Potentially significant impact	Less-than-significant impact with mitigation	Less-than-significant impact	No impact
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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"/>
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e) Result in determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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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 checked="" type="checkbox"/>	<input type="checkbox"/>
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g) Comply with federal, state, and local statutes and regulations related to solid waste?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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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, or 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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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"/>
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c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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SECTION 4(f) RESOURCES - Does the project:

a) Result in the use of any publicly owned land from a park, recreation area, or wildlife and waterfowl refuge, as defined by section 4(f) (23 CFR 771.135)?

Potentially significant impact	Less-than-significant impact with mitigation	Less-than-significant impact	No impact
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<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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b) Affect a significant archaeological or historic site, structure, object, or building, as defined by section 4(f) (23 CFR 771.135)?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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c) Involve “constructive use,” as defined by section 4(f) (23 CFR 771.135)?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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5.2 Discussion of CEQA Checklist Responses

Aesthetics

a); b); and c) Less-than-significant impact: The interchange would not obstruct the view of any scenic vista, or create an aesthetically offensive site. Public viewing locations of the Build Alternative include the Valencia Travel Village along SR 126 and the commercial properties north and south of SR 126. The project area is not within a visually sensitive setting due to the developing commercial area and restricted views of the Santa Clara River.

The Santa Clara River represents an important visual feature; however, views of the river are often obscured because: (1) it is a low-lying element of the landscape; (2) the visual elements of the river are mostly low and diffuse, such as barren sand and low-growing shrubs; (3) the viewing locations for the river and its tributaries are relatively limited; and (4) many portions of the river are adjacent to busy urban roadways where views are mostly obscured or unavailable because motorists' attention is directed to the roadway.

Construction of the Build Alternative would necessitate grading of the area and would also temporarily result in a disruption of the natural environment surrounding the SR 126/Commerce Center Drive interchange and Henry Mayo Drive. After construction of the project, the area would be revegetated, thereby minimizing the level of impact. The grading would not be considered a significant project impact because of the temporary nature of the disruption and the low scenic value of the urban interchange.

d) Less-than-significant impact: The project is the improvement of an existing freeway facility; the construction of an at-grade intersection to a grade-separated interchange. While additional facility lighting and pavement surfaces, that may induce glare, would comprise the project, these additional amounts would be considered insignificant because the project site is an existing lit and paved intersection.

Agricultural Resources

a) and c) Less-than-significant impact: Active farmland is present both north and south of SR 126 and Henry Mayo Drive, west of The Old Road. This property has been zoned by Los Angeles County as Urban 4 (with 15.0 to 40.0 dwelling units per acre). The proposed project rated a combined score of 91 points on the Farmland Conversion Impact Rating Form. This score is below the threshold of 160; therefore, the acquisition of this farmland would not be considered a significant impact. Additionally, according to the Farmland FPPA, farmland does not include those lands that a state or local government has designated, by planning or zoning, for commercial, industrial, or residential use. Therefore,

the acquisition of prime farmland or farmland of statewide importance would not be significant.

b) No impact: Construction and operation of the Build Alternative within existing Caltrans ROW would not conflict with existing agricultural zoning. The project site and surrounding areas are not under a Williamson Act contract.

Air Quality

a) Less-than-significant impact: The proposed SR 126/Commerce Center Drive interchange project has been included in the 2004 RTIP. Therefore, inclusion of this project in a conforming RTIP indicates the project would not cause a significant regional impact. Projects are subject to conformity requirements for PM₁₀ if they are located in a PM₁₀ nonattainment or maintenance area (federal standards). At the regional scale, this project is included in the RTIP. The RTIP air quality analysis must show that the transportation system will not increase PM₁₀ emissions overall. Therefore, inclusion of this project in a conforming RTIP indicates the project would not cause a significant regional PM₁₀ impact.

b) Less-than-significant impact: The pollutant of primary concern when assessing localized impacts of transportation projects is CO. High CO concentrations tend to accumulate near areas of heavy traffic congestion where average vehicle speeds are low. Localized impacts are assessed by estimating maximum ambient CO concentrations near the roadways affected by the project. The concentrations are compared to the national and California Ambient Air Quality Standards (CAAQS) for CO. The impact of a project is considered to be adverse if the project creates a new CO violation or exacerbates an existing violation.

In general, the proposed project would improve traffic flow and increase average vehicle speeds through the interchange relative to the no project condition. Therefore, the project is generally expected to have a beneficial impact on localized air quality. However, the completion of this project would move traffic closer to a receptor site. For this reason, a CO screening analysis was performed to determine if the proposed Build Alternative would cause localized violations of the standards for CO. Localized CO impacts were evaluated using the Transportation Project-Level Carbon Monoxide Protocol written by the Institute of Traffic Studies at the University of California, Davis, (Garza, et al., 1997). The procedure is a screening analysis intended to allow an analyst to obtain a conservative estimate of local CO impacts at intersections without having to run computational models such as EMFAC and CAL3QHC. SCAG endorses the use of the protocol to assess project-level impacts. Project impacts have been assessed through relevant methodologies and significance criteria per the SCAQWD CEQA Air Quality Handbook (SCAQMD, 1993).

Table 5.2-1 presents the peak 1-hour and 8-hour CO concentrations predicted near the intersections of Commerce Center Drive and Hancock, the SR126 WB Off Ramp, and Henry Mayo Streets under build-out conditions (2025). The conservative screening analysis predicts a maximum 1-hour CO concentration of 13.9 ppm, which is well below the national standard of 35 ppm and the state standard of 20 ppm. The conservative screening analysis predicts a maximum 8-hour concentration of 8.7 ppm, which is below the national and state standard of 9 ppm.

Table 5.2-1. Maximum CO Concentrations with the Build Alternative, 2025

Intersection	Maximum 1-hour CO Concentration (ppm)	Maximum 8-Hour CO Concentration (ppm)
Commerce Center Drive/Hancock	13.9	8.7
Commerce Center Drive/SR 126 Off-ramp	10.9	6.7
Commerce Center Drive/Henry Mayo	12.1	7.5

Notes:

Concentrations include a future (2025) 1-hour background concentration of 5.1 ppm and an 8-hour background concentration of 2.6 ppm (SCAQMD, 2003).

The NAAQS for CO are 35 ppm (1-hour) and 9 ppm (8-hour).

The CAAQS for CO are 20 ppm (1-hour) and 9 ppm (8-hour).

Source: CH2M HILL, 2003d.

The proposed project would not contribute to any new CO violations or cause an increase in any existing violations. Therefore, the localized air quality impacts would be less than significant, and the project-level conformity requirements are satisfied.

At the local scale, a qualitative PM₁₀ analysis is required for this project because the proposed site is located in a federal nonattainment zone for PM₁₀. To show project-level conformity for PM₁₀, the analysis must show that no new local PM₁₀ violations of the federal 24-hour standard will be created and the severity or number of existing violations will not be increased as a result of the project. Although this site is also located in a state nonattainment zone for PM₁₀, a guidance document for assessing the contribution of individual traffic projects to local violations of the state 24-hour standard does not exist at this time, nor is a local PM₁₀ analysis required at the state level to show project-level conformity. Therefore, potential local PM₁₀ impacts are only assessed against the federal level in this document.

As shown in Table 3.3-1, no violations of the PM₁₀ NAAQS have been recorded at the Santa Clarita Station, which is the nearest representative monitoring station for this project, over the past 3 available years (1999 through 2001). For example, the 1999 through 2001 data show a maximum 24-hour concentration of 75 µg/m³, approximately 50 percent of the

federal standard. Because the concentrations are well below the standard and no unusual circumstances are expected (such as heavy wintertime sanding conditions or a high concentration of diesel trucks), this project would be unlikely to contribute to a violation of the PM₁₀ NAAQS. Therefore, no mitigation measures for operational impacts are necessary.

c) *Less-than-significant impact:* The proposed project is planned to accommodate the traffic demand associated with future development of the project area and would not generate additional traffic. Therefore, the contribution of the project to cumulative regional air quality impacts would not be consequential.

The screening analysis for localized CO impacts included traffic volumes projected by Austin-Foust Associates for the year 2025. These traffic projections were derived from the SCVCTM using future land use and travel patterns that account for the cumulative growth of the project area. As stated above, localized impacts would be less than the ambient air quality standards. In addition, mitigation measures will be implemented to minimize construction-related emissions. Therefore, it is concluded that localized cumulative impacts would not be consequential.

d) and e): *Less-than-significant impact with mitigation:* As discussed in the Air Quality Report, emissions from the proposed project would impact air quality during construction (CH2M HILL, 2002b). Equipment would be used during site preparation and project construction for activities such as clearing, grading, excavating, loading/unloading of trucks, and travel on unpaved roads. These activities would generate emissions of fugitive dust.

In addition to the fugitive dust, the exhaust emissions from the operation of heavy equipment will also contain criteria pollutants such as PM₁₀, NO_x, and ROG. NO_x and ROG are important because they react to form O₃ in the presence of sunlight. The vehicles of commuting workers and other equipment powered by internal combustion engines would also generate emissions of criteria pollutants and could impact air quality at or near the construction site. Based on the extent of area disturbed and the duration of construction anticipated, the implementation of the construction BMPs listed below as mitigation measures would reduce criteria pollutants that may originate from the project site.

Fugitive Dust Control

- Apply EPA-approved nontoxic chemical soil stabilizers to all inactive construction areas (i.e., previously graded areas inactive for 5 days or more).
- Water active grading and parking areas at least twice daily during dry season (May 1 through November 1).

- Enclose, cover, water twice daily, or apply approved soil binders to exposed stockpiles.
- Suspend all excavation and grading operations when instantaneous wind speeds reach 25 miles per hour.
- Cover or maintain at least 0.6m (2 feet) of freeboard on all trucks hauling dirt, sand, silt, or other loose materials.
- Sweep paved streets at the end of the day if visible soil material is carried over to adjacent paved roads.
- Install wheel washers where vehicles enter and exit unpaved roads onto paved roads, or install and maintain adequate construction entrance stabilization measures.

Vehicular Emissions Controls

- Maintain equipment and vehicle engines in good condition and in proper tune as per manufacturers' specifications and per SCAQMD rules.
- Use electricity from existing nearby power lines rather than from temporary diesel- or gasoline-powered generators, to the extent feasible.
- Provide temporary traffic control during all phases of construction activities that affect circulation on public roads to maintain traffic flow.
- Schedule construction activities that affect traffic flow on the arterial system to off-peak hours.

With the implementation of these BMPs during the construction phases of the project, project construction impacts to air quality would be less than significant.

Biological Resources

a), d), e), and f) Less-than-significant impact with mitigation: In an effort to streamline the 404/1603 permitting process for the Santa Clara River and San Francisquito Creek, the USACE, CDFG, and Newhall Land prepared a plan that would address cumulative impacts on these drainages for the next 20 years; the NRMP. This plan was written to develop standard mitigation measures for all work that would occur in these drainages. Any project that is consistent with the mitigation measures in the NRMP, such as the proposed project, can operate under the 404/1603 permit issued to Newhall Land.

An NES was prepared by Bon Terra Consulting for the proposed project. A copy of the current NES is on file at Newhall Land. The following is a summary of the impacts to special-status biological resources.

Impacts

Plants. The focused plant survey located one population of Peirson's morning glory that consisted of approximately 38 plants on a berm, between Henry Mayo Parkway and SR 126. No other special-status species were observed during the focused survey. Impacts to special-status plants observed on the site are limited to the Peirson's morning glory. The potential loss of a small population of Peirson's morning glory would be considered potentially adverse, but not significant. No other impacts to special-status plants are anticipated because none were observed during either general or focused surveys performed onsite.

Wildlife. The project would result in the loss of habitat for several special-status wildlife species expected to occur in the study area, but were otherwise not observed during focused surveys due to their secretive nature or limited distribution. For those species not observed but expected to occur, potential impacts were evaluated for the habitat in which the species is expected to occupy.

Invertebrates

The Quino checkerspot is not expected to occur in the study area. Therefore, project implementation would not result in any impacts on the Quino checkerspot.

Fish

The Santa Ana sucker, unarmored threespine stickleback, arroyo chub, and steelhead trout occur in the Santa Clara River, with the stickleback and chub known to occur between I-5 and the Santa Clara River confluence with Castaic Creek. Recent observations of Santa Ana sucker or steelhead trout have not been recorded within the project area. Because the proposed project would impact only one bank on the upper terrace of the Santa Clara River, no impact to potentially occupied habitat is anticipated; and direct impacts on these fish are expected. However, indirect impacts may have adverse and potentially significant impacts on the Santa Ana sucker, unarmored threespine stickleback, arroyo chub, and steelhead trout.

Amphibians

The study area provides potentially suitable habitat for the arroyo toad. The study area also provides potentially suitable habitat for the western spadefoot. The proposed project would impact 2.27 hectares (5.62 acres) of potential estivating habitat for the arroyo toad and western spadefoot. This impact would be considered adverse and potentially significant if individuals or reproduction of these species are harmed.

The California red-legged frog is not expected to occur in the study area. Therefore, project implementation would not result in any impacts on the California red-legged frog.

Reptiles

Special-status reptile species potentially occurring in the study area include the silvery legless lizard, western pond turtle, coastal western whiptail, San Bernardino ringneck snake, coastal rosy boa, coast horned lizard, coast patch nose snake, and the two-striped garter snake. The coastal western whiptail, coast horned lizard, coastal rosy boa, and coast patch nose snake occur primarily in upland habitats. Because the proposed project would not impact any native upland habitat, project implementation would not result in significant impacts on the coastal western whiptail, coast horned lizard, coast patch nose snake, and the coastal rosy boa.

The silvery legless lizard, western pond turtle, San Bernardino ringneck snake, and two-striped garter snake may use the riparian habitats on the site. The proposed project would impact approximately 2.27 hectares (5.62 acres) of riparian habitat for these species. None of these species are listed as Threatened or Endangered by state or federal resource agencies; however, the western pond turtle and two-striped garter snake meet the criteria in Section 15380 of CEQA. Therefore, impacts on these species would be considered significant. The silvery legless lizard and San Bernardino ringneck snake do not meet the criteria in Section 15380; therefore, impacts on these species would be considered adverse, though less than significant.

Birds

A variety of bird species that are considered special status, but not listed as Threatened or Endangered by state or federal resources agencies, occurs or potentially occurs in the study area. These species include the tricolored blackbird, Southern California rufous-crowned sparrow, Bell's sage sparrow, western yellow warbler, California horned lark, yellow-breasted chat, loggerhead shrike, and summer tanager. The southern California rufous-crowned sparrow and Bell's sage sparrow primarily occur in upland habitats not present in the study area. Therefore, project implementation is not expected to result in adverse impacts on these species. The proposed project has the potential to result in a loss of 8.32 hectares (20.55 acres) of disturbed/ruderal and agricultural land that would be used by the tricolored blackbird, California horned lark, and loggerhead shrike. The proposed project would result in the loss of 2.27 hectares (5.62 acres) of riparian habitat for the summer tanager, tricolored blackbird, western yellow warbler, and yellow-breasted chat. Due to the low status of these species, and the abundance of similar habitat nearby, impacts on these species would be considered adverse, but less than significant.

The western yellow-billed cuckoo, southwestern willow flycatcher, coastal California gnatcatcher, and least Bell's vireo are listed as either Threatened or Endangered by state and

federal resource agencies. The coastal California gnatcatcher occurs in upland habitat not present in the study area. Therefore, project implementation would not result in impacts on this species. The proposed project would impact approximately 2.27 hectares (5.62 acres) of riparian vegetation types that provide limited suitable habitat for the western yellow-billed cuckoo, southwestern willow flycatcher, and least Bell's vireo. None of these species were known to nest in the Santa Clara River during the 1999 breeding season. However, the southwestern willow flycatcher is known to have nested in the Santa Clara River in 1995, while the least Bell's vireo is known to have nested there in 1998. The least Bell's vireo and willow flycatcher (including other subspecies) have been observed in the Santa Clara River and considered to be migrants in both 1998 and 1999 (Guthrie, 1995; 1998; 1999). The proposed project would result in the loss of potential habitat for these species. In addition, noise from construction could discourage or disrupt nesting by these species in the vicinity. These impacts on the least Bell's vireo and southwestern willow flycatcher would be considered significant. The western yellow-billed cuckoo is thought to have been extirpated as a breeding species in the Santa Clara River, but individuals judged to be migrants have been observed in or near the study area in recent years (Guthrie, 1998). Impacts to migrant birds would not be considered adverse. However, should the western yellow-billed cuckoo establish nests within the immediate project area prior to the implementation of project construction, then impacts on nesting western yellow-billed cuckoo would be considered adverse and potentially significant.

The proposed project would result in the loss of suitable foraging and/or nesting habitat for a variety of raptor species including the Cooper's hawk, sharp-shinned hawk, golden eagle, long-eared owl, ferruginous hawk, Swainson's hawk, northern harrier, white-tailed kite, merlin, prairie falcon, and burrowing owl. Of these species, the Swainson's hawk is state Threatened; and the golden eagle and white-tailed kite are considered Fully Protected species by CDFG. The loss of foraging habitat for all of these species except the Swainson's hawk, golden eagle, and white-tailed kite would cumulatively contribute to the ongoing regional and local loss of foraging habitat for these species. This would be considered a potentially adverse, but not significant, impact because a relatively substantial amount of similar foraging habitat is available in the region. These impacts to the Swainson's hawk, golden eagle, and white-tailed kite would be considered adverse and potentially significant.

The Cooper's hawk, long-eared owl, northern harrier, white-tailed kite, and burrowing owl, in addition to common raptor species, have potential to nest in the study area. The burrowing owl is considered to meet the criteria in Section 15380 in CEQA. Therefore, any impacts on the burrowing owl would be considered significant. Should an active raptor nest (of any raptor species) be found onsite, the loss of the nest would be considered a violation of the

California Fish and Game Code 3505.5. The loss of any active raptor nest occurring on the site would be considered significant.

Mammals

Special-status mammal species potentially present in the study area include the pallid bat, pale Townsend's big-eared bat, spotted bat, California mastiff bat, San Diego black-tailed jackrabbit, small-footed myotis, Yuma myotis, southern grasshopper mouse, and American badger. The California leaf nosed bat and San Diego desert woodrat are not expected to occur in the study area; therefore, project implementation would not result in any impacts on these species. The proposed project would result in the loss of upland habitat for the San Diego black-tailed jackrabbit, southern grasshopper mouse, and American badger. Due to the low status of these species, and the limited amount of habitat loss relative to the availability of similar habitat nearby, impacts on these species would be considered adverse, but not significant.

The proposed project would impact foraging habitat for the six bat species identified above. The loss of foraging habitat for these species would cumulatively contribute to the ongoing regional and local loss of foraging habitat for these species. This is considered an adverse, though not significant, impact because similar foraging habitat is available nearby. The pallid bat and the small-footed myotis also have potential to roost in the study area. However, due to the low status of these species, and the limited amount of habitat loss relative to the availability of similar habitat nearby, impacts on roosting habitat for these species would be considered adverse, but not significant.

Mitigation Measures

The proposed project will be required to be consistent with the NRMP. As a result, the impacts to biological resources discussed above would be mitigated to a level of insignificance with the implementation of mitigation measures outlined in the NRMP. The specific language of the NRMP mitigation measures noted in this Initial Study can be found in the NES technical document (Bon Terra, 2004), or in Section 3.9 of the Environmental Assessment (EA) for this project.

Special-Status Plant Species

The proposed project has the potential to significantly impact a small population (<40 individuals) of the CNPS List 4 plant Peirson's morning glory. Necessary mitigation would occur consistent with NRMP BIO-4 or NRMP BIO-5, as appropriate.

Special-Status Wildlife Species

The proposed project would result in potential direct impacts on several special-status wildlife species that may occur within the Fremont cottonwood riparian forest and adjacent watercourse of the proposed project. These species include the unarmored threespine stickleback, arroyo chub, Santa Ana sucker, arroyo toad, two-striped garter snake, and southwestern pond turtle. Mitigation measure NRMP BIO-2 Sensitive Aquatic Species Avoidance During Construction would mitigate impacts to a level of insignificance.

The proposed project would result in potential direct impacts to the least Bell's vireo, southwestern willow flycatcher, and western yellow-billed cuckoo. These potential impacts are considered less than significant after implementation of the following mitigation measure: NRMP BIO-3 Sensitive Bird Species Avoidance During Construction.

The proposed project has the potential to significantly affect burrowing owls, should they occur within the impact area of the proposed project. The following mitigation measure would reduce these potential impacts to a level of less than significant: NRMP BIO-20 Protection for the Burrowing Owl.

The proposed project has the potential to impact active raptor nests. The following measure will reduce these impacts to a level of less than significant: NRMP BIO-22 Protection for Nesting Raptors.

The proposed project has the potential to indirectly impact several aquatic wildlife species including the unarmored threespine stickleback, arroyo chub, Santa Ana sucker, arroyo toad, two-striped garter snake, and southwestern pond turtle. These potential indirect impacts could be reduced to a level of less than significant through the implementation of the following mitigation measure: NRMP BIO-1 Aquatic Habitat and Water Quality Measures During Construction. In addition, potential lighting impacts to adjacent habitat areas may be reduced through shielding, directional lighting, or other applicable methods, as much as practicable and consistent with federal, state, and local transportation health and safety mandates for roadway operation.

The proposed project would result in potentially significant cumulative impacts on the tri-colored blackbird. These impacts would be reduced to less than significant after the implementation of the following measure: NRMP BIO-21 Protection for Tri-Colored Blackbirds.

b) Less-than-significant impact with mitigation: A total of 3.79 hectares (9.36 acres) of native vegetation types consisting of Fremont cottonwood riparian forest will be impacted by

construction of the proposed project. A total of 0.33 hectare (0.81-acre) of riparian herb/braided wash will be affected by the proposed project. Impacts on this vegetation type are considered adverse and potentially significant because of its high biological value and its special status with state and federal resource agencies. However, impacts would be considered less than significant after implementation of the following mitigation measure: NRMP BIO-5 Riparian Habitat Mitigation Program.

The Arundo removal program will be operated through Newhall Land. Newhall Land will be responsible for monitoring the mitigation program and reporting to the resource agencies to keep them informed of the status of the mitigation program. Reports to resource agencies will include a *Mitigation Accounting Form* filed annually, and an *Annual Mitigation Status Report*.

c) *Less-than-significant impact with mitigation:* Jurisdictional areas, defined by the USACE and CDFG, within the Santa Clara River, were delineated as part of the Final EIS/EIR for the 404 Permit and 1603 Streambed Alteration Agreement for Portions of the Santa Clara River and Its Tributaries (USACE, 1998a) and the NRMP (USACE, 1998b), as part of a larger group of projects being developed by Newhall Land. Areas of wetlands and waters of the United States, defined by the USACE, were not delineated separately for this project because of the long-term nature of the 404 permit and the transitory nature of the Santa Clara River. Impacts of this project were previously analyzed in the aforementioned EIS/EIR, and the following mitigation measures will be implemented in accordance with the mitigation measure NRMP BIO-4.

Community Resources

a); c); and d) No impact: The proposed project would continue to be consistent with the existing land uses in the project area (a mixture of open space, urban, and rural uses). The project is within the existing SR 126 corridor, and will enhance the capacity of the existing SR 126/Commerce Center Drive at-grade intersection. The existing uses would not be impaired by the proximity of the proposed interchange, and are already well integrated with the transportation facilities in the area. Because the project would upgrade and replace and existing at-grade intersection, it would not divide established communities in the area.

The proposed interchange would be compatible with the proposed developments in the area; specifically with the Valencia Commerce Center and the Newhall Ranch land development. Without the proposed interchange, local as well as regional circulation through the SR 126/Commerce Center Drive at-grade intersection would be constrained due to high traffic volumes. With the proposed interchange, the existing and proposed land uses would

be served as shown through improved traffic levels of service (see also Section 3.18 Traffic Transportation/Pedestrian and Bicycle Facilities).

b) No impact: The proposed project is not located within the Coastal Zone; therefore, no permanent impacts to the Coastal Zone would occur with project implementation.

c) Less-than-significant impact with mitigation: The proposed interchange would have a significant impact on life-styles and stability in the project area. However, as noted in the noise analysis prepared for the project, noise generated by the interchange would be less than significant to the adjacent Valencia Travel Village with implementation of noise abatement measures listed in Section 3.4.5 (i.e., noise wall). Based on the information in the noise study, the total allowable cost for constructing a noise barrier for Valencia Travel Village would be \$1,997,000. Assuming an occupancy rate of 50 percent for Valencia Travel Village, the reasonableness allowance would be \$998,500 (or nearly \$1,000,000). The required noise barrier proposed for the project would be 862.5 meters (2,830 feet) long and vary in its heights between 3.05 to 4.27 meters (10 to 14 feet). The estimated cost of this noise barrier, assuming a unit noise barrier cost of \$25 per square foot, would be approximately \$800,000. Therefore, the noise barrier would be feasible and reasonable to construct. Additionally, the proposed project would provide safer and efficient access to the Valencia Travel Village via Henry Mayo Drive.

e) No impact: Based on review of data for Census Tract 9203.27 and neighboring Tract 9201.06, the median household incomes for both tracts are above the median household income for Los Angeles County. Therefore, implementation of the project would have no impacts to low-income populations. The project vicinity has a predominantly White race/ethnicity (65.8 percent), while the next two larger groups are Asian (14.2 percent) and Hispanic or Latino (11.8 percent). It is anticipated that the project would not disproportionately impact minority populations.

f) Less-than-significant impact; g) No impact: The proposed project would not negatively affect local or regional employment, industry, or commerce, or require the displacement of businesses. It would, however, have a significant positive effect for local and regional businesses, which would benefit from improved traffic operations at the SR 126/Commerce Center Drive and Commerce Center Drive/Henry Mayo Drive interchanges. The proposed interchange would also accommodate planned growth within the Valencia Commerce Center. Impacts to the Valencia Travel Village resulting from the loss of direct access are discussed in Section 3.18.

h) No impact: With the exception of the Valencia Travel Village, there are no community facilities such as medical, education, scientific, or religious institutions; ceremonial sites; or sacred shrines located within the project area. As a result, there are no significant impacts to community facilities resulting from the project.

i) No impact: There are no other modes of transportation, including waterborne, rail, and air modes, within the immediate project vicinity. The project is primarily the upgrade of an existing at-grade intersection to a partial cloverleaf interchange, and would have no impacts on other modes of transportation.

j) Less-than-significant impact: The proposed interchange would be compatible with the proposed developments in the area; most likely with the Valencia Commerce Center and the Newhall Ranch land development. Without the proposed interchange, local as well as regional circulation, through the SR 126/Commerce Center Drive at-grade intersection would be constrained due to high forecast traffic volumes. With the proposed interchange, the existing and proposed land uses would be served as shown through improved traffic levels of service (see also Section 3.18 Traffic/Transportation).

k) No impact: According to Section 3.1 – Hydrology, Water Quality, and Stormwater Runoff, the Santa Clara River is not a wild or scenic river, as designated by the National Wild and Scenic Rivers System (National Park Service, 1999). Additionally, according to Section 3.19 – Visual/Aesthetics, the interchange would not obstruct the view of any scenic vista, or create an aesthetically offensive site. The project area is not within a visually sensitive setting due to the developing commercial area and restricted views of the Santa Clara River. Therefore, the project would not impact wild or scenic rivers, or natural landmarks.

l) Less-than-significant impact with mitigation: Implementation of the mitigation measures outlined in the following sections would minimize temporary project construction impacts to levels of insignificance: Section 3.4 – Noise; Section 3.3 – Air Quality; Section 3.1 – Hydrology, Water Quality, and Stormwater Runoff; and Section 3.18 – Traffic Transportation/Pedestrian and Bicycle Facilities.

Cultural Resources

a) No impact: The HPSR prepared for the project indicates that no significant historic resources exist in the project area (CH2M HILL, 2004e). Eight properties were analyzed in the historic architecture survey. Of these, two buildings, one building group, and one landscape feature located along Henry Mayo Drive were determined to predate 1957. Three other buildings and one structure postdate 1957. None of the properties has previously

been determined eligible for inclusion in the NRHP, nor do any appear to meet the criteria for eligibility to the National Register because they were modified and did not retain their architectural integrity.

b) and c) No impact: A record search was undertaken in September 1999 by the South Central Coastal Information Center at the University of California, Los Angeles. A second search was undertaken in June 2002 by the South Central Coastal Information Center at California State University, Fullerton. The record searches revealed no previously recorded historic or prehistoric resources within a 1.6-kilometer (1-mile) radius of the project area. During a field survey conducted by Greenwood & Associates on September 20, 1999, no cultural resources were observed. To further confirm that no cultural resources are located within the proposed project area, the staff of the Native American Heritage Commission were requested to provide the names and addresses of Native American individuals and/or organizations who they suggested might be able to provide further information regarding cultural resources in the proposed project area. To date, we have received no significant information regarding cultural resources or sacred sites within the project area; therefore, the project would not impact any known cultural resources.

d) No impact: Although there appears to be no known archaeological resources in the project area, project-related construction activities may unearth cultural remains and/or artifacts. In the event that remains and/or artifacts are found during the construction of the project, the site will be protected until it can be evaluated by a qualified archaeologist. Contract specifications will identify procedures for encountering cultural resources, including human remains. For example, the contract specifications may state:

“If, cultural materials appear during construction, work will stop in the immediate area. Upon such discoveries, the Contractor shall immediately notify the Caltrans Environmental Branch Chief and the site will be protected until it can be evaluated by a qualified archaeologist. The Caltrans Archaeologist will consult with the FHWA and the State Historic Preservation Officer to formulate a treatment plan, including avoidance alternatives to mitigate for cultural resource impacts. Work can only resume in that area with approval of the State Historic Preservation Officer and the Caltrans Archaeologist. If human remains are encountered, Section 7050.5 of the California Health and Safety Code will be followed.”

Geology and Soils

a – d) Less-than-significant impact: There are numerous faults that run in the area. The most proximate fault in the project area is the San Gabriel fault, a fairly inactive branch of

the San Andreas fault. According to the Newhall quadrangle map of the Alquist-Priolo Earthquake Fault Zone Maps (California Department of Conservation), the San Gabriel fault runs right along Magic Mountain Parkway and through the Valencia Industrial Center. The fault runs east of the project site, approximately 1 mile east of I-5, and approximately 2 miles north of Newhall. The project site is not within the denoted Alquist-Priolo Zone of known fault ruptures.

The project site sits atop many hundreds of feet of alluvium that was deposited by the tributaries of the Santa Clara River during the last few thousand years. Review of the *Generalized Geologic Map of California* (California Department of Conservation) shows that the project site is located in an area of quaternary sedimentary rocks (gravel, sand, silt, and clay); tertiary sedimentary rocks (sandstone, shale, and conglomerate); and mesozoic granitic rocks (coarse-grained igneous rocks).

As an approval requirement, the proposed interchange will be designed to meet the structural seismic requirements for Caltrans freeway interchanges. Therefore, the project would have a less-than-significant impact to people and structures in the event of strong seismic shaking, liquefaction, and ground failure. Also, the project would not result in substantial soil erosion and would not be constructed on unstable geologic units or expansive soils.

e) No impact: The project is the construction of a grade-separated interchange from an existing signalized intersection. The project would not use or place septic tanks or other alternative wastewater disposal systems on the project site.

Hazards and Hazardous Materials

a) and b): Less-than-significant impact: Per the ISA conducted for the proposed project (CH2M HILL, 1999c), the following recognized environmental conditions were identified at the subject parcel:

- Potential groundwater contamination from past agricultural land use at the site and leaking USTs, and a landfill at nearby properties
- Potential for residual concentration of pesticides/herbicides in soil resulting from routine applications associated with past agricultural land use at the subject parcel

Approximately 0.5-hectare (1.3 acres) of potentially contaminated land would be required for the Build Alternative, with no additional ROW required for the No Build Alternative. Because no recognized environmental concerns were observed during a May 1998 site visit, these potential environmental conditions are not considered adverse impacts. As a result, the proposed project is not expected to result in a significant risk of the release of hazardous

substances during the construction and operation of the proposed project, and would not endanger the safety of workers or the general public. Additionally, neither the presence of these conditions nor the construction or operation of the proposed project is anticipated to violate any published federal, state, or local standards pertaining to hazardous waste, solid waste, or litter control. However, because testing of soil and groundwater contamination levels will be completed after the environmental documentation phase is completed, a definitive level of impact cannot be determined until soil and groundwater tests are completed. These tests must be completed prior to the purchase or exchange of ROW to the State of California, which is prohibited from purchasing or receiving land on which contaminants are located.

The proposed project would require the removal of existing yellow thermoplastic traffic stripes and pavement markings. These materials have the potential to contain hazardous levels of lead and/or chromium, which could be dangerous to the environment and to human health during construction. These materials typically are removed using sand- or air-blasting equipment. Workers are required to adhere to OSHA standards that describe necessary personal safety equipment and work procedures. After blasting, the blasted material is collected and disposed at an appropriate hazardous materials facility. The amount of material would not be substantial and would not result in a significant impact to local hazardous materials facilities.

c) No impact: The project site is not within 0.4 km (0.25-mile) of an existing or proposed school. Therefore, there would be no impacts to schools due to hazardous materials associated with the project.

d) No impact: The project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Therefore, there would be no significant impacts to the public or the environment.

e) and f) No impact: The project site is not within the vicinity of any public or private airports/airstrips. Therefore, there would be no impacts to those facilities or to employees of those facilities.

g) Less-than-significant impact: During the construction phases of the Build Alternative, certain lanes and sections of SR 126, Commerce Center Drive, and Henry Mayo Drive may be temporarily closed to allow specific construction activities to occur. Lane closures and detour routes will be designed to minimize impacts on peak-hour traffic flow to mainline SR 126. During the stage, the construction contractor will be required to develop a TMP for review and approval from Caltrans District 7.

The objective of the TMP is to mitigate the impact construction activities will have on freeway and roadway users, and it may include the following strategies:

- A public awareness campaign prior to and during construction
- Real-time communication with motorists, including changeable message signs and highway advisory radio announcements to alert motorists of upcoming construction impacts, detours, and travel conditions
- Promotion of ridesharing and public transit
- Identification of park-and-ride and other public transit modes to encourage use of ridesharing and public transit
- Provisions for tow truck service during peak hours to remove stalled vehicles within the construction zone

Construction activities along SR 126 and at the SR 126/Commerce Center Drive intersection will be coordinated with other construction activities that will be taking place nearby at around the same time. The I-5/SR 126, Hasley Canyon Road and Magic Mountain Parkway interchanges will also be under construction.

The TMP will be closely coordinated with the City, the County, Newhall Land, and the public to ensure that traffic along SR 126 and the surrounding streets remains at an acceptable level of operation during construction.

h) No impact: In general, current land use patterns within the proposed project area reflect a mixture of open space, urban, and rural use. The immediate project area has commercial and industrial properties, agriculture uses, and vacant land consisting of either undeveloped commercial and industrial areas, hills, or floodplains. There are no residential properties within the proposed project area. Therefore, the proposed project would not expose people or structures to a significant risk for wildland fires.

Hydrology and Water Quality

a) and f) Less-than-significant impact: The total monthly runoff to the river was estimated as the net new impervious surface area of the interchange and Commerce Center Drive (8.54 hectares [21.11 acres] for Alternative C) multiplied by the monthly precipitation totals at the National Weather Service (NWS) station at Newhall (NWS, 1999). Those monthly totals were compared to the average monthly total hydraulic load of the river. For all months except November, the average precipitation was less than 1 percent of the river flow. In November, project-associated stormwater runoff may average up to 2.7 percent of the river

flow. In reality, stormwater BMPs designed to absorb and infiltrate stormwater runoff would mitigate for almost all stormwater runoff from the site. No adverse impacts to the Santa Clara River are expected from this small amount of project-associated runoff.

b) *Less-than-significant impact:* The proposed project is located within the Eastern Groundwater Basin of the Santa Clara River Valley Basin. The basin includes alluvial sediments along the river and its tributaries, and deeper Saugus Formation sediments that underlie the alluvium. Depth to water in the alluvial aquifer varies greatly due to the seasonal and long-term variation in the amount of recharge and discharge.

The majority of water extraction within the Santa Clarita Valley occurs along the Santa Clara River. The largest groundwater user in the project area is the Newhall Land and Farming Company, which operates 25 to 30 wells primarily for agricultural purposes. Total groundwater extractions by the purveyors from the alluvial aquifer ranged between 19,740 and 38,240 cubic kilometers (16,000 to 31,000 acre-feet) from 1987 to 1994 (Santa Clarita Valley Water Report, 2001).

The proposed project is the construction and operation of a grade-separated interchange. As such, the potential to deplete groundwater supplies or interfere with groundwater recharge would be of little (insignificant) or no impact.

c) and d) *Less-than-significant impact with mitigation:* Construction of the Build Alternative would require grading of the immediate project area, which could result in erosion of disturbed earth by wind and/or water adjacent to and within the Santa Clara River. Construction of the project would not directly impact Castaic Creek, located north of the proposed construction area. The erosion as a result of construction activities could result in fine-grain particulate solids entering the Santa Clara River. This siltation would be expected to wash downstream and may potentially contaminate aquatic and/or wetland habitats. However, as part of the General Construction Activity Permit for the project, the project would be required to implement a SWPPP with the intent to prevent construction pollutants from contacting stormwater in addition to minimizing silt and sediment runoff. In addition to the SWPPP, appropriate BMPs and erosion control measures would also be implemented during construction, and siltation into the Santa Clara River would be both minimal and considered less than significant.

e) *Less-than-significant impact with mitigation:* The project applicant shall apply for coverage under the State Water Resources Control Board's General Permit for Storm Water Discharge Associated with Construction Activity. The project applicant shall comply with all of the provisions of the permit, including the development of a SWPPP, which includes

provisions for the implementation of BMPs that are designed to minimize erosion and reduce downstream siltation and minimize the risk of potential pollutants from coming into contact with stormwater during construction activities. Such BMPs (Caltrans, 1992) would include, but are not limited to:

- The establishment of equipment staging areas and the isolation of hazardous materials from drainage to the streambed
- The control of construction vehicles and containment of any leakage; equipment maintenance in designated areas away from drainage channels
- The control of all construction debris within the river channel
- Sediment traps and/or straw bale filters and silt fences
- Temporary and permanent stabilization of exposed soil

Implementation of BMPs would minimize erosion during construction and would prevent significant siltation impacts and nonvisible pollutants from affecting water quality and aquatic and riparian habitats.

There would be a slight increase in the amount of stormwater runoff on the project site due to the increase in the amount of impervious surfaces. As a result, there would be a small increase in runoff to the Santa Clara River, which could potentially degrade surface water quality. However, adherence to standard construction methods and BMPs would minimize adverse environmental effects to the Santa Clara River, prevent the proposed project from significantly affecting water quality, and ensure project consistency with state and federal water quality standards. The BMPs would be designed to channel runoff away from the river, absorb and infiltrate flows, detain direct runoff, and prevent nonvisible pollutants from discharging from the site. These BMPs are discussed in the mitigation portion of this section.

The proposed project will require both construction and operations stormwater NPDES permits. All potential impacts to water quality and flooding will be minimized or prevented during construction by the implementation, adherence, and monitoring of construction BMPs. Stormwater BMPs will be described in detail as part of the SWPPP filed as part of the stormwater NPDES permitting for the project. Standard operational BMPs (Caltrans, 1992), or postconstruction measures, that would effectively control erosion and water quality impacts include, but are not limited to:

- Earth, gravel, or grass-lined water quality filters to infiltrate and absorb stormwater runoff from the roadway
- Stormwater detention basins
- A storm drain and basin maintenance program

Construction management BMPs are designed to minimize erosion and reduce downstream siltation and potential nonvisible pollutant discharges during construction activities. Standard BMPs (Caltrans, 1992) would include, but are not limited to:

- The establishment of equipment staging areas and the requirements for storage of hazardous materials to prevent pollutants from discharging from the site, or entering waterways
- The control of construction vehicles and containment of any leakage
- The control of all construction debris
- Installation of sediment traps and/or straw bale filters, silt fences, and sandbags
- Temporary and permanent stabilization of exposed soil
- Implementation of BMPs that would minimize erosion during construction, and prevent nonpollutants from significantly affecting water quality

In addition, consultation with state and federal agencies concerning protection measures for the listed aquatic species in the project vicinity in accordance with the NRMP will be required. The following are standard measures to minimize water quality impacts due to construction activities, as listed in the NRMP:

- Equipment shall not be operated in areas of ponded or flowing water without approval of the CDFG.
- Silt settling basins, installed during the construction process, shall be located away from areas of ponded or flowing water to prevent discolored, silt-bearing water from reaching areas of ponded or flowing water during normal flow regimes.
- Installation of bridges, culverts, or other structures shall not impair movement of fish or aquatic organisms. Bottoms of temporary culverts shall be placed at below channel grades. Bottoms of permanent culverts shall be placed below channel grade.

- Water containing mud, silt, or other pollutants from construction activities shall not be allowed to enter a flowing stream or be placed in locations that may be subject to normal storm flows during periods when storm flows can be reasonably be expected to occur.
- If a stream channel has been altered during the construction and/or maintenance operations, its low-flow channel shall be returned as nearly as practical to preproject topographic conditions without creating a possible future bank erosion problem, or a flat wide channel or sluice-like area. The gradient of the streambed shall be returned to preproject grade, to the extent practical, unless it is specified in the NRMP as a restoration area, or a new river bottom area.
- Staging/storage areas for equipment and materials shall be located outside areas of ponded or flowing water.
- Vehicles shall not be driven or equipment operated in areas of ponded or flowing water, or where wetland vegetation, riparian vegetation, or aquatic organisms may be destroyed, except as otherwise provided for in the Agreement.
- Any equipment or vehicles driven and/or operated within or adjacent to the stream shall be checked and maintained daily to prevent leaks of materials that, if introduced to water, could be deleterious to aquatic life.
- Stationary equipment such as motors, pumps, generators, and welders, located within the riverbed construction zone shall be positioned over drip pans. No fuel storage tanks are allowed in the riverbed.
- County of Los Angeles and/or its approved contractor will use best efforts to ensure that no debris, bark, slash, sawdust, rubbish, cement, or concrete or washings thereof, oil, petroleum products, or other organic material from any construction, or associated activity of whatever nature shall be allowed to enter into or be placed where it may be washed by rainfall or runoff into waters of the state. When operations are completed, any excess materials or debris shall be removed from the work area and properly disposed.
- No equipment maintenance shall be done within or near any stream where petroleum products or other pollutants from the equipment may enter these areas under flow.

The following are specific water quality mitigation measures listed in the NRMP:

(WQ-1) The engineering design and operational criteria of the proposed water quality wetlands and filters shall be reviewed by the Regional Board staff during the 401 certification review for individual projects. The final designs should consider optimal

size, retention time, internal flow patterns, use of a forebay, selection of appropriate plants, and location of inlets and outlets.

(WQ-2) The design of the proposed treatment control BMPs must meet the requirements of any similar treatment control BMP that is formally adopted by the Regional Board for the then current municipal stormwater permit for Los Angeles County or the City of Santa Clarita.

g) No impact: As discussed in the Floodplain Evaluation Report, the proposed project is located within the base floodplain of the Santa Clara River, although not the base floodplain for Castaic Creek (CH2M HILL, 2004d). However, the project is the construction and operation of an existing intersection/interchange facility; and no homes would be placed in the floodplain as a result of this project.

h) Less-than-significant impact: Construction activities associated with the proposed interchange project would impact portions of the Santa Clara River floodplain (relocation of the Commerce Center Drive/Henry Mayo Drive intersection, and reconfiguration of Henry Mayo Drive into the Santa Clara River floodplain). Approximately 2.9 hectares (7.1 acres) of the floodplain would be affected by components of the project. Construction-related impacts to the natural and beneficial floodplain values will be prevented through the use of BMPs and mitigated in the NRMP to a less-than-significant level.

As discussed above, impacts to the natural and beneficial floodplain values resulting from the proposed project are included in the NRMP. Consequently, all necessary mitigation measures for these impacts are included in the NRMP. Mitigation measures from the NRMP that are relevant to the specific impacts of this project are listed below.

Additionally, implementation of the NRMP would result in a gain of approximately 39.3 hectares (97 acres) of potential new riverbed because 39.3 hectares (97 acres) of uplands will be lowered to the elevation of the riverbed and used to create a new riverbed habitat for mitigation purposes. Hence, the NRMP could result in an overall net gain of 27.9 hectares (69 acres) of riverbed¹.

¹ The Natural River Management Plan includes impacts and mitigation for eight new bridges; one replacement bridge; and six widened bridges, including the SR 126/Commerce Center Drive interchange project. The net gain in riverbed area discussed above results from the mitigation of impacts of all NRMP projects.

Permanent measures

- a. Installation of structures shall not impair water flow. Bottoms of permanent culverts shall be placed below channel grade.
- b. If a stream channel has been altered, the low-flow channel shall be returned as nearly as practical to preproject topographic conditions.

Construction measures

- a. Construction activities shall be limited to the following areas of temporary disturbance: (1) a 25.9-meter (85-foot) zone that extends into the river from the base of the riprap or gunite bank protection where it intercepts the river bottom; and (2) 6.09-meter (20-foot)-wide temporary access ramps and roads to reach construction sites. The locations of these temporary construction sites and the routes of all access roads shall be shown on maps submitted with the VRL that is submitted to the CDFG and USACE. Any variation from these limits shall be noted, with a justification for a variation. The construction plans should indicate what type of vegetation, if any, would be temporarily disturbed, and the postconstruction activities to facilitate natural revegetation of the temporarily disturbed areas. The boundaries of the construction site and any temporary access roads within the riverbed shall be marked in the field with stakes and flagging. No construction activities, vehicular access, equipment storage, stockpiling, or significant human intrusion shall occur outside the work area and access roads.
- b. Equipment shall not be operated in areas of ponding or flowing water unless there are no practicable alternative methods to accomplish the construction work, and only after prior approval by the CDFG and the USACE. Approval shall be acquired by submitting a request to CDFG and USACE no later than 30 days prior to construction. The request must contain a biological evaluation demonstrating that no sensitive fish, amphibians, and/or reptiles are currently present, or likely to be present during construction, at the construction site, or along access roads. This request may be included in the VRL that is submitted to the CDFG and USACE.
- c. Temporary sediment retention ponds shall be constructed downstream of construction sites that are located in the riverbed under the following circumstances: (1) when the construction site contains flowing or ponded water that drains offsite into the undisturbed streamflow or ponds, as allowed for certain areas under Item (a) above; or (2) when streamflow is diverted around the construction site, but the work is occurring in the period from November 1 through April 15 when storm flows could inundate the construction site. The sediment ponds shall be constructed of riverbed material and shall

prevent sediment-laden water from reaching undisturbed ponds or streamflows. To the extent feasible, ponds shall be located in barren or sandy river bottom areas devoid of existing riparian scrub, riparian woodland, or aquatic habitat. The ponds shall be maintained and repaired after flooding events, and shall be restored to preconstruction grades and substrate conditions within 30 days after construction has ended at that particular site. The location and design of sediment retention ponds shall be included in the SWPPP prepared by the project applicant for all construction activities that require a NPDES general construction activity stormwater permit.

- d. Installation of structures shall not impair water flow. Bottoms of temporary culverts shall be placed at or below channel grade.
- e. Water containing mud, silt, or other pollutants from construction activities shall not be allowed to enter a flowing stream or placed in locations that may be subject to normal storm flows during the period November 1 through April 15.
- f. Temporary structures and associated materials not designed to withstand high seasonal flows shall be removed to areas above the high-water mark before such flows occur.
- g. Staging/storage areas for construction equipment and materials shall be located outside the high-water mark.
- h. Any equipment or vehicles driven and/or operated within or adjacent to the stream shall be checked and maintained daily to prevent leaks of materials that, if introduced to water, could be deleterious to aquatic life.
- i. Stationary equipment such as motors, pumps, generators, and welders will not be located within the riverbed construction zone.
- j. The project applicant shall use best efforts to ensure that no debris, bark, slash sawdust, rubbish, cement or concrete or washing thereof, oil, petroleum products, or other organic material from any construction, or associated activity of whatever nature, shall be allowed to enter into, or be placed where it may be washed by rainfall or runoff into, the Santa Clara River or Castaic Creek. When construction operations are completed, any excess materials or debris shall be removed from the work area and properly disposed.
- k. No equipment maintenance or fueling shall be conducted within 15.2 meters (49.8 feet) of a watercourse.

With the implementation of these mitigation measures, impacts to the Santa Clara River floodplain would be reduced to a level that is considered less than significant.

i) and j) No impact: The proposed project is not located in an area with active levees and dams and, therefore, would have no impact to people using the interchange facility, or structures adjacent to the interchange. In addition, because the project is not within the coastal zone, any potential seiche, tsunami, or mudflow would not significantly affect the proposed interchange.

Land Use and Planning

a) No impact: Under the Build Alternative, the proposed interchange would be consistent with the County of Los Angeles General Plan's Policy 9.4 (Land Use Element); Policy 1.3 (Economic Development Element); and Policies 2.1 and 2.3 (Circulation Element). The proposed interchange would meet existing and future local residential needs by providing adequate roadway and intersection capacity to existing and planned employment centers (Valencia Commerce Center).

Policy 7.1 of the City of Santa Clarita General Plan states that "...necessary public facility improvements should precede or be coordinated with future development..." Construction of the Build Alternative is consistent with this policy in that it is tied with the future expansion of the Valencia Commerce Center, which is planned to be a 1.2-million-square-meter (12-million-square-foot) employment center at its buildout.

For the above reasons, the Build Alternative is expected to be consistent with local land use plans and policies.

b) Less-than-significant with mitigation: The proposed project is consistent with the NRMP. Impacts to the natural and beneficial floodplain values, hydrology, and biological resources resulting from the proposed project are included in the NRMP. Consequently, all project-related mitigation measures for impacts to floodplain, hydrology, and biological resources are also included in the NRMP.

Mineral Resources

a) and b) No impact: A majority of the project site is within an existing area designated as Caltrans ROW, and contains an existing Caltrans facility. Based on other local plans and policies, there are no known mineral resources on the project site. Therefore, there would be no impacts to known mineral resources on the project site.

Noise

a), b), and c) Less-than-significant impact with mitigation: Traffic noise levels were evaluated using the FHWA Traffic Noise Prediction Model (FHWA-RD-77-108) as coded into the SOUND32 computer program. The FHWA Model is the analytical method currently favored by most state and local agencies, including Caltrans, for highway traffic noise prediction. The model is based upon reference energy emission levels for automobiles, medium trucks (two axles), and heavy trucks (three or more axles), with consideration given to vehicle volume, speed, roadway configuration, distance to the receiver, and the acoustical characteristics onsite. The FHWA model was developed to predict hourly L_{eq} values for free-flowing traffic conditions, and it is generally considered to be accurate within +1.5 dB. The SOUND32 version of the FHWA Model uses Calveno traffic noise emission curves, which are recommended by Caltrans to more accurately calculate noise levels generated by California traffic.

As discussed in the Noise Impact Analysis, a computer program (SOUND32) was used to calculate future (2025) Build and No Build traffic noise levels from SR 126 in terms of peak-hour Leq (CH2M HILL, 2004c). The same four sites, as discussed in Section 3.13, representing receiver locations inside the Valencia Travel Village were analyzed. Table 3.4-2 in Chapter 3.4 summarizes future Build and No Build traffic noise levels at these locations in terms of the state/federal and county criteria. These data show that future (2025) traffic noise levels for both the Build and No Build conditions exceed the 66-dBA criterion at all selected receiver locations within the Valencia Travel Village.

Potential traffic noise mitigation measures that may be considered for the project include the following:

- Constructing a noise barrier along the south side of SR 126
- Depressing the roadway
- Modifying the proposed alignment of the road
- Modifying speed limits
- Restricting truck traffic

Of the above mitigation measures, the noise barrier option is usually the most practical, reasonable, and effective choice. The other options would be inconsistent with the project purpose; therefore, they would be impractical. Table 3.4-4 in Chapter 3.4 shows the results of the noise barrier modeling analysis. Caltrans requires a 5-dBA noise reduction with a barrier to be considered reasonable and feasible mitigation, hence the need for a 4.3m (14-foot) wall; this wall also satisfies the Los Angeles County assumed noise level criterion.

Therefore, a noise barrier of heights up to 4.2 meters (14 feet) above the roadway surface would mitigate future traffic noise levels within the Valencia Travel Village to acceptable levels. The noise barrier will be located beginning at Station 11+24.011 and ending at Station 19+57.085. The barrier would reduce future noise levels within the recreational vehicle park to levels slightly below existing noise levels. To be effective, the barrier should be constructed of massive materials, and should be continuous without gaps or openings that could result in flanking paths and reduce barrier performance. A combination of berm and wall may also be acceptable. The required noise barrier would be 862.5 meters (2,830 feet) long and vary in its heights between 3.05 to 4.27 meters (10 to 14 feet). The estimated cost of this noise barrier, assuming a unit noise barrier cost of \$25 per square foot, would be approximately \$782,000.

It should also be noted that noise barriers can have their own negative impacts. Barriers may interfere with the passage of air, interrupt scenic views, create objectionable shadows, or reduce or eliminate visibility of a business from the roadway. Barriers could also create maintenance access problems, make it difficult to maintain landscaping, create drainage problems, and provide pockets for trash and garbage to accumulate. While a noise barrier may be beneficial for the Valencia Travel Village for noise reasons, it would result in the business losing its visibility from SR 126. Therefore, all mitigation measures will be designed with the consent and cooperation of the owner(s) of the Valencia Travel Village.

d) Less-than-significant impact with mitigation: During the construction phase, noise from construction activities would add to the noise environment in the immediate project area. Activities involved in construction would generate noise levels, as indicated in Table 3.4-3 in Chapter 3.4, ranging from 82 to 86 dBA at a distance of 30 meters (100 feet). The distance from the project construction activities to the nearest parking areas within Valencia Travel Village would be approximately 25 to 30 meters (80 to 100 feet). Construction activities would be temporary in nature and are anticipated to occur during normal daytime working hours. Construction at night would not occur; therefore, sleep disruptions are not anticipated.

Noise would also be generated during the construction phase by increased truck traffic on area roadways associated with transport of heavy materials and equipment. This noise increase would be of short duration, and would probably occur primarily during daytime hours. The diversion of traffic onto local roads and traffic "bottle-necks" might also create temporary noise impacts.

Equipment operating at the project site will conform with contractual specifications requiring the contractor to comply with all local noise control rules, regulations, and ordinances.

However, there are no FHWA or Caltrans criteria for mitigating construction noise impacts. Despite the lack of criteria for construction noise mitigation, the following standard Caltrans measures will be implemented to minimize such impacts:

- Whenever possible, the operation of heavy equipment and other noisy procedures shall be limited to daylight hours; otherwise a nighttime noise variance will be required.
- The installation and maintenance of effective mufflers on equipment shall be done to minimize noise from construction vehicles.
- Construction equipment shall be required to maintain all engine covers, shields, and screening from the manufacturer.
- Location of equipment and vehicle staging areas shall be as far from the Valencia Travel Village as possible.
- Limit unnecessary idling of equipment.

e) and f) No impact: The proposed project is not within the vicinity of a public or private airport/airstrip. The project site is also not within the boundaries of a local and/or regional airport land use plan.

Population and Housing

a) Less-than-significant impact: The proposed project is a programmed improvement in the RTIP and serves to mitigate forecast traffic volumes from approved development. Without the proposed interchange, local as well as regional circulation through the SR 126/Commerce Center Drive at-grade intersection would be constrained due to high forecast traffic volumes from approved development. With the proposed interchange, the existing and proposed land uses would be served as shown through improved and satisfactory levels of service (see also Section 3.18 Traffic Transportation/Pedestrian and Bicycle Facilities).

b) and c) No impact: Growth in the number of housing units within the Santa Clarita Valley is supported by the goals of the Santa Clarita Area Plan and the City General Plan, which seek to create a balance of jobs and housing. At the present time, there is an imbalance of jobs and housing. The County Santa Clarita Area Plan includes approximately 4,047 hectares (10,000 acres) of proposed new development outside the City of Santa Clarita. This land is planned for single- and multiple-family residences, and significant areas are also planned for the needed industrial and commercial land uses (i.e., the Valencia Commerce Center). The proposed project would not remove any existing housing or persons from the project vicinity, nor would it prevent the construction of new housing.

Public Services

a) Fire and Police Protection – Less-than-significant impact: Emergency services could experience temporary, short-term traffic delays during construction. Any road closures and detours would be advertised in advance and signed to minimize adverse impacts to both the traveling public and emergency service operators. A TMP will be required that would minimize impacts to emergency services. Section 3.18, Traffic Transportation/Pedestrian and Bicycle Facilities, provides a description of the TMP. This impact would not be considered significant due to the temporary, short-term nature of the impact.

a) Schools, Parks, and other Public Facilities – No impact: There are no schools, parks, and other public facilities in the project vicinity. The project involves the improvement of an existing roadway facility; as such, no impacts to these types of public facilities are anticipated to occur.

Recreation

a) Less-than-significant impact: The construction of a new grade-separated interchange at SR 126 and Commerce Center Drive would eliminate direct access from SR 126 to the Valencia Travel Village. The project would construct a new access for the Travel Village at the Commerce Center Drive/Henry Mayo Drive intersection. Signing would be provided along SR 126 to redirect travelers to the Valencia Travel Village via Henry Mayo Drive. The loss of direct access from eastbound SR 126 to the Valencia Travel Village would be a less-than-significant impact. The new route would maximize operation and increase safety.

b) No impact: The proposed project does not include recreational facilities, nor does it require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment.

Transportation/Traffic

a) and b) Less-than-significant impact: Table 5.2-2 shows the LOS at the signalized intersections along Commerce Center Drive based upon the ICU analysis for the No Build Alternative and proposed project conditions. With the construction of the Build Alternative, the improved SR 126/Commerce Center Drive interchange would operate at LOS D or better, a significant improvement from the forecasted No Build Alternative LOS F.

Table 5.2-2. Intersection LOS Summary

Location	2025 No Build Alternative				2025 Build Alternative			
	A.M.		P.M.		A.M.		P.M.	
	v/c	LOS	v/c	LOS	v/c	LOS	v/c	LOS
Commerce & SR 126	1.31	F	1.40	F	-	-	-	-

Location	2025 No Build Alternative				2025 Build Alternative			
	A.M.		P.M.		A.M.		P.M.	
	v/c	LOS	v/c	LOS	v/c	LOS	v/c	LOS
Commerce & SR 126 WB	-	-	-	-	0.83	D	0.65	B
Commerce & Henry Mayo	0.78	C	0.62	B	0.81	D	0.73	C
Commerce & Hancock St.	0.90	D	0.74	C	0.90	D	0.74	C

The proposed improvements would add the necessary capacity to accommodate the future buildout within the area. A comparison of the operational conditions of the Build and No Build Alternatives for the year 2025 indicates that the proposed improvements would alleviate several of the potential operational and safety problems identified in the analysis of the No Build Alternative.

c) No impact: The proposed project involves the improvement of an existing at-grade intersection to a partial cloverleaf freeway interchange. There would be no change in air traffic patterns and no increases in air traffic levels with implementation of the project.

d) Less-than-significant impact: The Build Alternative for the SR 126/ Commerce Center Drive intersection proposes a grade-separated interchange at the SR 126/Commerce Center Drive intersection and widening of SR 126. A new structure would be built over Commerce Center Drive to allow for uninterrupted flow on SR 126. The interchange would provide full movement for traffic from Commerce Center Drive and along SR 126. The construction of this interchange would result in improvements to local access and circulation. Access to the Valencia Travel Village would no longer be provided directly from SR 126, but via the Commerce Center Drive/Henry Mayo Drive intersection. Signing would be provided along SR 126 to redirect travelers to the Valencia Travel Village via Henry Mayo Drive.

e) Less-than-significant impact: During the construction phases of the Build Alternative, certain lanes and sections of SR 126, Commerce Center Drive, and Henry Mayo Drive may be temporarily closed to allow specific construction activities to occur. This could temporarily impact emergency access to service vehicles. However, lane closures and detour routes will be designed to minimize impacts on emergency services as well as peak-hour traffic flow on SR 126. During the PS&E stage, the construction contractor will be required to develop a TMP for review and approval from Caltrans District 7.

The objective of the TMP is to mitigate the impact construction activities will have on freeway and roadway users, and it may include the following strategies:

- A public awareness campaign prior to and during construction

- Real-time communication with motorists, including changeable message signs and highway advisory radio announcements to alert motorists of upcoming construction impacts, detours, and travel conditions
- Promotion of ridesharing and public transit
- Identification of park-and-ride and other public transit modes to encourage use of ridesharing and public transit
- Provisions for tow-truck service during peak hours to remove stalled vehicles within the construction zone

The TMP will be closely coordinated with the City, the County, Newhall Land and the public to ensure that traffic along SR 126 and the surrounding streets remains at an acceptable level of operation during construction.

f) No impact: Once completed, the proposed interchange project will not create a demand for parking spaces. During the construction phases, employee parking will be provided within, or adjacent to, the construction staging areas.

g) No impact: The proposed project is funded transportation improvement project, and will not conflict with adopted policies, plans, or programs supporting alternative transportation.

Utility and Service Systems

a), b), c), d), and e) No impact: The proposed project is the reconstruction of an existing at-grade intersection to a grade-separated interchange. Unlike a land development project (e.g., new home or office land uses), the proposed project would not create a demand additional utility and service systems.

f) and g) Less-than-significant impact: Construction of the proposed interchange would result in a reduction of solid waste municipal landfill capacity; however, this capacity reduction is not expected to be substantial because the wastestreams of construction and demolition debris are usually segregated and recycled to take advantage of differential disposal fees. Municipal landfill fees are generally on the higher end of the scale; consequently, construction and demolition wastes are taken to municipal solid waste landfills as a last resort. The deposit of solid waste resulting from construction of the project will comply with federal, state, and local statutes and regulations.

Mandatory Findings of Significance

a) Less-than-significant impact with mitigation: Based upon the studies conducted for the project, including the NRMP, it has been determined that the development of the SR-

126/Commerce Center Drive interchange project would have less than significant impacts to the environment with mitigation. The NRMP analyzed impacts that would result from the proposed development of the Valencia Company (now Newhall Land) and similar projects from present to the year 2018. Construction of the Santa Clara River Bridge (Commerce Center Drive over Santa Clara River) is anticipated to occur between 2006 and 2008. To avoid cumulative impacts to the Santa Clara River, the proposed project is anticipated to be constructed and in operation before the construction of the bridge over the Santa Clara River. Because the SR 126/ Commerce Center Drive interchange project would be consistent with the projects considered under the NRMP, the NRMP measures to minimize harm would be applicable to this project. Implementation of measures to minimize harm are included in Section 3.8.5 and will mitigate direct, indirect and cumulative biological impacts to a level that is less than significant impact to the following:

- Candidate sensitives, or special-status species in local regional plans, riparian habitat, or other sensitive natural community identified in local or regional plans, policies, or regulations
 - Federally protected wetlands
 - The movement of any native resident or migratory fish or wildlife species; conflict with local policies or ordinances protecting biological resources
 - Conflict with the provision of an adopted Habitat Conservation Plan; Natural Community Conservation Plan; or other approved local, regional, or state habitat conservation plan
 - Association with construction activities (e.g. noise, dust, temporary drainage, traffic, etc.
 - Water quality standards or waste discharge requirements
 - Substantially alter the existing drainage pattern of the site or area
 - To impede or redirect flood flows
 - Expose people and structures to seismic shaking of exposure of persons to or generation of noise levels in excess of standards established in the local general plan noise ordinance
 - Expose persons to or generation of excessive groundborne vibration and noise
- b) **Less than significant impact:** Based upon the studies conducted for the project, including the NRMP, it has been determined that the cumulative impacts resulting from the

development of this project combined with other projects in the area would have a less than significant impact (Chapter 4 provides a more complete description of the cumulative impacts for the project area). The NRMP analyzed impacts that would result from the proposed development of the Valencia Company (now Newhall Land) and similar projects from present to the year 2018. Construction scheduling for this project will be coordinated to minimize the overall cumulative impact to the environment. Construction of the Santa Clara River Bridge (Commerce Center Drive over Santa Clara River) is anticipated to occur between 2006 and 2008. To avoid cumulative impacts to the Santa Clara River, the proposed project is anticipated to be constructed and in operation before the construction of the bridge over the Santa Clara River. Due to the construction scheduling with other cumulative projects this project is anticipated to have a less than significant impact on environmental resources. Cumulative impacts resulting from this project being constructed in conjunction with the other nearby projects will be mitigated through the development of a Construction Management Plan by Caltrans, which prevents overlapping of significant projects in the same region. Other Measures to Minimize Harm that have been identified for the project as a result of cumulative impacts are identified in more detail in Chapter 4 of this IS/EA.

- c) **No Impact:** The project will not have adverse impacts on human beings, either directly or indirectly.

5.3 Monitoring Program for CEQA Mitigation

TO BE PROVIDED UPON FINAL REVIEW BY CALTRANS

Chapter 6 Summary of Public Involvement Process

6.1 **Coordination with Organizations**

During the early preparation of this IS/EA, monthly PDT meetings were held to discuss design options, factors to be considered during the environmental study process, and scheduling issues. Staff from Caltrans, FHWA, County of Los Angeles, Newhall Land, and CH2M HILL attended these meetings. More frequent conversations were conducted to ensure that important issues were resolved between meeting dates.

As part of the coordination necessary for the environmental study process, the following federal, state, and local agencies were consulted:

- Archaeological Information Center, Institute of Archaeology University of California, Los Angeles
- U.S. Army Corps of Engineers (USACE)
- California Department of Fish and Game (CDFG)
- Los Angeles County Flood Control Department
- Los Angeles County Planning Department
- Native American Heritage Commission
- South Coast Air Quality Management District (SCAQMD)

Staff from these agencies provided substantive information regarding the presence of environmental resources within the project area, regulations governing those resources, impact assessment methodologies, significance of environmental impacts, and the design of any necessary mitigation measures.

6.2 **Scoping Summary**

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. This chapter summarizes the results of the Newhall efforts to

fully identify, address, and resolve project-related issues through early and continuing coordination.

CEQA and NEPA regulations do not require formal scoping for projects where an IS/EA is prepared. However, to ensure that local concerns are presented for consideration and inclusion in the environmental studies, a scoping notice was submitted to local newspapers as well as other governmental agencies for their early review/comment. A list of agencies/stakeholders that a scoping notice was submitted to is provided in Appendix A and copies of the advertisements/letters can be found in Appendix E. Responses to the scoping notices can be found in Appendix F.

The scoping notice/letters resulted in a response letter from the following individuals/agencies:

- Southern California Association of Governments (Jeffery Smith, AICP)
- Penfield & Smith Engineers (Patrick Reeves, P.E.)
- Castaic Union School District (Jaime Garcia)
- California Regional Water Quality Control Board (Elizabeth Erickson)

Southern California Association of Governments

The comments from SCAG confirmed that the SR126 Commerce Center Drive Project is regionally significant and directly relates to the Regional Comprehensive Plan and Guide (RCPG) and RTP. As such, SCAG has also confirmed that this project is consistent with the 2001 RTP, and is listed in the 2000/2001 – 2005/2006 RTIP (Project ID. No. LAOC 8099). SCAG then provided a list of policies that are applicable to the project. See Appendix F.

Penfield & Smith Engineers

Penfield & Smith Engineers is retained as consulting civil engineers for the Valencia Water Company, and it submitted a letter advising of the location of proposed water system facilities. Penfield & Smith is concerned that this project assures that an allowance is made for the construction of three water pipelines for the Valencia Water Company. The letter (located in Appendix F) provides a map showing the approximate location of these water lines.

Castaic Union School District

The Castaic Union School District has provided a fax showing its interest in receiving information on the project as well as a request for the project schedule when developed.

California Regional Water Quality Control Board

The California RWQCB has provided a list of permitting requirements to be referred to in preparation of the documentation for this project. The RWQCB has concerns pertaining to water quality and the potential change in pollutant loading into the watershed as a result of this project. It is anticipated that the RWQCB will formally submit comments, and that these comments will be responded to accordingly.

Native American Heritage Commission

The Native American Heritage Commission has been contacted and indicated that there is no presence of Native American cultural resources in the immediate area of the project. However, it requests that additional Native American individuals/organizations be contacted to assist in identifying any cultural resources within the project area.

6.3 Public Hearings

As part of ongoing consultation for this environmental process, a “Notice of Public Hearing” will be advertised in newspapers serving the proposed project area. A public hearing will be held for this project. Any comments received regarding the proposed project, its impact on the environment, or concerns or issues about the project are incorporated into the IS/EA before final certification of the document.

The Notice of Public Hearing will also include a list of public locations where copies of this IS/EA and referenced technical reports can be viewed. These locations will include Caltrans District 7 offices (contact Gregory Damico), Los Angeles County Department of Public Works (contact Hubert Seto), and local public libraries.

Chapter 7 List of Preparers

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