



Serra Mesa Community Plan Amendment Roadway Connection Project: Recirculated Draft Environmental Impact Report

SCH # 2012011048

Project # 265605

Prepared by:
City of San Diego
Planning Department
1010 Second Avenue
San Diego, California 92101

March 2017





PLANNING DEPARTMENT

Date of Notice: MARCH 29, 2017

**PUBLIC NOTICE OF AVAILABILITY FOR RECIRCULATION
OF AN ENVIRONMENTAL IMPACT REPORT**

Internal Order Number: 11002155

The City of San Diego Planning Department has determined that the Draft Environmental Impact Report (EIR) for the above project should be revised and recirculated in accordance with Section 15088.5(a) of the State CEQA Guidelines which requires that an EIR be recirculated for an additional public review when significant new information is added to the EIR after public notice is given of the availability of the Draft EIR for public review, but before certification. This determination was made in response to comments received during public review of the Draft EIR. Public review concluded on June 20, 2016. This Recirculated Draft EIR is consistent with the requirements of Section 15088.5(a) of the CEQA Guidelines.

As a result, the Draft EIR has been revised to analyze impacts at a project level to ensure that all potential significant environmental effects associated with the project are disclosed, and further evaluation of the subsequent actions necessary to implement and construct the roadway connection is included.

The Recirculated Draft EIR has been placed on the City of San Diego Planning Department website under the heading "Draft CEQA Documents" and can be accessed using the following link:

<http://www.sandiego.gov/planning/programs/ceqa/index.shtml>

The Recirculated Draft EIR public notice has also been placed on the City Clerk website at:

<http://www.sandiego.gov/city-clerk/officialdocs/notices/index.shtml>

In accordance with CEQA Section 15088.5(f)(1), the City is inviting the public to review the Recirculated Draft EIR. **New comments must be received *in writing* by MAY 15, 2017 to be included in the final document considered by the decision-making authorities.** Comments submitted during the previous review period will remain part of the record but will not receive responses: the Final EIR will only include responses to comments received during this review period.

Please send your written comments to the following address: **Susan Morrison, Environmental Planner, City of San Diego Planning Department, 1010 2nd Avenue, Suite 1200, East Tower, MS 413, San Diego, CA 92101 or email your comments to PlanningCEQA@sandiego.gov with the Project Name (SERRA MESA COMMUNITY PLAN AMENDMENT ROADWAY CONNECTION PROJECT) and Project Number (265605) in the subject line.**

General Project Information:

- Project: **SERRA MESA COMMUNITY PLAN AMENDMENT ROADWAY CONNECTION PROJECT**
- Project No. **265605**, SCH No. **2012011048**
- Community Plan Area: **SERRA MESA AND MISSION VALLEY**
- Council District: **7 (SHERMAN)**

PROJECT LOCATION:

The project site is located in the Mission Valley and Serra Mesa communities of the City of San Diego. The project site is immediately south of Phyllis Place, east of Abbotshill Road, and approximately 0.25 mile west of Interstate 805 (I-805). The project site is located within the boundary of the Quarry Falls site, and includes undeveloped, primarily disturbed hillside. The project site is also within a San Diego Gas & Electric (SDG&E) easement, which contains an active energy transmission line (four transmission towers) running east-west at the northern portion of the project site, adjacent to Phyllis Place. A 20-inch gas transmission pipeline is located underground within the vicinity of the transmission line.

PROJECT DESCRIPTION:

The proposed project is an amendment to the Serra Mesa Community Plan. The proposed community plan amendment would revise text and figures in the Serra Mesa Community Plan to show a roadway connection from Phyllis Place (in Serra Mesa) southward to the boundary between the Serra Mesa and Mission Valley Community Plan areas. Because construction of the roadway connection was determined to be foreseeable, a project-level analysis was conducted and is included as part of the proposed project.

Implementation of the proposed project would include the construction and operation of a four-lane major street with landscaped median, complete with bicycle lanes and pedestrian pathways, extending from Phyllis Place in Serra Mesa southward to Via Alta and Franklin Ridge Road in Mission Valley.

The proposed roadway connection would extend approximately 460 feet south from Phyllis Place to the intersection of Via Alta/Franklin Ridge Road. The project site evaluated throughout the Recirculated Draft EIR encompasses approximately 2 acres, which includes the area required for grading and drainage improvements for the roadway and associated utilities work. The proposed roadway itself would cover approximately 1.25 acre. The proposed project would require two signalized intersections following construction. One signalized intersection would be required at the intersection with Phyllis Place, and the other would be located where the proposed roadway would intersect with Franklin Ridge Road/Via Alta.

The Serra Mesa and Mission Valley community plans can be found on the Planning Department's website at:

<https://www.sandiego.gov/planning/community/profiles/serramesa>

<https://www.sandiego.gov/planning/community/profiles/missionvalley>

Applicant: City of San Diego Planning Department

Recommended Finding: The Recirculated Draft EIR concludes that the project would result in significant and unavoidable impacts in the area of **Transportation/Circulation (Roadway Capacity, Planned Transportation Systems, Traffic Hazards)**, and less than significant impacts with implementation of mitigation measures with regard to **Noise (Construction Noise Levels)**, **Biological Resources (Sensitive Species and Sensitive Habitat)**, **Historical Resources (Historical Resource, Sacred/Religious Use, Tribal Cultural Resource, Human Remains)**, and **Visual Effects/Neighborhood Character (Landform Alteration)**. All other impacts analyzed in this Recirculated Draft EIR were found to be less than or not significant.

Availability in Alternative Format: To request this Notice, the Recirculated Draft EIR Sections, and/or supporting documents in alternative format, call the Planning Department at 619-235-5200 or (800) 735-2929 (TEXT TELEPHONE).

Additional Information: For information regarding public hearings on this project, contact Project Manager, Seth Litchney, at (619) 236-6892. For environmental review information, contact Susan Morrison, Environmental Planner, at (619) 533-6492. The Recirculated Draft EIR and supporting documents may be reviewed or purchased for the cost of reproduction in the Planning Department.

This notice was published in the SAN DIEGO DAILY TRANSCRIPT and distributed on **March 29, 2017**.

Alyssa Muto
Deputy Director
Planning Department

RECIRCULATED DRAFT **ENVIRONMENTAL IMPACT REPORT**

Project No. 265605
SCH No. 2012011048

SUBJECT: SERRA MESA COMMUNITY PLAN AMENDMENT ROADWAY CONNECTION PROJECT: CITY COUNCIL APPROVAL AND ADOPTION of an amendment to the Serra Mesa Community Plan to include a street connection extending from Phyllis Place in Serra Mesa southward to Via Alta and Franklin Ridge Road in Mission Valley. The proposed amendment would revise text and figures in the Serra Mesa Community Plan to show the street connection as a four-lane major street with landscaped median, including bicycle and pedestrian facilities.

UPDATE – MARCH 29, 2017

The City of San Diego Planning Department has determined that the Draft Environmental Impact Report (EIR) for the above project should be revised and recirculated in accordance with Section 15088.5(a) of the State CEQA Guidelines which requires that an EIR be recirculated for an additional public review when significant new information is added to the EIR after public notice is given of the availability of the Draft EIR for public review, but before certification. This determination was made in response to comments received during public review of the Draft EIR. Public review concluded on June 20, 2016. This Recirculated Draft EIR is consistent with the requirements of Section 15088.5(a) of the CEQA Guidelines.

As a result, the Draft EIR has been revised to analyze impacts at both a program and project level to ensure that all potential significant environmental effects associated with the project are disclosed, and further evaluation of the subsequent actions necessary to implement and construct the roadway connection is included.

This Recirculated Draft EIR is consistent with the requirements of Section 15088.5(a) of the CEQA Guidelines.

Serra Mesa Community Plan Amendment

PROJECT LOCATION: The project site is located in the Mission Valley and Serra Mesa communities of the City of San Diego. The project site is immediately south of Phyllis Place, east of Abbotshill Road, and approximately 0.25 mile west of Interstate 805 (I-805). The project site is located within the boundary of the Quarry Falls site, and includes undeveloped, primarily disturbed hillside. The project site is also within a San Diego Gas & Electric (SDG&E) easement, which contains an active energy transmission line (four transmission towers) running east-west at the northern portion of the project site, adjacent to Phyllis Place.

A 20-inch gas transmission main is located underground within the vicinity of the transmission line.

PROJECT DESCRIPTION: The proposed project is an amendment to the Serra Mesa Community Plan. The proposed community plan amendment would revise text and figures in the Serra Mesa Community Plan to show a street connection from Phyllis Place (in Serra Mesa) southward to the boundary between the Serra Mesa and Mission Valley Community Plan areas. Because construction of the roadway connection was determined to be foreseeable, a project-level analysis was conducted and is included as part of the proposed project.

Implementation of the proposed roadway amendment would include the construction and operation of a four-lane major street with landscaped median, complete with bicycle lanes and pedestrian pathways, extending from Phyllis Place in Serra Mesa southward to Via Alta and Franklin Ridge Road in Mission Valley.

The proposed roadway connection would extend approximately 460 feet south from Phyllis Place to the intersection of Via Alta/Franklin Ridge Road. The project site evaluated throughout the Recirculated Draft EIR encompasses approximately 2 acres, which includes the area required for grading and drainage improvements for the roadway and associated utilities work. The proposed roadway itself would cover approximately 1.25 acre. The proposed project would require two signalized intersections following construction. One signalized intersection would be required at the intersection with Phyllis Place, and the other would be located where the proposed roadway would intersect with Franklin Ridge Road/Via Alta.

The Serra Mesa and Mission Valley community plans can be found on the Planning Department's website at:

<https://www.sandiego.gov/planning/community/profiles/serramesa>

<https://www.sandiego.gov/planning/community/profiles/missionvalley>

Applicant: City of San Diego Planning Department

ENVIRONMENTAL DETERMINATION:

Based on the analysis conducted for the project described above, the City of San Diego has prepared the following Recirculated Draft EIR in accordance with the California Environmental Quality Act (CEQA). The analysis conducted identified that the project could result in significant and unavoidable impacts in the area of **Transportation/Circulation (Roadway Capacity, Planned Transportation Systems, Traffic Hazards)**, and less than significant impacts with implementation of mitigation measures with regard to **Noise (Construction Noise Levels)**, **Biological Resources (Sensitive Species and Sensitive Habitat)**, **Historical Resources (Historical Resource, Sacred/Religious Use, Tribal Cultural Resource, Human Remains)**, and **Visual Effects/Neighborhood Character (Landform Alteration)**. All other impacts analyzed in this Recirculated Draft EIR were found to be less than or not significant.

The purpose of this document is to inform decision-makers, agencies, and the public of the significant environmental effects that could result if the project is approved and implemented, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project.

PUBLIC REVIEW DISTRIBUTION:

The following agencies, organizations, and individuals received a copy or notice of the Recirculated Draft EIR and were invited to comment on its accuracy and sufficiency. Copies of the Recirculated Draft EIR and any technical appendices may be reviewed in the offices of the Planning Department, or purchased for the cost of reproduction.

FEDERAL GOVERNMENT

Federal Aviation Administration (1)
Environmental Protection Agency (19)
U. S. Fish and Wildlife Service (23)
Army Corps of Engineers (26)
MCAS Miramar Air Station (263C)

STATE OF CALIFORNIA

Caltrans District 11 (31)
Department of Fish and Wildlife (32)
Cal Recycle (35)
California Environmental Protection Agency (37A)
Department of Toxic Substance Control (39)
Natural Resources Agency (43)
Regional Water Quality Control Board, Region 9 (44)
State Clearinghouse (46A)
California Air Resources Board (49)
California Transportation Commission (51)
California Department of Transportation (51A)
Native American Heritage Commission (56)

COUNTY OF SAN DIEGO

Air Pollution Control Board (65)
Planning and Development Services (68)
Department of Environmental Health (76)

CITY OF SAN DIEGO

Office of the Mayor (91)
Council President Cole, District 4
Councilmember Bry, District 1
Councilmember Zapf, District 2
Councilmember Ward, District 3
Council President Pro Tem Kersey, District 5
Councilmember Cate, District 6
Councilmember Sherman, District 7
Councilmember Alvarez, District 8
Councilmember Gómez, District 9

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Lisa Wood, Senior Planner

Public Utilities Department

Keli Balo

Public Works Department

James Nagelvoort, Director

Park and Recreation Department

Herman Parker, Director
Andrew Field, Assistant Director

Fire-Rescue Department

Brian Fennessy, Fire Chief
Larry Trame, Assistant Fire Marshal

Police Department

Charles Kaye, Acting Assistant Chief, Special Operations
Richard Freedman, Captain, Eastern Division
Andra Brown, Lieutenant, Eastern Division
Kenneth Impellizeri, Acting Lieutenant, Operational Support

Transportation & Storm Water Department

Kris McFadden, Director
Andrew Kleis, Deputy Director
Ruth Kolb
Linda Marabian, Deputy Director
Mark Stephens

Real Estate Assets Department
Cybele Thompson, Director

Economic Development Department
Cody Hooven, Program Manager

City Advisory Boards or Committees
Park and Recreation Board (83)
Community Forest Advisory Board (90)
Historical Resources Board (87)
Wetland Advisory Board (91A)

Libraries
Central Library, Government Documents (81 & 81A)
Mission Valley Branch Library (81R)
Serra Mesa Branch Library (81GG)

Other City Governments
San Diego Association of Governments (108)
Metropolitan Transit System (112/115)
San Diego Gas & Electric (114)

School Districts
San Diego Unified School District (125)

Community Planning Groups or Committees
Serra Mesa Planning Group (263A)
Mission Valley Planning Group (331)

Community Councils
Serra Mesa Community Council (264)
Mission Valley Community Council (328C)

Other Agencies, Organizations and Individuals
San Diego Chamber of Commerce (157)
Building Industry Association (158)
Sierra Club (165)
San Diego Canyonlands (165A)
San Diego Natural History Museum (166)
San Diego Audubon Society (167)
Jim Peugh (167A)
Environmental Health Coalition (169)
California Native Plant Society (170)
San Diego Coastkeeper (173)
Citizens Coordinate for Century 3 (179)
Endangered Habitats League (182 & 182A)
League of Women Voters (192)
Carmen Lucas (206)
South Coastal Information Center (210)
San Diego History Center (211)
San Diego Archaeological Center (212)
San Diego Highway Development Association

Save Our Heritage Organisation (214)
Ron Christman (215)
Clint Linton (215B)
Frank Brown - Inter-Tribal Cultural Resource Council (216)
Campo Band of Mission Indians (217)
San Diego County Archaeological Society Inc. (218)
Kuumeayaay Cultural Heritage Preservation (223)
Kuumeayaay Cultural Repatriation Committee (225)
Native American Distribution
 Barona Group of Capitan Grande Band of Mission Indians (225A)
 Campo Band of Mission Indians (225B)
 Ewiiapaayp Band of Mission Indians (225C)
 Inaja Band of Mission Indians (225D)
 Jamul Indian Village (225E)
 La Posta Band of Mission Indians (225F)
 Manzanita Band of Mission Indians (225G)
 Sycuan Band of Mission Indians (225H)
 Viejas Group of Capitan Grande Band of Mission Indians (225I)
 Mesa Grande Band of Mission Indians (225J)
 San Pasqual Band of Mission Indians (225K)
 Ipai Nation of Santa Ysabel (225L)
 La Jolla Band of Mission Indians (225M)
 Pala Band of Mission Indians (225N)
 Pauma Band of Mission Indians (225O)
 Pechanga Band of Mission Indians (225P)
 Rincon Band of Luiseno Indians (225Q)
 San Luis Rey Band of Luiseno Indians (225R)
 Los Coyotes Band of Mission Indians (225S)
Mission Valley Center Association (328)
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Sudberry Development, Inc.
Hye Park Homeowners Association
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Marla Bell
Mark Bielsky
Deborah Bossmeyer
Ryan Braidwood
Jim Brown
Sue Buell
Ed and Joan Buselt
Cindy and Pat Canfield

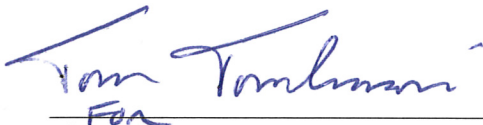
Carrie Hobson
Mary Cash
Kathy and Greg Collier
Julie Corrales
Vikki Coughlin
Bob Crider
Laurel Daly
Gloria and Robert Damm
Luong Dao
Denise Davidson
Pat Day-Phillips and John W Phillips
Patricia Day-Phillips
Vincent and Angeliquea Di Nino
Richard Dresselhaus
Mark Elliott
Ada Jean Fabish
James Feinberg
Pam Fleming
FIROOZ
Evan Franz
Joanne M. Friedman
Adam Gardner
Joleen Garnett
Matt Gates
Michael Gehring
Dong Han
Alexis Luck
Dave Harris
Virginia Hensley
Christopher Hewitt
Randall Stacey Hicks
Kyle Hinsz
Lorraine Hitchen
Brad Hobson
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Michael Hubbard
Brooke Spiering
Sonia Hyncik
Ellen Ichinaga
Perry Jacobson
Kristine Kosak
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Henry Johnson
April Johnson
Carole Jordan
Patrick Justman
Diane Kemp
Jennifer Kolde
Cicely Kraus
John W Lahr
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Ryan Benjamin
Sally Smith
Suzanne Sanderman
Paul Santos
Kimberly Alessi
Brad Savall
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Susan Shean
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Tim Shockley
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Peter StClair
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Rajeev & Padmini Tillu
Andrea Tobias
Alexander Tse
Robert and Ruth Valentine
Irma Villavicencio
Joyce Volen
John Walker

Minjuan Wang
James Warniak
Andrea Winter and Matt Gates
George Wolfe
Allen Wu & Grace Yang
Ron Yardley
Matt Kovic & Nancy Lamy
Cuong Nguyen
Jackie Wassilup
Harlan Lowe
Tom & Leslie Leech
Timothy Freiheit
Karen L. Ruggels
Bryan Holt
Steven Sandeman
Carol Ann Ferrell
Robert Garner
Ed Chapman
Mary Watry
Jamie Moody
Marie Wiltord
Carol Wolovnik
James Beard
Pat Ibbs
Gil and Mary Lou Degenhardt
Lionel Greve
Ronald B. Guy
Anne M. Khong MD
Carolyn B. Morris
H. Eugene Myers
Ruby Plouffe

RESULTS OF PUBLIC REVIEW:

- () No comments were received during the public input period.
- () Comments were received but did not address the accuracy or completeness of the draft environmental document. No response is necessary and the letters are incorporated herein.
- () Comments addressing the accuracy or completeness of the draft environmental document were received during the public input period. The letters and responses are incorporated herein.



Alyssa Muto, Deputy Director
Planning Department

March 29, 2017
Date of Recirculated Draft Report

Date of Final Report

Analyst: Susan Morrison, AICP

Contents

List of Tables	vii
List of Figures.....	x
List of Acronyms and Abbreviations.....	xii
Executive Summary.....	S-1
Project Description	S-1
Overview	S-1
Project Location and Setting	S-2
Project Objectives	S-2
Areas of Known Controversy/Issues Raised by Agencies and the Public.....	S-2
Summary of Environmental Impacts	S-3
Summary of Project Alternatives	S-3
Alternative 1 – No Project Alternative.....	S-4
Alternative 2 – Bicycle, Pedestrian, and Emergency Access Only Alternative.....	S-4
Environmentally Superior Alternative	S-5
Chapter 1 Introduction.....	1-1
1.1 Purpose of CEQA and the EIR.....	1-1
1.2 Intended Uses of this EIR	1-1
1.3 Scope and Content of this EIR.....	1-2
1.3.1 Notice of Preparation and Scoping Period.....	1-2
1.3.2 Environmental Analysis Content.....	1-2
1.4 Availability of this EIR.....	1-3
1.5 Incorporation by Reference in this EIR	1-4
1.6 Organization of this EIR.....	1-4
Chapter 2 Environmental Setting.....	2-1
2.1 Regional Setting	2-2
2.1.1 Project Location	2-2
2.1.2 Surrounding Uses.....	2-2
2.2 Existing Physical Site Conditions	2-3
2.3 Existing Transportation Network.....	2-3
2.3.1 Existing Roadway Network	2-3
2.3.2 Existing Transit Network	2-4
2.3.3 Existing Pedestrian and Bicycle Circulation Network	2-5
2.4 Existing Emergency Services	2-5
2.4.1 Fire Protection and Emergency Medical Services.....	2-6

2.4.2	Police Protection.....	2-6
Chapter 3 Project Description		3-1
3.1	Project Objectives	3-1
3.2	Project Background.....	3-1
3.2.1	Project Initiation	3-1
3.2.2	Relationship to Quarry Falls Project	3-3
3.3	Project Components	3-4
3.3.1	Proposed Roadway	3-5
3.3.2	Community Plan Amendment	3-8
Chapter 4 History of Project Changes		4-1
Chapter 5 Environmental Analysis		5-1
	Potential Environmental Impacts	5-1
	Format of the Environmental Analysis	5-1
	Existing Conditions.....	5-1
	Regulatory Framework	5-2
	Impact Analysis	5-2
5.1	Land Use.....	5.1-1
5.1.1	Existing Conditions.....	5.1-1
5.1.2	Regulatory Framework	5.1-3
5.1.3	Significance Determination Thresholds	5.1-10
5.1.4	Impact Analysis	5.1-11
5.1.5	Impact Analysis	5.1-13
5.1.6	Impact Analysis	5.1-26
5.1.7	Impact Analysis	5.1-27
5.1.8	Impact Analysis	5.1-27
5.2	Transportation and Circulation.....	5.2-1
5.2.1	Existing Conditions.....	5.2-1
5.2.2	Regulatory Framework	5.2-14
5.2.3	Significance Determination Thresholds	5.2-17
5.2.4	Impact Analysis	5.2-19
5.2.5	Impact Analysis	5.2-30
5.2.6	Impact Analysis	5.2-46
5.2.7	Impact Analysis	5.2-47
5.2.8	Impact Analysis	5.2-49
5.3	Air Quality	5.3-1
5.3.1	Existing Conditions.....	5.3-1
5.3.2	Regulatory Framework	5.3-7

5.3.3	Significance Determination Thresholds	5.3-12
5.3.4	Impact Analysis	5.3-14
5.3.5	Impact Analysis	5.3-15
5.3.6	Impact Analysis	5.3-17
5.3.7	Impact Analysis	5.3-21
5.3.8	Impact Analysis	5.3-22
5.3.9	Impact Analysis	5.3-23
5.4	Noise	5.4-1
5.4.1	Existing Conditions.....	5.4-1
5.4.2	Regulatory Framework	5.4-8
5.4.3	Significance Determination Thresholds	5.4-12
5.4.4	Impact Analysis	5.4-13
5.4.5	Impact Analysis	5.4-16
5.4.6	Impact Analysis	5.4-18
5.4.7	Impact Analysis	5.4-19
5.4.8	Impact Analysis	5.4-21
5.5	Biological Resources	5.5-1
5.5.1	Existing Conditions.....	5.5-1
5.5.2	Regulatory Framework	5.5-5
5.5.3	Significance Determination Thresholds	5.5-9
5.5.4	Impact Analysis	5.5-11
5.5.5	Impact Analysis	5.5-15
5.5.6	Impact Analysis	5.5-17
5.5.7	Impact Analysis	5.5-17
5.5.8	Impact Analysis	5.5-18
5.5.9	Impact Analysis	5.5-19
5.6	Paleontological Resources	5.6-1
5.6.1	Regulatory Framework	5.6-1
5.6.2	Environmental Setting	5.6-1
5.6.3	Significance Determination Thresholds	5.6-2
5.6.4	Impact Analysis	5.6-2
5.7	Historical and Tribal Cultural Resources	5.7-1
5.7.1	Existing Conditions.....	5.7-1
5.7.2	Regulatory Framework	5.7-4
5.7.3	Significance Determination Thresholds	5.7-8
5.7.4	Impact Analysis	5.7-9
5.7.5	Impact Analysis	5.7-16

5.8	Hydrology and Water Quality	5.8-1
5.8.1	Existing Conditions.....	5.8-1
5.8.2	Regulatory Framework	5.8-3
5.8.3	Significance Determination Thresholds	5.8-11
5.8.4	Impact Analysis	5.8-11
5.8.5	Impact Analysis	5.8-12
5.8.6	Impact Analysis	5.8-13
5.9	Visual Effects and Neighborhood Character	5.9-1
5.9.1	Existing Conditions.....	5.9-1
5.9.2	Regulatory Framework	5.9-3
5.9.3	Significance Determination Thresholds	5.9-7
5.9.4	Impact Analysis	5.9-7
5.9.5	Impact Analysis	5.9-8
5.9.6	Impact Analysis	5.9-9
5.9.7	Impact Analysis	5.9-10
5.10	Greenhouse Gases	5.10-1
5.10.1	Existing Conditions.....	5.10-1
5.10.2	Regulatory Framework	5.10-3
5.10.3	Significance Determination Thresholds	5.10-8
5.10.4	Impact Analysis	5.10-10
5.10.5	Impact Analysis	5.10-12
Chapter 6 Cumulative Impacts.....		6-1
6.1	Methodology.....	6-1
6.2	List of Cumulative Projects	6-2
6.3	Cumulative Impact Analysis.....	6-3
6.3.1	Land Use.....	6-3
6.3.2	Transportation and Circulation.....	6-6
6.3.3	Air Quality	6-14
6.3.4	Noise	6-16
6.3.5	Biological Resources	6-18
6.3.6	Historical and Tribal Cultural Resources	6-20
6.3.7	Hydrology and Water Quality	6-21
6.3.8	Visual Effects and Neighborhood Character	6-23
6.3.9	Greenhouse Gas Emissions.....	6-24
Chapter 7 Effects Not Found To Be Significant.....		7-1
7.1	Agricultural and Forestry Resources.....	7-1
7.2	Energy Use	7-2

7.3	Geologic Conditions	7-5
7.4	Health and Safety.....	7-7
7.5	Mineral Resources	7-9
7.6	Population and Housing.....	7-9
7.7	Public Services and Facilities.....	7-10
7.7.1	Fire–Rescue Services.....	7-10
7.7.2	Police Services.....	7-11
7.7.3	Schools	7-11
7.7.4	Libraries.....	7-12
7.7.5	Parks.....	7-12
7.8	Public Utilities	7-12
7.8.1	Water	7-12
7.8.2	Wastewater/Sewer	7-13
7.8.3	Solid Waste	7-13
7.8.4	Natural Gas	7-13
7.8.5	Communication Systems	7-13
7.9	Recreation.....	7-13
Chapter 8 Mandatory Discussion Areas.....		8-1
8.1	Significant Effects that Cannot Be Avoided	8-1
8.1.1	Transportation/Circulation	8-1
8.2	Significant Irreversible Environmental Changes	8-2
8.3	Growth-Inducing Impacts	8-4
8.3.1	Population Growth.....	8-4
8.3.2	Substantially Alter Planned Growth.....	8-5
8.3.3	Extension of Infrastructure	8-5
Chapter 9 Alternatives		9-1
9.1	Overview	9-1
9.2	Requirements for Alternative Analysis	9-1
9.3	Selection of Alternatives.....	9-1
9.4	Alternatives Considered.....	9-3
9.4.1	Alternatives Considered but Rejected	9-3
9.4.2	Alternatives Selected for Analysis.....	9-4
9.5	Analysis of Alternatives.....	9-5
9.5.1	Analysis of Alternative 1 – No-Project Alternative	9-6
9.5.2	Analysis of Alternative 2 – Bicycle, Pedestrian, and Emergency Access Only Alternative	9-12
9.5.3	Environmentally Superior Alternative	9-15

Chapter 10 Preparers of this Report.....	10-1
Chapter 11 References	11-1
Appendix A	Notice of Preparation and Scoping Comments
Appendix B	Proposed Serra Mesa Community Plan Amendment
Appendix C	Traffic Impact Study
Appendix D	Air Quality
Appendix E	Noise Assessment
Appendix F	Biological Resources
Appendix G	Geologic Reconnaissance
Appendix H	Vehicle Miles Traveled Output and Summary

Tables

Table	Page
ES-1 Summary of Significant Project Impacts and Mitigation Measures.....	S-6
1-1 List of Required Discretionary Actions.....	1-2
1-2 Document Organization and CEQA Requirements	1-5
5.1-1 Proposed Project’s Consistency with the City of San Diego 2008 General Plan.....	5.1-14
5.1-2 Proposed Project’s Consistency with the Serra Mesa Community Plan.....	5.1-23
5.2-1 Level of Service Definitions.....	5.2-7
5.2-2 Roadway Classifications and LOS Standards.....	5.2-7
5.2-3 Roadway Segments: Existing Conditions	5.2-8
5.2-4 Signalized Intersection LOS Criteria	5.2-9
5.2-5 Intersections: Existing Peak-Hour Conditions.....	5.2-10
5.2-6 Ramp Meter: Existing Conditions	5.2-11
5.2-7 Freeway Segment LOS Criteria.....	5.2-12
5.2-8 Freeway Mainline Segments: Existing Conditions	5.2-13
5.2-9 City of San Diego Traffic Impact Significance Thresholds	5.2-19
5.2-10 Roadway Segments: Near-Term Baseline Condition vs Near-Term Project Condition	5.2-20
5.2-11 Intersections: Near-Term Baseline Condition vs Near-Term Project Condition.....	5.2-22
5.2-12 Ramp Metering: Near-Term Baseline Condition vs Near-Term Project Condition.....	5.2-24
5.2-13 Freeway Mainline Segments: Near-Term Baseline Condition vs Near-Term Project Condition.....	5.2-25
5.2-14 Roadway Segments: Near-Term Baseline Plus Project Condition (Unmitigated vs. Mitigated)	5.2-29
5.2-15 Intersections: Near-Term Baseline Plus Project Condition (Unmitigated vs. Mitigated)	5.2-29
5.2-16 Roadway Segments: Long-Term Baseline Cumulative Condition vs. Long-Term Cumulative Condition with Project.....	5.2-31
5.2-17 Intersections: Long-Term Baseline Cumulative Condition vs. Long-Term Cumulative Condition with Project	5.2-33

5.2-18	Ramp Metering: Long-Term Baseline Cumulative Condition vs. Long-Term Cumulative Condition with Project	5.2-36
5.2-19	Freeway Mainline Segments: Long-Term Baseline Cumulative Condition vs. Long-Term Cumulative Condition with Project	5.2-37
5.2-20	Roadway Segments: Long-Term Cumulative Baseline Condition Plus Project (Unmitigated Vs. Mitigated)	5.2-43
5.2-21	Intersections: Long-Term Cumulative Baseline Condition Plus Project (Unmitigated Vs. Mitigated).....	5.2-44
5.2-22	Ramp Metering: Long-Term Cumulative Baseline Condition Plus Project (Unmitigated Vs. Mitigated)	5.2-45
5.2-23	Community Access Travel Times.....	5.2-48
5.3-1	Ambient Air Quality Data	5.3-5
5.3-2	San Diego Air Basin Attainment Classification.....	5.3-6
5.3-3	Ambient Air Quality Standards	5.3-8
5.3-4	San Diego Air Pollution Control District Air Quality Significance Thresholds	5.3-13
5.3-5	Estimated Construction Emissions (pounds per day)	5.3-16
5.3-6	Estimated Operational Emissions (pounds per day).....	5.3-17
5.3-7	CALINE4 Predicted Carbon Monoxide Concentrations.....	5.3-21
5.4-1	Typical Noise Levels in the Environment	5.4-3
5.4-2	Measured Noise Levels and Community Noise Equivalent Level	5.4-8
5.4-3	Caltrans Vibration Damage Potential Threshold Criteria.....	5.4-9
5.4-4	City of San Diego Sound Level Limits	5.4-10
5.4-5	Traffic Noise Significance Thresholds	5.4-12
5.4-6	Estimated Construction Noise Impact Distances by Phase.....	5.4-14
5.4-7	Traffic Noise Model Results (dBA CNEL)	5.4-17
5.4-8	Traffic Noise Model Results (dBA CNEL)	5.4-19
5.4-9	Estimated Distances from Construction Activities to Vibration Effects	5.4-20
5.5-1	Direct Impacts on Vegetation Communities and Land Cover Types	5.5-15
5.9-1	Relevant General Plan Policies.....	5.9-3
5.10-1	California Greenhouse Gas Inventory (2014)	5.10-2

5.10-2	Relevant General Plan Policies.....	5.10-6
5.10-3	Estimated Construction Emissions (metric tons)	5.10-10
5.10-4	Estimated Annual Vehicle Miles Traveled and Operational Emissions (metric tons).....	5.10-12
6-1	Cumulative Projects List.....	6-2
6-2	City of San Diego Measure of Significant Project Traffic Impacts.....	6-6
6-2	Summary of Near-Term (Year 2017) Impacts on Roadways, Intersections, and Metered Freeway On-Ramps.....	6-8
6-3	Summary of Long-Term (Year 2035) Impacts on Roadways, Intersections and Metered Freeway On-Ramps.....	6-9
6-4	Summary of Near-Term (Year 2017) Mitigation Measures	6-10
6-5	Summary of Long-Term (Year 2035) Mitigation Measures	6-11
7-1	Estimated Annual Operational Energy Consumption	7-3
9-1	Summary of Significant Effects of the Proposed Project	9-2
9-2	Summary Impacts of Alternatives Relative to the Proposed Project	9-6

Figures

Figure	Follows Page
2-1 Regional Map	2-2
2-2 Vicinity Map	2-2
2-3 Land Uses Surrounding the Project Site	2-2
2-4 Existing Roadway Network	2-4
2-5 Existing Transit Facilities within Project Vicinity	2-4
2-6 Fire and Police Stations within Project Vicinity	2-6
3-1 Project Site	3-2
3-2 Quarry Falls Specific Plan Land Use Plan	3-2
3-3 Road Connection to Phyllis Place, Alternative 4 (as depicted in Quarry Falls PEIR)	3-2
3-4 Quarry Falls Phasing Plan	3-4
3-5a Phyllis Place Park with Proposed Roadway	3-4
3-5b Phyllis Place Park without Proposed Roadway	3-4
3-6 Quarry Falls Conceptual Park Plan	3-4
3-7 Standard Four-Lane Major Roadway Cross-Section	3-6
3-8 Standard Four-Lane Major Roadway Intersection	3-6
5.1-1 General Plan Land Use Designation	5.1-2
5.1-2 Zoning	5.1-2
5.1-3 Montgomery Field Airport Influence Area	5.1-10
5.2-1 Traffic Impact Study Area	5.2-2
5.2-2 Existing Circulation Network	5.2-2
5.2-3 Existing Intersection Configurations	5.2-4
5.2-4 Long-Term Scenario (2035) Intersection Configurations	5.2-34
5.4-1 Noise Measurement and Modeling Locations	5.4-8
5.4-2 Montgomery Field Noise Compatibility	5.4-22
5.5-1 Biological Resources	5.5-16

5.8-1	Hydrologic Subarea	5.8-2
5.8-2	Drainage Overview.....	5.8-2
6-1	Cumulative Projects Location	6-2
7-1	Geologic Hazards and Faults	7-6
7-2	Montgomery Field Safety Compatibility Map.....	7-8
7-3	Very High Fire Hazard Severity Zone.....	7-8

Acronyms and Abbreviations

°F	degrees Fahrenheit
µg/m ³	micrograms per cubic meter
µPa	microPascals
AB	Assembly Bill
ADD	Assistant Deputy Director
ADT	average daily traffic
AIA	Airport Influence Area
ALUC	Airport Land Use Commission
ALUCP	Airport Land Use Compatibility Plan
AME	Archaeological Monitoring Exhibit
AMSL	above mean sea level
APE	Area of Potential Effects
ARB	California Air Resources Board
ATCM	Airborne Toxic Control Measure
Basin Plan	Water Quality Control Plan for the San Diego Basin
BAU	business-as-usual
BCME	Biological Construction Mitigation/Monitoring Exhibit
BI	Building Inspector
BMP	best management practice
BTUs	British thermal units
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CALINE4	California LINE Source Dispersion Model
Caltrans	California Department of Transportation
Caltrans CO Protocol	California Department of Transportation Institute of Transportation Studies <i>Transportation Project-Level Carbon Monoxide Protocol</i>
CAP	Climate Action Plan
CARB	California Air Resources Board
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFGF	California Fish and Game Code
CFR	Code of Federal Regulations
CH ₄	methane
City	City of San Diego
CM	Construction Manager
CMP	Congestion Management Program
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society

CO	carbon monoxide
CO ₂	carbon dioxide
CO ₂ e	carbon dioxide equivalent
Construction General Permit	General Permit for Stormwater Discharges Associated with Construction Activity
CPA	Community Plan Amendment
CRHR	California Register of Historical Resources
CRPR	California Rare Plant Rank
CSVR	Consultant Site Visit Record
CTC	California Transportation Commission
CWA	Clean Water Act
dB	decibels
dBA	A-weighted decibels
DEIR	Draft Environmental Impact Report
DPR	Department of Parks and Recreation
EAS	Environmental Analysis Section
EB	eastbound
EMFAC	emission factors
EO	executive order
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
ESL	Environmentally Sensitive Lands
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
GHG	greenhouse gas
HPS	high-pressure sodium
HSC	Health and Safety Code
Hz	Hertz
I-	Interstate
in/s	inches per second
Interim Guidance	Local Development – Intergovernmental Review Program Interim Guidance
IPCC	Intergovernmental Panel on Climate Change
ITP	incidental take permit
JURMP	Jurisdictional Urban Runoff Management Program
kHz	kilohertz
LCFS	Low Carbon Fuel Standard
LDC	Land Development Code
L _{eq}	equivalent sound level
LID	Low-Impact Development
L _{max}	maximum sound level
L _{min}	minimum sound level
LOS	level of service

LPS	low pressure sodium
Lv	vibration velocity level
MBTA	Migratory Bird Treaty Act
MEP	maximum extent practicable
MHPA	Multi-Habitat Planning Area
MLD	Most Likely Descendant
MMC	Mitigation Monitoring Coordination
MMRP	Mitigation Monitoring and Reporting Program
MMT	million metric tons
mph	miles per hour
MPO	Metropolitan Planning Organization
MS4	municipal separate storm sewer system
MSCP	Multiple Species Conservation Program
MTS	Metropolitan Transit System
N ₂ O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAGPRA	Native American Graves Protection and Repatriation Act
NAHC	Native American Heritage Commission
NB	northbound
NEPA	National Environmental Policy Act
NO	nitric oxide
NO ₂	nitrogen dioxide
NOI	Notice of Intent
NOP	Notice of Preparation
NO _x	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
O ₃	ozone
Pb	lead
PDP	Priority Development Project
PEIR	Program Environmental Impact Report
PI	Principal Investigator
PM	particulate matter
PM ₁₀	particulate matter 10 micrometers or less in diameter
PM _{2.5}	particulate matter 2.5 micrometers or less in diameter
ppb	parts per billion
ppm	parts per million by volume
PPV	peak particle velocity
PRC	Public Resources Code
precon	preconstruction
proposed project	Serra Mesa Community Plan Amendment Roadway Connection Project
RAQS	Regional Air Quality Strategy
RCEM	Road Construction Emissions Model

RE	Resident Engineer
Regional Plan	San Diego Forward: Regional Plan
Regulations	City of San Diego's Historical Resources Regulations
rms	root-mean-square
ROG	reactive organic gas
RTP	regional transportation plan
RWQCB	Regional Water Quality Control Board
SANDAG	San Diego Association of Governments
SB	southbound
SB	Senate Bill
SCIC	South Coastal Information Center
SCS	Sustainable Communities Strategy
SDAB	San Diego Air Basin
SDAPCD	San Diego Air Pollution Control District
SDG&E	San Diego Gas & Electric
SDP	Site Development Permit
SDPD	San Diego Police Department
SIP	State Implementation Plan
SO ₂	sulfur dioxide
SPL	sound pressure level
SR-	State Route
SWPPP	Storm Water Pollution Prevention Plan
SWQMP	Storm Water Quality Management Plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminant
TDS	total dissolved solids
TMDL	Total Maximum Daily Loads
U.S.C.	U.S. Code
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
UST	underground storage tank
V/C	volume to capacity
VdB	velocity level decibels
VMT	vehicle miles traveled
WB	westbound
WDR	Waste Discharge Requirement
WQIP	Water Quality Improvement Plan

Executive Summary

This chapter provides a summary of the Draft Environmental Impact Report (DEIR) prepared for the proposed Serra Mesa Community Plan Amendment (CPA) Roadway Connection Project (proposed project), prepared in compliance with the California Environmental Quality Act (CEQA). The City of San Diego (City) is the CEQA Lead Agency for the EIR and, as such, has the primary responsibility for evaluating the environmental effects of the proposed project and considering whether to approve or disapprove the proposed project in light of these effects.

As required by CEQA, this DEIR does the following: (1) describes the proposed project, including its location, objectives, and features; (2) describes the existing conditions at the project site and nearby environs; (3) analyzes the direct, indirect, and cumulative adverse physical effects that would occur should the proposed project be implemented; (4) identifies feasible means of avoiding or substantially lessening the significant adverse effects; (5) provides a determination of significance for each impact after mitigation is incorporated; and (6) evaluates a reasonable range of feasible alternatives to the proposed project that would meet the basic project objectives and reduce a project-related significant impact.

This Executive Summary covers the following topics: (1) Project Description, (2) Areas of Controversy/Issues Raised by Agencies and the Public, (3) Summary of Environmental Impacts, and (4) Project Alternatives.

Project Description

Overview

The proposed project consists of construction and operation of a four-lane major street, complete with bicycle lanes and pedestrian pathways, extending from Phyllis Place in Serra Mesa southward to Via Alta and Franklin Ridge Road in Mission Valley. The proposed project would also require an amendment to the Serra Mesa Community Plan.

The proposed roadway connection would extend approximately 460 feet south from Phyllis Place to Via Alta and Franklin Ridge Road. The project site evaluated throughout this EIR encompasses approximately 2 acres, which includes the area required for construction work and drainage/utility improvements. The proposed roadway itself would cover approximately 1.25 acre. The roadway would include pedestrian walkways/parkways, bicycle lanes, four travel lanes, and a landscaped center median. The proposed project would require two signalized intersections following construction. One signalized intersection would be required at Phyllis Place where the roadway would begin, while the other would be located where the proposed roadway would meet Franklin Ridge Road/Via Alta.

Regarding the proposed community plan amendment, the proposed project would revise text and figures in the Serra Mesa Community Plan to show a street connection from Phyllis Place (in Serra Mesa) southward to the boundary of the Serra Mesa and Mission Valley Community Plan areas. The amendment would result in revisions to all maps of the Serra Mesa Community Plan area, as shown in Appendix A.

Project Location and Setting

The project site is located in the Mission Valley and Serra Mesa communities of the city of San Diego, within San Diego County. The project site is immediately south of Phyllis Place, east of Abbotshill Road, and approximately 0.25 mile west of Interstate 805 (I-805). The project site is located within the boundary of the Quarry Falls site within an undeveloped, primarily disturbed hillside. The project site is also within a San Diego Gas & Electric (SDG&E) easement, which contains an active energy transmission line (four transmission towers) running east–west at the northern portion of the project site, adjacent to Phyllis Place. A 20-inch gas transmission pipeline is located underground within the vicinity of the transmission line.

As further detailed in Chapter 3, *Project Description*, a new portion of this gas line would be constructed within the easement to achieve a preferred depth of 3 feet from finished elevation. The area to conduct this work is within the project site. As also detailed in Chapter 3, *Project Description*, a portion of the Phyllis Place Park is located within the project site. The linear park would run along the south side of Phyllis Place. There are two approved general development plans for the park—one with the roadway connection and one without. Under either scenario, however, the park would be 1.33 acres and would be for passive use activities.

Project Objectives

The City has identified the following objectives for the proposed project:

1. Resolve the inconsistency between the Mission Valley Community Plan and the Serra Mesa Community Plan by providing a multi-modal linkage from Friars Road in Mission Valley to Phyllis Place in Serra Mesa.
2. Improve local mobility in the Serra Mesa and Mission Valley planning areas.
3. Alleviate traffic congestion and improve navigational efficiency to and from local freeway on- and off-ramps for the surrounding areas.
4. Improve emergency access and evacuation route options between the Serra Mesa and Mission Valley planning areas.
5. Provide a safe and efficient street design for motorists, cyclists, and pedestrians that minimizes environmental and neighborhood impacts.

Areas of Known Controversy/Issues Raised by Agencies and the Public

Section 15123(b)(2) of the State CEQA Guidelines requires that areas of controversy known to the Lead Agency, including issues raised by agencies and the public, be identified in the Executive Summary section of the EIR. To determine the number, scope, and extent of the environmental topics to be addressed in this DEIR, the City prepared a Notice of Preparation (NOP) and circulated the NOP to interested public agencies, organizations, community groups, and individuals in order to receive input on the proposed CPA. The NOP was distributed on January 23, 2012, for a 30-day public review and comment period, and a public scoping meeting was held on February 7, 2012.

Public comments received on the NOP and comments from the scoping meeting reflect the controversy related to several environmental issues to be discussed in the DEIR.

Issues raised in response to the NOP prepared and circulated for this DEIR focus around land use, transportation/circulation, air quality, noise, biological resources, paleontological resources, historical/cultural resources, hydrology and water quality, and visual quality and neighborhood character. Transportation/circulation issues were raised through written comments from the California Department of Transportation (Caltrans), biological resource issues were raised in a letter from the California Department of Fish and Wildlife, and potential health and safety issues were raised in written comments from the California Department of Toxic Substances Control. In addition to written comments received, the City of San Diego held a public scoping meeting where verbal comments were provided concerning land use, transportation/circulation, and biological resource issues as well as noise and visual quality.

Summary of Environmental Impacts

Chapter 5 of this DEIR presents the environmental analysis of the proposed project. Table ES-1 summarizes the significant impacts identified in the environmental analysis for each issue area. Table ES-1 also outlines the mitigation measures proposed to reduce and/or avoid the environmental effects, with a conclusion as to whether the impact has been mitigated to below a level of significance.

Based on the analysis presented in Chapter 5, the project would result in significant and unavoidable direct impacts after mitigation related to the topic areas of transportation/circulation (roadway network capacity, planned transportation systems, and traffic hazards). Based on the analysis provided in Chapter 5, the proposed project would result in significant and unavoidable cumulative impacts related to transportation/circulation.

With the implementation of mitigation measures, the proposed project would result in less-than-significant impacts for the issue areas of noise (construction noise), biological resources (sensitive species and sensitive vegetation communities), historical resources (historical resources, religious/sacred uses, and tribal cultural resources), and visual effects/neighborhood character (landform alteration). Impacts were determined to be less than significant for the issue areas of land use, air quality, paleontological resources, hydrology and water quality, and greenhouse gas (GHG) emissions. Other issue areas that were determined to be not significant are analyzed in Chapter 7, *Effects Found Not To Be Significant*.

Summary of Project Alternatives

The State CEQA Guidelines require that an EIR present a range of reasonable alternatives to a project, or to the location of a project, that could feasibly attain the majority of the basic project objectives but that would avoid or substantially lessen one or more significant environmental impacts of the project. The range of alternatives required in an EIR is governed by a “rule of reason” that requires an EIR to set forth only those alternatives necessary to permit a reasoned choice. An EIR need not consider every conceivable alternative to a project. Alternatives may be eliminated from detailed consideration in the EIR if they fail to meet most of the basic project objectives, are not feasible, or do not avoid or substantially lessen any significant

environmental effects (State CEQA Guidelines, Section 15126.6(c)). In addition to the requirements described above, CEQA requires the evaluation of a No Project Alternative, which analyzes the environmental effects that would occur if the project were not to proceed (State CEQA Guidelines Section 15126.6(e)). Moreover, the EIR is required to identify the environmentally superior alternative. The environmentally superior alternative cannot be the No Project Alternative.

Alternative 1 – No Project Alternative

CEQA Guidelines Section 15126.6(e) requires that an EIR evaluate a “no project” alternative. The purpose of describing and analyzing a no project alternative is to allow a lead agency to compare the impacts of approving the project to the impacts of not approving it. The No Project Alternative assumes that the proposed roadway connection and associated CPA to the Serra Mesa Community Plan would not occur. As such, the inconsistency between the Mission Valley and Serra Mesa Community Plan would remain, and any future proposal for a road connection would require an amendment to the Serra Mesa Community Plan.

Section 15126.6(e)(3) of the State CEQA Guidelines states that the no project analysis shall discuss what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services. As further detailed in Chapter 3, *Project Description*, the northernmost portion of the project site (immediately south of Phyllis Place) is likely to be developed as a park if the proposed project were not to be implemented. There are two approved general development plans for the Phyllis Place Park—one with the proposed roadway and one without. Although a subsequent action to obtain a notice to proceed or grading permit may be required, the park was approved as part of the Quarry Falls Specific Plan and has conceptual design plans, grading plans, etc. Therefore, it is reasonable to assume that a portion of the site would be developed going forward under the No Project Alternative. The remaining portion of the project site is designated as “Open Space” within the Quarry Falls Specific Plan. Therefore, it is reasonable to assume that no other development within this portion of the project site would occur under the No Project Alternative.

Compared to the proposed project, the No Project Alternative would result in greater impacts on land use, transportation and circulation, air quality, and GHG emissions due to the increase in regional and study area vehicle miles traveled (VMT). This alternative would result in similar impacts to paleontological resources. The No Project Alternative would reduce impacts on noise/vibration, biological resources, historical resources, hydrology/water quality, and visual effects.

Alternative 2 – Bicycle, Pedestrian, and Emergency Access Only Alternative

The Bicycle, Pedestrian, and Emergency Access Only Alternative would provide a narrower roadway design as it would not allow vehicle traffic aside from emergency responders. It would also provide access for pedestrians and cyclists. The roadway design would include bollards, gates, or another type of control subject to the approval of the San Diego Fire and Police Departments. The final width of the roadway design and type of control would be determined in conjunction with these departments. However, for the purposes of analysis, it can reasonably be concluded that the roadway would be narrower than the proposed project (120 feet wide), as it would only be required

to include a bollard/gate and an entry on either side for pedestrians and cyclists. Due to the reduced width, it is also reasonable to assume that the construction schedule would be shorter for this alternative when compared to the proposed project. This alternative would still require an amendment to the Serra Mesa Community Plan as it currently does not provide for any roadway connection.

The Bicycle, Pedestrian, and Emergency Access Only Alternative would result in greater impacts on land use, transportation and circulation, air quality, and GHG emissions due to the increase in regional and study area VMT. This alternative would result in similar impacts to paleontological resources. The Bicycle, Pedestrian, and Emergency Access Only Alternative would slightly reduce impacts on noise/vibration, biological resources, historical resources, hydrology/water quality, and visual effects.

Environmentally Superior Alternative

Pursuant to CEQA, the EIR is required to identify the environmentally superior alternative. When the environmentally superior alternative is the No-Project Alternative, CEQA requires that another alternative be identified. As further detailed in Chapter 9, *Alternatives*, the No-Project Alternative reduces impacts within several issue areas—such as biological resources, historical/tribal cultural resources, and visual effects—and is therefore identified as the environmentally superior alternative. It should be noted, however, that these impacts would be mitigated to less-than-significant levels under the proposed project.

As the No-Project Alternative is identified as the environmentally superior alternative, the Bicycle, Pedestrian, and Emergency Access Only Alternative is identified as the environmentally superior build alternative. It would slightly reduce impacts associated with construction (i.e., biological resources, historical and tribal cultural resources) due to the narrower roadway and shorter duration of construction.

It should be noted, however, that both alternatives would result in significant and unavoidable impacts that would not result under implementation of the proposed project, as they would not decrease VMT within the study area or the region. Therefore, both alternatives would result in greater impacts associated with transportation and traffic, air quality, and GHG emissions.

Table ES-1. Summary of Significant Project Impacts and Mitigation Measures

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
5.2 Transportation and Circulation				
Near-Term Scenario (Year 2017)				
Roadway Capacity (Roadway Segments)	Impact TRAF-1: The proposed project would result in a significant impact at the segment of Murray Ridge Road from Mission Center Road to Pinecrest Avenue because it would increase the volume-to-capacity (V/C) ratio by 0.08, which exceeds the City's threshold of 0.01 for roadway segments operating at level of service (LOS) F.	Potentially Significant	MM-TRAF-1: Prior to the commencement of any grading activities or, if a grading permit is required, prior to issuance of a grading permit, Murray Ridge Road shall be restriped from Mission Center Road to Pinecrest Avenue to accommodate two lanes in each direction and a center left-turn lane. The new classification for this segment of Murray Ridge Road will be a four-lane Collector.	Significant and Unavoidable ¹
	Impact TRAF-2: The proposed project would result in a significant impact per the City's thresholds at the segment of Murray Ridge Road from Pinecrest Avenue to Sandrock Road because it degrades the LOS from D to E.	Potentially Significant	MM-TRAF-2: Prior to the commencement of any grading activities or, if a grading permit is required, prior to issuance of a grading permit, Murray Ridge Road shall be restriped from Pinecrest Avenue to Sandrock Road to accommodate two lanes in each direction and a center left-turn lane. The new classification for this segment of Murray Ridge Road will be a four-lane Collector.	Significant and Unavoidable ¹
	Impact TRAF-3: The proposed project would result in a significant impact per the City's thresholds at the segment of Phyllis Place from Franklin Ridge Road to I-805 southbound (SB) ramp because it degrades the LOS to F from A.	Potentially Significant	MM-TRAF-3: Prior to the commencement of any grading activities or, if a grading permit is required, prior to issuance of a grading permit, Phyllis Place shall be widened from Franklin Ridge Road to I-805 SB ramps to accommodate five total lanes (three EB and two WB), including a median. The new classification for this segment of Phyllis Place will be a five-lane Major Arterial.	Less than Significant
	Impact TRAF-4: The proposed project would result in a significant impact per the City's thresholds at the segment of Phyllis Place from I-805 SB ramp to I-805 northbound (NB) ramp because it degrades the LOS to F from D.	Potentially Significant	MM-TRAF-4: Prior to the commencement of any grading activities or, if a grading permit is required, prior to issuance of a grading permit, Phyllis Place shall be restriped from I-805 SB ramps to I-805 NB ramps to accommodate a total of five lanes. The new classification for this segment of Phyllis Place will be a four-lane Collector.	Less than Significant

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
Roadway Capacity (Intersections)	Impact TRAF-5: The proposed project would result in a significant impact per the City's thresholds at the Murray Ridge Road and I-805 NB ramps in the PM peak hour because it would worsen the delay and degrade the LOS to E from B.	Potentially Significant	MM-TRAF-5: Prior to the commencement of any grading activities or, if a grading permit is required, prior to issuance of a grading permit, at the intersection, the NB off-ramp approach shall be restriped, the EB approach shall be restriped, the WB approach shall be reconfigured, and the NB on-ramp approach shall be widened.	Less than Significant
	Impact TRAF-6: The proposed project would result in a significant impact per the City's thresholds at the Murray Ridge Road and I-805 SB ramps in the PM peak hour because it would worsen the delay and degrade the LOS to F from C.	Potentially Significant	MM-TRAF-6: Prior to the commencement of any grading activities or, if a grading permit is required, prior to issuance of a grading permit, at the intersection, the EB approach shall be widened to accommodate two through lanes and an exclusive right-turn lane, the SB on-ramp shall be widened, and the SB off-ramp shall be widened to accommodate one share-through-left lane and two exclusive right-turn lanes.	Less than Significant
	Impact TRAF-7: The proposed project would result in a significant impact per the City's thresholds at the Qualcomm Way and Friars Road westbound (WB) ramps in the PM peak hour because it would worsen the delay and degrade the LOS to E from D.	Potentially Significant	MM-TRAF-7: Prior to the commencement of any grading activities or, if a grading permit is required, prior to issuance of a grading permit, the Qualcomm Way and Friars Road WB ramps intersection shall be reconfigured with the following improvements: the SB approach shall be widened to accommodate two through lanes and one exclusive right-turn lane; the NB approach shall be restriped to accommodate two through lanes and two left-turn lanes; and the WB on-ramp shall be widened to accommodate two receiving lanes.	Less than Significant
Long-Term Scenario (Year 2035)				
Planned Circulation System (Roadway Segments)	Impact TRAF-8: The proposed project would result in a significant impact per the City's thresholds at the segment of Franklin Ridge Road from Via Alta to Civita Boulevard because it degrades the LOS to F from C.	Potentially Significant	MM-TRAF-8: Prior to the commencement of any grading activities or, if a grading permit is required, prior to issuance of a grading permit, Franklin Ridge Road shall be widened to accommodate two lanes in each direction and a center left-turn lane. The new classification for this segment of Franklin Ridge Road would be a four-lane Collector.	Significant and Unavoidable ²
	Impact TRAF-9: The proposed project	Potentially	MM-TRAF-9: Prior to the commencement of any grading	Significant

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	would result in a significant impact per the City's thresholds at the segment of Murray Ridge Road from Mission Center Road to Pinecrest Avenue because it would increase the V/C ratio by 0.08, which exceeds the City's threshold of 0.01 for roadway segments operating at LOS F.	Significant	activities or, if a grading permit is required, prior to issuance of a grading permit, Murray Ridge Road from Mission Center Road to Pinecrest Avenue shall be restriped to accommodate two lanes in each direction and a center left-turn lane. The new classification for this segment of Murray Ridge Road will be a four-lane Collector.	and Unavoidable ¹
	Impact TRAF-10: The proposed project would result in a significant impact per the City's thresholds at the segment of Murray Ridge Road from Pinecrest Avenue to Sandrock Road because it would increase the V/C ratio by 0.053, which exceeds the City's threshold of 0.01 for roadway segments operating at LOS F.	Potentially Significant	MM-TRAF-10: Prior to the commencement of any grading activities or, if a grading permit is required, prior to issuance of a grading permit, Murray Ridge Road shall be restriped to accommodate two lanes in each direction and a center left-turn lane. The new classification for this segment of Murray Ridge Road will be a four-lane Collector.	Significant and Unavoidable ¹
	Impact TRAF-11: The proposed project would result in a significant impact per the City's thresholds at the segment of Phyllis Place from Franklin Ridge Road to I-805 SB ramp because it degrades the LOS to F from an existing LOS A.	Potentially Significant	MM-TRAF-11: Prior to the commencement of any grading activities or, if a grading permit is required, prior to issuance of a grading permit, Phyllis Place from Franklin Ridge Road to I-805 SB ramp shall be reconfigured to accommodate five total lanes (three EB and two WB), including a median. The new classification for this segment of Phyllis Place will be a five-lane Major Arterial.	Less than Significant

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	Impact TRAF-12: The proposed project would result in a significant impact per the City's thresholds at the segment of Phyllis Place from I-805 SB ramp to I-805 NB ramp because it degrades the LOS to F from E.	Potentially Significant	MM-TRAF-12: Prior to the commencement of any grading activities or, if a grading permit is required, prior to issuance of a grading permit, Phyllis Place from I-805 SB ramp to I-805 NB ramp shall be restriped to accommodate five total lanes. The new classification for this segment of Phyllis Place will be a five-lane Major Arterial.	Less than Significant
	Impact TRAF-13: The proposed project would result in a significant impact per the City's thresholds at the segment of Rio San Diego Drive from Qualcomm Way to Rio Bonito Way because it would increase the V/C ratio by 0.031, which exceeds the City's threshold of 0.01 for roadway segments operating at LOS E.	Potentially Significant	MM-TRAF-13: Prior to the commencement of any grading activities or, if a grading permit is required, prior to issuance of a grading permit, the segment of Rio San Diego Drive from Qualcomm Way to Rio Bonito Way shall be reconfigured to include the necessary median commensurate with a four-lane Major Arterial.	Significant and Unavoidable ³
Planned Circulation System (Intersections)	Impact TRAF-14: The proposed project would result in a significant impact per the City's thresholds at the intersection of Murray Ridge Road and Sandro Rock Road in the PM peak hour because it would worsen the delay and degrade the LOS to E from B.	Potentially Significant	MM-TRAF-14: Prior to the commencement of any grading activities or, if a grading permit is required, prior to issuance of a grading permit, this intersection shall be reconfigured such that the left-turn lanes in both the NB and SB directions will allow both through movements and left turns.	Significant and Unavoidable ⁴
	Impact TRAF-15: The proposed project would result in a significant impact per the City's thresholds at the intersection of Murray Ridge Road and I-805 NB ramps in the PM peak hour because it would worsen the delay and degrade the LOS to F from D.	Potentially Significant	MM-TRAF-15: Prior to the commencement of any grading activities or, if a grading permit is required, prior to issuance of a grading permit, at the intersection, the NB off-ramp approach shall be restriped, the EB approach shall be restriped, the WB approach shall be reconfigured, and the NB on-ramp approach shall be widened.	Significant and Unavoidable ⁵

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	Impact TRAF-16: The proposed project would result in a significant impact per the City's thresholds at the intersection of Murray Ridge Road and I-805 SB ramps in the AM and PM peak hour because it would worsen the delay and degrade the LOS to E in the AM peak hour and to F in the PM peak hour.	Potentially Significant	MM-TRAF-16: Prior to the commencement of any grading activities or, if a grading permit is required, prior to issuance of a grading permit, at the intersection, the EB approach shall be widened to accommodate two through lanes and an exclusive right-turn lane, the SB on-ramp shall be widened, and the SB off-ramp shall be widened to accommodate one share-through-left lane and two exclusive right-turn lanes.	Significant and Unavoidable ⁵
	Impact TRAF-17: The proposed project would result in a significant impact per the City's thresholds at the intersection of Via Alta and Franklin Ridge Road in the PM peak hour because it would worsen the delay and degrade the LOS to F from B.	Potentially Significant	MM-TRAF-17: Prior to the commencement of any grading activities or, if a grading permit is required, prior to issuance of a grading permit, this intersection shall be reconfigured such that the EB through/right-turn lane will be converted to a left/through/right-turn lane to account for additional EB to NB traffic.	Less than Significant
Planned Circulation System (Freeway Ramp Meters)	Impact TRAF-18: The proposed project would result in a significant impact at the I-805 SB freeway ramp meter at Murray Ridge Road in the PM peak hour because it would operate with 31 minutes of delay, which exceeds the City's threshold of 15 minutes of delay.	Potentially Significant	MM-TRAF-18: Prior to the commencement of any grading activities or, if a grading permit is required, prior to issuance of a grading permit, the applicant shall contribute a fair share contribution, in coordination with Caltrans, which would be applied toward an additional regular traffic ramp lane on the I-805 SB on-ramp from Murray Ridge Road.	Less than Significant
Traffic Hazards	Impact TRAF-19: The proposed project would require a signalized intersection along Phyllis Place, which would in turn result in possibly unsafe conditions for motorists entering or exiting the City View Church parking lot as the driveway would be approximately 150 feet east of the signalized intersection.	Potentially Significant	MM-TRAF-19: Prior to the commencement of any grading activities or, if a grading permit is required, prior to issuance of a grading permit, the City View Church driveway shall be relocated as part of the four-way intersection design with the proposed roadway connection and Phyllis Place.	Significant and Unavoidable ⁶

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
5.4 Noise				
Construction Noise Levels	Impact NOI-1: Noise from project construction activities would be temporary and would cease at the completion of construction. However, significant impacts could result if construction occurs outside of the hours permitted by the City's Noise Ordinance or at any time within 65 to 125 feet (depending on the phase of construction within the Quarry Falls site) of occupied residences.	Potentially Significant	<p>MM NOI-1: All construction and general maintenance activities, except in an emergency, shall be limited to the days and hours permitted in Section 59.5.0404 of the City of San Diego Municipal Code. Outside of these hours, construction personnel shall not be permitted on the job site, and material or equipment deliveries and collections shall not be permitted. The construction contractor shall develop and implement a noise control plan that demonstrates to the City's satisfaction that the Noise Ordinance standard would not be exceeded. The plan may include the following.</p> <ul style="list-style-type: none"> • All construction equipment and vehicles using internal combustion engines shall be equipped with mufflers, air-inlet silencers where appropriate, and any other shrouds, shields, or other noise-reducing features in good operating condition that meet or exceed original factory specification. • All mobile or fixed construction equipment used on the project that is regulated for noise output by a local, state, or federal agency shall comply with such regulation while in the course of project activity. • All construction equipment shall be properly maintained. • All construction equipment shall be operated only when necessary and shall be switched off when not in use. • Construction employees shall be trained in the proper operation and use of the equipment. • Electrical power from the local power grid (as opposed to onsite generators) shall be used to the maximum extent feasible to run compressors, power tools, and similar equipment. • Stationary equipment, such as generators or compressors, shall be located as far as feasible from noise-sensitive receptors. 	Less than Significant

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			<ul style="list-style-type: none"> • Material stockpiles and mobile equipment staging, parking, and maintenance areas shall be located as far as practicable from noise-sensitive receptors. • Construction site speed limits shall be established and enforced during the construction period. • The use of noise-producing signals, including horns, whistles, alarms, and bells, shall be for safety warning purposes only. • Temporary construction noise barriers shall be installed as necessary to adequately control noise levels. Barriers may be constructed around specific equipment items or larger work areas as required. Barriers shall be constructed of materials with a minimum sound transmission class (STC) rating of 25 (sound absorptive acoustical panels, acoustical blankets, etc.). • The project developer and/or its contractor shall prominently post signage at the north and south ends of the project site in a highly visible location, not less than 72 hours prior to the start of any construction activity using heavy construction equipment (e.g., graders, dozer, backhoes). These two signs shall provide the project name, indicate the anticipated dates of construction, and advise that there will be loud noise associated with some construction activities. The signage shall provide a telephone contact number for affected parties to ask questions and/or relay concerns. This signage shall either consist of stand-alone signs or be combined with any other project-related signage at the project boundary, but shall be clearly visible from outside the project site. The project developer shall include this measure in the construction specification documents for the project. Prior to the commencement of heavy construction activities, the project developer and/or its contractor shall submit documentation (including photographs) to the City demonstrating 	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
compliance with this measure.				
5.5 Biological Resources				
Sensitive Species	Impact BIO-1: Construction of the proposed project could result in direct impacts on sensitive species that have moderate potential to utilize the disturbed coastal sage scrub on-site. Construction activities would also have the potential to result in significant indirect impacts on raptors or other migratory birds if the species nests in trees adjacent to the project site.	Potentially Significant	MM-BIO-1: Biological resource protection measures during construction: I. Prior to Construction A. Biologist Verification –The owner/permittee shall provide a letter to the City’s Mitigation Monitoring Coordination (MMC) section stating that a Project Biologist (Qualified Biologist), as defined in the City of San Diego’s Biological Guidelines (2012), has been retained to implement the project’s biological monitoring program. The letter shall include the names and contact information of all persons involved in the biological monitoring of the project. B. Preconstruction Meeting – The Qualified Biologist shall attend the preconstruction meeting, discuss the project’s biological monitoring program, and arrange to perform any follow-up mitigation measures and reporting, including site-specific monitoring, restoration or revegetation, and additional fauna/flora surveys/salvage. C. Biological Documents – The Qualified Biologist shall submit all required documentation to MMC, verifying that any special mitigation reports, including, but not limited to, maps, plans, surveys, survey timelines, or buffers, are completed or scheduled per City Biology Guidelines, the Multiple Species Conservation Program (MSCP), Environmentally Sensitive Lands Ordinance (ESL), project permit conditions, California Environmental Quality Act (CEQA), endangered species acts (ESAs), and/or other local, state or federal requirements. D. BCME – The Qualified Biologist shall present a Biological Construction Mitigation/Monitoring	Less than Significant

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			<p>Exhibit (BCME) that includes the biological documents in C, above. In addition, include the following: restoration/revegetation plans, plant salvage/relocation requirements (e.g., coastal cactus wren plant salvage, burrowing owl exclusions, etc.), avian or other wildlife surveys/survey schedules (including general avian nesting and USFWS protocol), timing of surveys, wetland buffers, avian construction avoidance areas/noise buffers/ barriers, other impact avoidance areas, and any subsequent requirements determined by the Qualified Biologist and the City ADD/MMC. The BCME shall include a site plan, written and graphic depiction of the project's biological mitigation/monitoring program, and a schedule. The BCME shall be approved by MMC and referenced in the construction documents.</p> <p>E. Avian Protection Requirements – To avoid any direct impacts on sensitive, MSCP-covered, listed, threatened, or endangered species, or species in the list of raptors provided on page 12 (Restrictions on Grading) of the Biology Guidelines, removal of habitat that supports active nests in the proposed area of disturbance should occur outside of the established breeding season for these species (February 1 to September 15). If removal of habitat in the proposed area of disturbance must occur during the breeding season, the Qualified Biologist shall conduct a pre-construction survey to determine the presence or absence of nesting birds in the proposed area of disturbance. The pre-construction survey shall be conducted within 10 calendar days prior to the start of construction activities (including removal of vegetation). The applicant shall submit the results of the pre-</p>	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			<p>construction survey to City MMC for review and approval prior to initiating any construction activities. If nesting birds are detected, a letter report or mitigation plan in conformance with the City's Biology Guidelines and applicable state and federal law (i.e., appropriate follow-up surveys, monitoring schedules, construction barriers/buffers, etc.) shall be prepared and include proposed measures to be implemented to ensure that take of birds or eggs is avoided. The report or mitigation plan shall be submitted to the City for review and approval and implemented to the satisfaction of the City. The City's MMC Section or RE and Biologist shall verify and approve that all measures identified in the report or mitigation plan are in place prior to and/or during construction.</p> <p>F. Resource Delineation – Prior to construction activities, the Qualified Biologist shall supervise the placement of orange construction fencing or equivalent along the limits of disturbance adjacent to sensitive biological habitats and verify compliance with any other project conditions as shown on the BCME. This phase shall include flagging plant specimens and delimiting buffers to protect sensitive biological resources (e.g., habitats/flora and fauna species, including nesting birds) during construction. Appropriate steps/care should be taken to minimize attraction of nest predators to the site.</p> <p>G. Education – Prior to commencement of construction activities, the Qualified Biologist shall meet with the owner/permittee or designee and the construction crew and conduct an on-site educational session regarding the need to avoid impacts outside of the approved construction area and protect sensitive flora and fauna (e.g., explain</p>	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			<p>the avian and wetland buffers, flag system for removal of invasive species or retention of sensitive plants, and acceptable access routes/methods and staging areas, etc.).</p> <p>II. During Construction</p> <p>A. Monitoring – All construction (including access/staging areas) shall be restricted to areas previously identified, proposed for development/staging, or previously disturbed, as shown in “Exhibit A” and/or the BCME. The Qualified Biologist shall monitor construction activities as needed to ensure that construction activities do not encroach into biologically sensitive areas, or cause other similar damage, and that the work plan has been amended to accommodate any sensitive species located during the pre-construction surveys. In addition, the Qualified Biologist shall document field activity through the Consultant Site Visit Record (CSV). The CSV shall be e-mailed to MMC on the first day of monitoring, the first week of each month, the last day of monitoring, and immediately in the case of any undocumented condition or discovery.</p> <p>B. Subsequent Resource Identification – The Qualified Biologist shall note/act to prevent any new disturbances to habitat, flora, and/or fauna on-site (e.g., flag plant specimens for avoidance during access, etc.). If active nests or other previously unknown sensitive resources are detected, all project activities that directly affect the resource shall be delayed until species specific local, state, or federal regulations have been determined and applied by the Qualified Biologist.</p> <p>III. Post-Construction Measures</p> <p>A. In the event that impacts exceed previously allowed</p>	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			amounts, additional impacts shall be mitigated in accordance with City Biology Guidelines, ESL and MSCP, CEQA, and other applicable local, state and federal law. The Qualified Biologist shall submit a final BCME/report to the satisfaction of the City ADD/MMC within 30 days of construction completion.	
Sensitive Habitat	Impact BIO-2: The proposed project would directly impact (both temporarily and permanently) a total of approximately 0.25 acre of coastal sage scrub habitat, a Tier II habitat. Impacts would occur outside the MHPA; therefore, in accordance with the City's Biology Guidelines, a 1:1 mitigation ratio would be required if mitigation occurs within the MHPA, for a total of 0.25 acre. If mitigation is proposed outside the MHPA, a mitigation ratio of 1.5:1 would be required for a total of 0.38 acre.	Potentially Significant	MM-BIO-2: Prior to the commencement of any grading activities or, if a grading permit is required, prior to issuance of a grading permit, evidence shall be provided that demonstrates a total of 0.25 acre of credit from the San Diego Habitat Acquisition Fund or another approved mitigation bank (such as Marron Valley) has been acquired to mitigate the loss of disturbed coastal sage scrub (Tier II).	Less than Significant
5.7 Historical Resources				
Historical Resources, Sacred/ Religious Uses, Tribal Cultural Resources	Impact HIS-1: Although no historical (archaeological) or tribal cultural resources were identified within the project site, the project would have the potential to disturb or alter subsurface resources during construction-related activities.	Potentially Significant	MM-HIST-1: I. Prior to Permit Issuance (for projects that include ground disturbance) A. Entitlements Plan Check 1. Prior to issuance of any construction permits including, but not limited to, the first Grading Permit, Demolition Plans/Permits, and Building Plans/Permits, but prior to the first preconstruction (precon) meeting, whichever is applicable, the Assistant Deputy Director (ADD) Environmental designee shall verify that the requirements for archaeological monitoring and Native American (Kumeyaay) monitoring have been noted on the	Less than Significant

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			<p>applicable construction documents through the plan check process.</p> <p>B. Letters of Qualification Have Been Submitted to ADD</p> <ol style="list-style-type: none"> 1. The project's cultural resources consultant shall submit a letter of verification to Mitigation Monitoring Coordination (MMC) identifying the Principal Investigator (PI) for the project and the names of all persons involved in the archaeological monitoring program, as defined in the City of San Diego Historical Resources Guidelines. If applicable, individuals involved in the archaeological monitoring program must have completed the 40-hour Hazardous Waste Operations and Emergency Response training with certification documentation. 2. MMC would provide a letter to the project's cultural resources consultant confirming the qualifications of the PI and all persons involved in the archaeological monitoring of the project meet the qualifications established in the Historical Resources Guidelines. 3. Prior to the start of work, the project's cultural resources must obtain written approval from MMC for any personnel changes associated with the monitoring program. <p>II. Prior to Start of Construction</p> <p>A. Verification of Records Search</p> <ol style="list-style-type: none"> 1. The PI shall provide verification to MMC that a site-specific records search(quarter-mile radius) has been completed. Verification includes, but is not limited to, a copy of a 	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			<p>confirmation letter from SCIC, or, if the search was in-house, a letter of verification from the PI stating that the search was completed.</p> <p>2. The letter shall introduce any pertinent information concerning expectations and probabilities of discovery during trenching and/or grading activities.</p> <p>3. The PI may submit a detailed letter to MMC requesting a reduction to the quarter-mile radius.</p> <p>B. PI Shall Attend Precon Meetings</p> <p>1. Prior to beginning any work that requires monitoring; the City shall arrange a precon meeting that shall include the PI, Native American (Kumeyaay) consultant/monitor (where Native American resources may be impacted), Construction Manager (CM) and/or Grading Contractor, Resident Engineer (RE), Building Inspector (BI), if appropriate, and MMC. The qualified Archaeologist and Native American (Kumeyaay) monitor shall attend any grading/excavation-related precon meetings to make comments and/or suggestions concerning the archaeological monitoring program with the CM and/or Grading Contractor.</p> <p>a. If the PI is unable to attend the precon meeting, the City shall schedule a focused precon meeting with MMC, the PI, RE, CM, or BI, if appropriate, prior to the start of any work that requires monitoring.</p> <p>2. Identify Areas to Be Monitored</p>	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			<ul style="list-style-type: none"> a. Prior to the start of any work that requires monitoring, the PI shall submit an Archaeological Monitoring Exhibit (AME) (with verification that the AME has been reviewed and approved by the Native American (Kumeyaay) consultant/monitor when Native American resources may be impacted) based on the appropriate construction documents (reduced to 11 inches x 17 inches) to MMC identifying the areas to be monitored, including the delineation of grading/excavation limits. b. The AME shall be based on the results of a site-specific records search as well as information regarding existing known soil conditions (native or formation). 	
			<ul style="list-style-type: none"> 3. When Monitoring Will Occur <ul style="list-style-type: none"> a. Prior to the start of any work, the PI shall also submit a construction schedule to MMC through the RE indicating when and where monitoring would occur. b. The PI may submit a detailed letter to MMC prior to the start of work or during construction requesting a modification to the monitoring program. This request shall be based on relevant information such as review of final construction documents that indicate site conditions such as depth of excavation and/or site graded to bedrock, etc. that may reduce or increase the potential for resources to be present. 	
			<ul style="list-style-type: none"> III. During Construction <ul style="list-style-type: none"> A. Monitor(s) Shall Be Present during 	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			<p>Grading/Excavation/Trenching</p> <ol style="list-style-type: none"> 1. The Archaeological Monitor shall be present full time during all soil-disturbing and grading/excavation/ trenching activities that could result in impacts on archaeological resources as identified on the AME. The CM is responsible for notifying the RE, PI, and MMC of changes to any construction activities such as in the case of a potential safety concern within the area being monitored. In certain circumstances, Occupational Safety and Health Administration safety requirements may necessitate modification of the AME. 2. Native American (Kumeyaay) consultant/monitor shall determine the extent of their presence during soil-disturbing and grading/excavation/trenching activities based on the AME and provide that information to the PI and MMC. If prehistoric resources are encountered during the Native American (Kumeyaay) consultant/monitor's absence, work shall stop and the Discovery Notification Process detailed in Sections III.B–C and IV.A–D shall commence. 3. The PI may submit a detailed letter to MMC during construction requesting a modification to the monitoring program when a field condition—such as modern disturbance post-dating the previous grading/trenching activities, presence of fossil formations, or encountering of native soils—that may reduce or increase the potential for resources to be present occurs. 4. The Archaeological Monitor and Native American (Kumeyaay) consultant/monitor shall document field activity via the 	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			<p>Consultant Site Visit Record (CSV). The CSVs shall be faxed or emailed by the CM to the RE the first day of monitoring, the last day of monitoring, monthly (Notification of Monitoring Completion), and in the case of ANY discoveries. The RE shall forward copies to MMC.</p> <p>B. Discovery Notification Process</p> <ol style="list-style-type: none"> 1. In the event of a discovery, the Archaeological Monitor shall direct the contractor to temporarily divert all soil-disturbing activities including, but not limited to, digging, trenching, excavating, or grading activities in the area of discovery and in the area reasonably suspected to overlay adjacent resources and immediately notify the RE or BI, as appropriate. 2. The Monitor shall immediately notify the PI (unless Monitor is the PI) of the discovery. 3. The PI shall immediately notify MMC by phone of the discovery, and shall also submit written documentation to MMC within 24 hours by fax or email with photos of the resource in context, if possible. 4. No soil shall be exported off site until a determination can be made regarding the significance of the resource specifically if Native American resources are encountered. <p>C. Determination of Significance</p> <ol style="list-style-type: none"> 1. The PI and Native American (Kumeyaay) consultant/monitor, where Native American resources are discovered, shall evaluate the significance of the resource. If human remains are involved, follow protocol in Section IV below. 	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			<ul style="list-style-type: none"> a. The PI shall immediately notify MMC by phone to discuss significance determination and shall also submit a letter to MMC indicating whether additional mitigation is required. b. If the resource is significant, the PI shall submit an Archaeological Data Recovery Program that has been reviewed by the Native American (Kumeyaay) consultant/monitor, and obtain written approval from MMC. Impacts on significant resources must be mitigated before ground-disturbing activities in the area of discovery would be allowed to resume. Note: If a unique archaeological site is also a historical resource as defined in CEQA, then the limits on the amount(s) that the project may be required to pay to cover mitigation costs as indicated in CEQA Section 21083.2 shall not apply. c. If the resource is not significant, the PI shall submit a letter to MMC indicating that artifacts would be collected, curated, and documented in the Final Monitoring Report. The letter shall also indicate that that no further work is required. 	
			<p>IV. Discovery of Human Remains</p> <p>If human remains are discovered, work shall halt in that area and no soil shall be exported off site until a determination can be made regarding the provenance of the human remains, and the following procedures as set forth in CEQA Section 15064.5(e), California PRC (Section 5097.98), and State HSC (Section 7050.5) shall be undertaken:</p>	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			<p>A. Notification</p> <ol style="list-style-type: none"> 1. Archaeological Monitor shall notify the RE or BI as appropriate, MMC, and the PI, if the Monitor is not qualified as a PI. MMC would notify the appropriate Senior Planner in the Environmental Analysis Section (EAS) of the Development Services Department to assist with the discovery notification process. 2. The PI shall notify the Medical Examiner after consultation with the RE, either in person or via telephone. <p>B. Isolate Discovery Site</p> <ol style="list-style-type: none"> 1. Work shall be directed away from the location of the discovery and any nearby area reasonably suspected to overlay adjacent human remains until a determination can be made by the Medical Examiner in consultation with the PI concerning the provenance of the remains. 2. The Medical Examiner, in consultation with the PI, would determine the need for a field examination to determine the provenance. 3. If a field examination is not warranted, the Medical Examiner would determine with input from the PI whether the remains are, or are most likely to be, of Native American origin. <p>C. If Human Remains Are Determined to Be Native American</p> <ol style="list-style-type: none"> 1. The Medical Examiner would notify the NAHC within 24 hours. By law, only the Medical Examiner can make this call. 2. The NAHC would immediately identify the person or persons determined to be the MLD and provide contact information. 	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			<ol style="list-style-type: none"> 3. The MLD would contact the PI within 24 hours or sooner after the Medical Examiner has completed coordination, to begin the consultation process in accordance with CEQA Section 15064.5(e), the California PRC, and HSC. 4. The MLD would have 48 hours to make recommendations to the City or representative for the treatment or disposition, with proper dignity, of the human remains and associated grave goods. 5. Disposition of Native American human remains would be determined between the MLD and the PI, and, if: <ol style="list-style-type: none"> a. The NAHC is unable to identify the MLD, or the MLD failed to make a recommendation within 48 hours after being notified by the Commission, or; b. The City or authorized representative rejects the recommendation of the MLD and mediation in accordance with PRC 5097.94 (k) by the NAHC fails to provide measures acceptable to the City, then, c. In order to protect these sites, the City shall do one or more of the following: <ol style="list-style-type: none"> 1) Record the site with the NAHC; 2) Record an open space or conservation easement on the site; or 3) Record a document with the County. d. Upon the discovery of multiple Native American human remains during a ground-disturbing land development activity, the City may agree that 	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			<p>additional conferral with descendants is necessary to consider culturally appropriate treatment of multiple Native American human remains. Culturally appropriate treatment of such a discovery may be ascertained from review of the site utilizing cultural and archaeological standards. Where the parties are unable to agree on the appropriate treatment measures, the human remains and cultural materials buried with Native American human remains shall be reinterred with appropriate dignity, pursuant to Section 5.c., above.</p> <p>D. If Human Remains Are Not Native American</p> <ol style="list-style-type: none"> 1. The PI shall contact the Medical Examiner with notification of the historic era context of the burial. 2. The Medical Examiner would determine the appropriate course of action with the PI and City staff (PRC 5097.98). 3. If the remains are of historic origin, they shall be appropriately removed and conveyed to the San Diego Museum of Man for analysis. The decision for interment of the human remains shall be made in consultation with MMC, EAS, any known descendant group, and the San Diego Museum of Man. <p>V. Night and/or Weekend Work</p> <p>A. If Night and/or Weekend Work Is Included in the Contract</p> <ol style="list-style-type: none"> 1. When night and/or weekend work is included in the contract package, the extent and timing shall be presented and discussed 	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			<p>at the precon meeting.</p> <p>2. The following procedures shall be followed.</p> <p>a. No Discoveries</p> <p>In the event that no discoveries were encountered during night and/or weekend work, the PI shall record the information on the CSV and submit to MMC via fax or email by 8 a.m. of the next business day.</p> <p>b. Discoveries</p> <p>All discoveries shall be processed and documented using the existing procedures detailed in Sections III – During Construction, and IV – Discovery of Human Remains. Discovery of human remains shall always be treated as a significant discovery.</p> <p>c. Potentially Significant Discoveries</p> <p>If the PI determines that a potentially significant discovery has been made, the procedures detailed under Sections III – During Construction and IV – Discovery of Human Remains shall be followed.</p> <p>d. The PI shall immediately contact MMC, or by 8 a.m. of the next business day, to report and discuss the findings as indicated in Section III-B, unless other specific arrangements have been made.</p> <p>B. If Night and/or Weekend Work Becomes Necessary during the Course of Construction</p> <p>1. The CM shall notify the RE, or BI, as appropriate, a minimum of 24 hours before the work is to begin.</p> <p>2. The RE, or BI, as appropriate, shall notify</p>	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			<p>MMC immediately.</p> <p>C. All Other Procedures Described Above Shall Apply, as Appropriate</p> <p>VI. Post Construction</p> <p>A. Preparation and Submittal of Draft Monitoring Report</p> <p>1. The PI shall submit two copies of the Draft Monitoring Report (even if negative), prepared in accordance with the Historical Resources Guidelines, that describes the results, analysis, and conclusions of all phases of the Archaeological Monitoring Program (with appropriate graphics) to MMC for review and approval within 90 days following the completion of monitoring. It should be noted that if the PI is unable to submit the Draft Monitoring Report within the allotted 90-day timeframe resulting from delays with analysis, special study results, or other complex issues, a schedule shall be submitted to MMC establishing agreed-upon due dates and the provision for submittal of monthly status reports until this measure can be met.</p> <p>a. For significant archaeological resources encountered during monitoring, the Archaeological Data Recovery Program shall be included in the Draft Monitoring Report.</p> <p>b. Recording Sites with State of California Department of Parks and Recreation (DPR)</p> <p>c. The PI shall be responsible for recording (on the appropriate State of California Department of Park and Recreation</p>	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			<p>forms-DPR 523 A/B) any significant or potentially significant resources encountered during the Archaeological Monitoring Program in accordance with the City's Historical Resources Guidelines, and submittal of such forms to the SCIC with the Final Monitoring Report.</p> <ol style="list-style-type: none"> 2. MMC shall return the Draft Monitoring Report to the PI for revision or for preparation of the Final Report. 3. The PI shall submit revised Draft Monitoring Report to MMC for approval. 4. MMC shall provide written verification to the PI of the approved report. 5. MMC shall notify the RE or BI, as appropriate, of receipt of all Draft Monitoring Report submittals and approvals. <p>B. Handling of Artifacts</p> <ol style="list-style-type: none"> 1. The PI shall be responsible for ensuring that all cultural remains collected are cleaned and catalogued. 2. The PI shall be responsible for ensuring that all artifacts are analyzed to identify function and chronology as they relate to the history of the area; that faunal material is identified as to species; and that specialty studies are completed, as appropriate. 3. The cost for curation is the responsibility of the property owner. <p>C. Curation of Artifacts: Accession Agreement and Acceptance Verification</p> <ol style="list-style-type: none"> 1. The PI shall be responsible for ensuring that all artifacts associated with the survey, testing, and/or data recovery for this project 	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
			<p>are permanently curated with an appropriate institution. This shall be completed in consultation with MMC and the Native American (Kumeyaay) representative, as applicable.</p> <ol style="list-style-type: none"> 2. The PI shall include the Acceptance Verification from the curation institution in the Final Monitoring Report submitted to the RE or BI and MMC. 3. When applicable to the situation, the PI shall include written verification from the Native American (Kumeyaay) consultant/monitor indicating that Native American resources were treated in accordance with state law and/or applicable agreements. If the resources were reinterred, verification shall be provided to show what protective measures were taken to ensure no further disturbance occurs in accordance with Section IV – Discovery of Human Remains, Subsection 5. <p>D. Final Monitoring Report(s)</p> <ol style="list-style-type: none"> 1. The PI shall submit one copy of the approved Final Monitoring Report to the RE or BI as appropriate, and one copy to MMC (even if negative), within 90 days after notification from MMC that the draft report has been approved. 2. The RE shall, in no case, issue the Notice of Completion and/or release of the Performance Bond for grading until receiving a copy of the approved Final Monitoring Report from MMC that includes the Acceptance Verification from the curation institution. 	

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
5.9 Visual Effects and Neighborhood Character				
Landform Alteration	The project site is on a steep hillside with natural gradients equal to or in excess of 25% and is, therefore, subject to the City's ESL regulations. As discussed in Chapter 3, <i>Project Description</i> , the proposed project would entail 43,500 cubic yards of fill and 0 yards of cut. The maximum fill would be approximately 46 feet. Therefore, the project would alter more than 2,000 cubic yards of earth per graded acre and/or result in a change in elevation of a steep hillside from existing grade to proposed grade of more than 5 feet. As such, the proposed project would result in a potentially significant impact.	Potentially Significant	Prior to issuance of grading permits, the project applicant shall implement design features and grading techniques specific to the alteration of the hillside. The grading plans shall be subject to the review and approval by the City prior to issuance of a grading permit. The grading plans shall clearly demonstrate, with both spot elevations and contours, that: <ol style="list-style-type: none"> 1) The proposed landforms shall very closely imitate the existing on-site landform and/or the undisturbed, pre-existing surrounding neighborhood landforms. This can be achieved through "naturalized" variable slopes. 2) The proposed slopes follow the natural existing landform and at no point vary substantially from the natural landform elevations. 3) The gradient of the slopes will be varied rather than left at a constant angle in order to create a more natural appearance. 4) Natural landform plantings are incorporated to soften the appearance of manufactured slopes. 	Less than Significant

NOTES:

¹ Implementation of this measure would reduce the impact to a level below significance; however, the City's ability to implement this measure may be limited. This roadway provides Class II bike lanes that would likely be removed under this mitigation. The proposed mitigation would cause a substantial conflict with applicable City land use and mobility policies (e.g., the City's General Plan, Bicycle Master Plan, Pedestrian Master Plan, and Serra Mesa Community Plan). Due to the uncertainty of being able to implement this measure in light of countervailing considerations, this analysis does not assume it will occur. In the event it does not, the impact would remain significant and unavoidable.

² Implementation of this measure would reduce the impact to a level below significance; however, the City's ability to implement this measure may be limited. This roadway would provide Class II bikeways and a 6-foot-wide sidewalk, separated from the street by an 8-foot-wide parkway; some of these amenities would likely be removed under this mitigation. The proposed mitigation would cause a substantial conflict with applicable City land use and mobility policies (e.g., the City's General Plan, Bicycle Master Plan, Pedestrian Master Plan, Serra Mesa Community Plan, and Quarry Falls Specific Plan). Due to the uncertainty of being able to implement this measure in light of countervailing considerations, this analysis does not assume it will occur. In the event it does not, the impact would remain significant and unavoidable.

³ Implementation of this measure would reduce the impact to a level below significance; however, the City's ability to implement this measure may be limited. This segment of the roadway is likely to be reclassified as a four-lane Major Arterial as part of the forthcoming update to the Mission Valley Community Plan, which in turn may require a median or other reconfiguration in order to meet that classification. Due to the uncertainty of being able to implement this measure in light of

Issue	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
countervailing considerations, this analysis does not assume it will occur. In the event it does not, the impact would remain significant and unavoidable.				
⁴ Implementation of this measure would reduce the impact to a level below significance; however, the City's ability to implement this measure may be limited. Currently the intersection geometry provides for bike lanes that would likely be removed under this mitigation. The proposed mitigation would cause a substantial conflict with applicable City land use and mobility policies (e.g., the City's General Plan, Bicycle Master Plan, Pedestrian Master Plan, Serra Mesa Community Plan, and Quarry Falls Specific Plan). Due to the uncertainty of being able to implement this measure in light of countervailing considerations, this analysis does not assume it will occur. In the event it does not, the impact would remain significant and unavoidable.				
⁵ Mitigation identified would not reduce the delay at this intersection to an acceptable LOS per the City's thresholds, and is therefore considered partial mitigation.				
⁶ Implementation of this measure would reduce the impact to a level below significance; however, the City's ability to implement this measure may be limited. The City View Church is a privately owned property. The relocation of the driveway may in turn require the removal of trees and the reconfiguration of other internal access considerations within the Church property, such as the drop-off area in front of the church that is connected to the existing driveway. Due to the uncertainty of being able to implement this measure in light of countervailing considerations, this analysis does not assume it will occur. In the event it does not, the impact would remain significant and unavoidable.				

Chapter 1

Introduction

This recirculated Draft Environmental Impact Report (DEIR) for the proposed Serra Mesa Community Plan Amendment (CPA) Roadway Connection Project (proposed project) has been prepared by the City of San Diego (City) in accordance with the California Environmental Quality Act (CEQA) Statute and Guidelines (Public Resources Code, Section 21000 et seq. and California Code of Regulations, Title 14, Section 15000, et seq.). The DEIR has also been prepared in accordance with the City's Environmental Impact Report Guidelines (City of San Diego 2005) and the CEQA Significance Determination Thresholds (City of San Diego 2016). This DEIR evaluates the potential direct, indirect, and cumulative environmental impacts of the proposed project. The proposed project is fully detailed in Chapter 3, *Project Description*, of this DEIR. This section provides an overview of the environmental review process and requirements of CEQA.

1.1 Purpose of CEQA and the EIR

CEQA was enacted by the California legislature in 1970. As noted under State CEQA Guidelines Section 15002, CEQA has four basic purposes.

1. Inform governmental decision-makers and the public about the potential significant environmental effects of proposed activities.
2. Identify the ways in which environmental damage can be avoided or significantly reduced.
3. Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible.
4. Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

An EIR is an informational document, the purpose of which is to inform members of the public and agency decision-makers of the significant environmental effects of a proposed project, identify feasible ways to reduce the significant effects of the proposed project, and describe a reasonable range of feasible alternatives to the project that would reduce one or more significant effects and still meet the proposed project's objectives. In instances where significant impacts cannot be avoided or mitigated, the proposed project may nonetheless be carried out or approved if the approving agency finds that economic, legal, social, technological, or other benefits outweigh the unavoidable significant environmental impacts.

1.2 Intended Uses of this EIR

This section discusses the intended uses for this DEIR. Environmental review and consultation requirements under federal, state, or local laws, regulations, or policies that are in addition to CEQA are discussed in the applicable individual resource sections within Chapter 5, *Environmental Analysis*, of this DEIR.

The City is the CEQA lead agency, as defined under State CEQA Guidelines Section 15050, because it has principal responsibility for carrying out and approving the proposed project. As the lead agency, the City also has primary responsibility for complying with CEQA. As such, the City has analyzed the environmental effects of the proposed project; the results of that analysis are presented in this DEIR. The City Council, in its role as the decision-making body of the City, is responsible for certifying the Final EIR and approving the Findings of Fact and Statement of Overriding Considerations pursuant to Sections 15090–15093 of the State CEQA Guidelines prior to project approval. Responsible agencies, as defined pursuant to State CEQA Guidelines Section 15381, are public agencies that may have discretionary approval authority for a project, and for the proposed project includes the California Department of Transportation (Caltrans). As detailed further in Section 5.2, *Transportation and Circulation*, the project would require mitigation for impacts on the circulation network that would affect freeway ramps, which are under the jurisdiction of Caltrans. Table 1-1 provides a summary list of the approvals and permits that would be required.

Table 1-1. List of Required Discretionary Actions

Discretionary Action	City Council
Certification of Final EIR	X
Adoption of Mitigation Monitoring and Reporting Program	X
Adoption of Findings of Fact	X
Adoption of Statement of Overriding Considerations	X
Approval and Adoption of the project and CPA	X

1.3 Scope and Content of this EIR

1.3.1 Notice of Preparation and Scoping Period

In compliance with Section 15082 of the State CEQA Guidelines, the City Development Services Department circulated the Notice of Preparation (NOP), dated January 23, 2012, to interested agencies, groups, and individuals. The 30-day public scoping period ended February 21, 2012. In addition, a public scoping meeting was held on February 7, 2012, at the Serra Mesa Branch Library to gather additional public input. The scope of analysis for the DEIR was determined by the public responses to the NOP and in conjunction with City staff. In addition, comments received during the NOP public scoping meetings were considered during the preparation of this DEIR. The NOP and Scoping Letter comments are included as Appendix A of this DEIR.

1.3.2 Environmental Analysis Content

Based on the scope of analysis for this DEIR, the following issues were determined to be potentially significant and are therefore addressed in Chapter 5, *Environmental Analysis*, of this document:

- Land Use
- Traffic and Transportation
- Air Quality

- Noise
- Biological Resources
- Paleontological Resources
- Hydrology and Water Quality
- Historical Resources
- Visual Quality and Neighborhood Character
- Greenhouse Gas Emissions

Comment letters received during the NOP public scoping period expressed concern about traffic, noise, air quality and greenhouse gas emissions, and neighborhood character. These concerns have been identified as areas of known controversy and are analyzed in Chapter 5, *Environmental Analysis*, and Chapter 6, *Cumulative Impacts*, of this DEIR. Additional CEQA-mandated environmental topics, such as Agricultural and Forestry Resources, Energy, Mineral Resources, Population and Housing, Recreation, Geology and Soils, Health and Safety, Public Services, and Public Utilities are addressed in Chapter 7, *Effects Not Found To Be Significant*, of this DEIR.

1.4 Availability of this EIR

This DEIR was made available for review by members of the public and public agencies for 45 days (March 29, 2017 to May 15, 2017) to provide comments on the sufficiency of the document in identifying and analyzing the possible impacts on the environment and ways in which the significant effects of the proposed project might be avoided or mitigated.

Hard copies of the DEIR were also available to review at the following location:

City of San Diego, Planning Department
1010 2nd Avenue, Eleventh Floor
San Diego, California 92101-4153

Compact discs (CDs) with an electronic version of the DEIR were available to review at the following locations:

Serra Mesa-Kearny Mesa Library
9005 Aero Drive
San Diego, California 92123

Mission Valley Library
2123 Fenton Parkway
San Diego, California 92108

Downtown San Diego Public Library
330 Park Boulevard
San Diego, California 92101

The Notice of Availability of the DEIR was mailed as required by the State CEQA Guidelines and the City. As detailed in the Public Notice of Availability for Recirculation included as a preface to this DEIR, comments previously received on the prior Program EIR were considered, will be included as

part of the administrative record, and are factored into the decision to revise and recirculate this DEIR. As such, the City will only be directly responding to new written comments received on this DEIR in making its decision to certify it as complete and in compliance with CEQA, and also whether to approve or deny the proposed project. In the final review, environmental considerations and economic and social factors will be weighed to determine the most appropriate course of action. The City will use the Final Environmental Impact Report (FEIR) and supporting documentation in its decision to approve or deny the proposed project.

1.5 Incorporation by Reference in this EIR

As detailed in Section 15150 of the State CEQA Guidelines, an EIR may incorporate by reference all or portions of another document that is a matter of public record or is generally available to the public. Where all or part of another document is incorporated by reference, the incorporated language shall be considered to be set forth in full as part of the text of the EIR. It also states that the document be made available to the public for inspection at a public place. Finally, Section 15150 states that the relationship between the incorporated part of the referenced document and the EIR be described and that incorporation by reference is most appropriate for including lengthy materials that provide general background but do not contribute directly to the analysis of the problem at hand.

As further detailed in Chapter 3, *Project Description*, the Quarry Falls Program EIR (PEIR) is incorporated by reference throughout this DEIR and available for review at the City's website;¹ a hard copy is available at the City Planning Department.² The State Clearinghouse number for the Quarry Falls PEIR is 2005081018.

The Quarry Falls PEIR is incorporated by reference because the project site is within the Quarry Falls site, and the PEIR provides a detailed overview of the Quarry Falls project,³ which is currently under construction (and some portions have been constructed and occupied). Section 3.3, *Project Background*, provides further information on the background of the proposed project and its relationship to the Quarry Falls project.

1.6 Organization of this EIR

The content and format of this DEIR are designed to meet the requirements of CEQA and State CEQA Guidelines Article 9. Table 1-2 summarizes the organization and content of the DEIR.

¹ <https://www.sandiego.gov/planning/programs/ceqa>

² 1010 Second Avenue, Suite 1200, East Tower, M.S. 413, San Diego, CA 92101

³ The Quarry Falls Project is now called Civita; however, for the purposes of this EIR and consistency, the project will be referred to as "Quarry Falls" throughout because of the numerous references to the Quarry Falls PEIR.

Table 1-2. Document Organization and CEQA Requirements

DEIR Chapter	Contents
Summary	Includes a brief summary of the proposed project; identifies each significant effect, including proposed mitigation measures and alternatives to reduce or avoid the effect; identifies the areas of controversy known to the lead agency, including issues raised by agencies and the public; and summarizes the issues to be resolved, including the choice among alternatives and whether or how to mitigate the significant effects (State CEQA Guidelines Section 15123).
Chapter 1 Introduction	Discusses the purpose of CEQA and this DEIR, the scope and content of this DEIR, the organization of this DEIR, and the intended uses for this DEIR (State CEQA Guidelines Section 15124(d)).
Chapter 2 Environmental Setting	Describes the overall existing physical conditions in the vicinity of the proposed project when the analysis was initiated. In addition, the specific existing conditions for each resource area are described in the applicable resource section in Chapter 5, <i>Environmental Analysis</i> (State CEQA Guidelines Section 15125).
Chapter 3 Project Description	Contains both a map of the precise location and boundaries of the proposed project and its location relative to the region, lists the proposed project's central objectives and underlying purpose, and provides a detailed description of the proposed project's characteristics (State CEQA Guidelines Section 15124(a), (b), and (c)).
Chapter 4 History of Project Changes	Provides a brief overview of minor changes to the project.
Chapter 5 Environmental Analysis	Describes the existing physical conditions for each resource area, lists the applicable laws and regulations germane to the specific resource, describes the impact assessment methodology, lists the criteria for determining whether an impact is significant, identifies the direct and indirect significant impacts that would result from implementation of the proposed project, and lists feasible mitigation measures that would eliminate or reduce the identified significant impacts (State CEQA Guidelines Sections 15125–15126.4).
Chapter 6 Cumulative Impacts	Defines the cumulative study area for each resource; identifies past, present, and reasonably foreseeable future projects with related impacts within each study area; and evaluates the contribution of the proposed project to a cumulatively significant impact. This chapter also lists feasible mitigation measures that would eliminate or reduce the identified significant cumulative impacts (State CEQA Guidelines Section 15130).
Chapter 7 Effects Not Found To Be Significant	Provides a discussion of the environmental resource impacts that were found to be not significant during preparation of this DEIR (State CEQA Guidelines Section 15128).
Chapter 8 Mandatory Discussion Areas	Discusses the way the proposed project could foster economic or population growth, either directly or indirectly, in the surrounding environment; describes the significant irreversible changes associated with the proposed project's implementation (State CEQA Guidelines Sections 15126.2(c) and (d) and 15127).

DEIR Chapter	Contents
Chapter 9 Alternatives to the Proposed Project	Describes a reasonable range of alternatives to the proposed project, including the No-Project Alternative; compares and contrasts the significant environmental impacts of alternatives to the proposed project; and identifies the environmentally superior alternative (State CEQA Guidelines Section 15126.6).
Chapter 10 Preparers of this Report	Lists the individuals and agencies involved in preparing this DEIR (State CEQA Guidelines Section 15129).
Chapter 11 References	Provides a comprehensive listing by chapter of all references cited in this DEIR (State CEQA Guidelines Section 15148).

Chapter 2

Environmental Setting

This chapter provides a description of the overall physical environmental conditions of the project site, from both a local and regional perspective. Resource-specific existing conditions are provided within each individual resource section of Chapter 5, *Environmental Analysis*.

CEQA generally requires disclosure of the environmental setting as it was at the time the Notice of Preparation was published,¹ which for the proposed project was January 23, 2012. As further detailed in this section and in Chapter 3, *Project Description*, a portion of the project site is within the Quarry Falls site. The Quarry Falls project was approved in 2008 and has been in various phases of construction since that time. In the time between the Notice of Preparation being released in 2012 and the preparation of the other technical studies for this DEIR in April 2015, the City elected to conduct updates to resource areas that might have changed substantially during that time. As such, the Biological Resources Technical Report, Noise Technical Report, and Traffic Impact Study were completed in 2015. The geological conditions on site did not change; therefore, the Geologic Reconnaissance prepared for the DEIR in 2013 remains valid.

As further detailed in Section 5.2, *Transportation and Circulation*, traffic counts were collected in 2011 and verified in 2013, to represent the existing conditions. The existing conditions are detailed for informational purposes in Section 5.2, *Transportation and Circulation*, as well as under the other issue areas that rely on traffic data in order to determine impacts—including Sections 5.3, *Air Quality*, 5.4, *Noise*, and 5.10, *Greenhouse Gases*. However, impacts are not determined by comparing the project to the existing condition. Rather, the impact analysis utilizes traffic conditions modeled for the Near-Term Scenario (Year 2017) as the baseline for comparing potential traffic impacts associated with the proposed project because it represents the anticipated opening year for the proposed project. As such, modeled traffic conditions for the Near-Term Scenario would provide a more accurate representation of the direct traffic impacts of the proposed project because they take into account development that has occurred since traffic counts were taken in 2013. Accordingly, traffic conditions for the Near-Term Scenario are considered the near-term baseline conditions for CEQA purposes and are used as a basis for comparison of project-related traffic impacts. The same approach is used for issues within Sections 5.3, *Air Quality*, 5.4, *Noise*, and 5.10, *Greenhouse Gases*, where the analysis relies on traffic data.

In summary, the physical existing conditions that represent the environmental setting discussed below are from 2015. There is the possibility that other uses within the Quarry Falls site have been constructed during the time this DEIR was being prepared. Where necessary, this DEIR analyzes reasonably foreseeable uses that have been approved within the Quarry Falls Program EIR (PEIR). For example, low- to medium-density residential uses are planned in the vicinity of the project site.

¹ Section 15125 of the State CEQA Guidelines states that an EIR must include “a description of the physical environmental conditions in the vicinity of the project, as they exist at the time the notice of preparation is published, or if no notice of preparation is published, at the time environmental analysis is commenced, from both a local and regional perspective. This environmental setting will *normally* constitute the baseline physical conditions by which a lead agency determines whether an impact is significant. The description of the environmental setting shall be no longer than is necessary to an understanding of the significant effects of the proposed project and its alternatives” (emphasis added).

Therefore, Section 5.4, *Noise*, and other sections throughout as applicable evaluate potential impacts on these uses.

2.1 Regional Setting

Figure 2-1 shows the location of the approximately 2-acre project site within the City of San Diego. The City of San Diego covers approximately 207,000 acres in the southwestern section of San Diego County, in Southern California. The City is located approximately 17 miles north of the United States-Mexico border and is bordered on the north by the city of Del Mar, the city of Poway, and unincorporated San Diego County land. On the east, the City of San Diego is bordered by the cities of Santee, El Cajon, La Mesa, and Lemon Grove, as well as unincorporated County of San Diego land. To the south, San Diego is bordered by the cities of Coronado, Chula Vista, National City, and the United States-Mexico border. The Pacific Ocean is the City of San Diego's western border.

As shown in Figure 2-2, the project site is within the Serra Mesa Community Planning Area and the Mission Valley Community Planning Area. Mission Valley is composed of a wide, flat San Diego River floodplain with steep slopes and mesas along its northern and southern boundaries. Formed through the erosive actions of the San Diego River, the valley is characterized by a topography that gently slopes from about 600 feet above mean sea level (AMSL) on the eastern end of the community to sea level at the western end. The Mission Valley Community Planning Area occupies approximately 3,200 acres and is generally bounded by Friars Road and the northern slopes of the valley on the north, the eastern banks of the San Diego River on the east, the southern slopes of the valley on the south, and Interstate (I-) 5 on the west. The Serra Mesa Community Planning Area is located immediately to the north of Mission Valley and encompasses approximately 2,200 acres. It is characterized by relatively flat mesas with intervening canyons and is generally located between State Route 163 and I-15, south of Aero Drive.

2.1.1 Project Location

The project site is immediately south of Phyllis Place, east of Abbotshill Road, and approximately 0.25 mile west of I-805. The project site is within the boundary of the Quarry Falls site, including an undeveloped, primarily disturbed hillside. The project site is also within a San Diego Gas & Electric (SDG&E) easement, which contains an energy transmission line (four transmission poles) running east-west at the northern portion of the project site, adjacent to Phyllis Place.

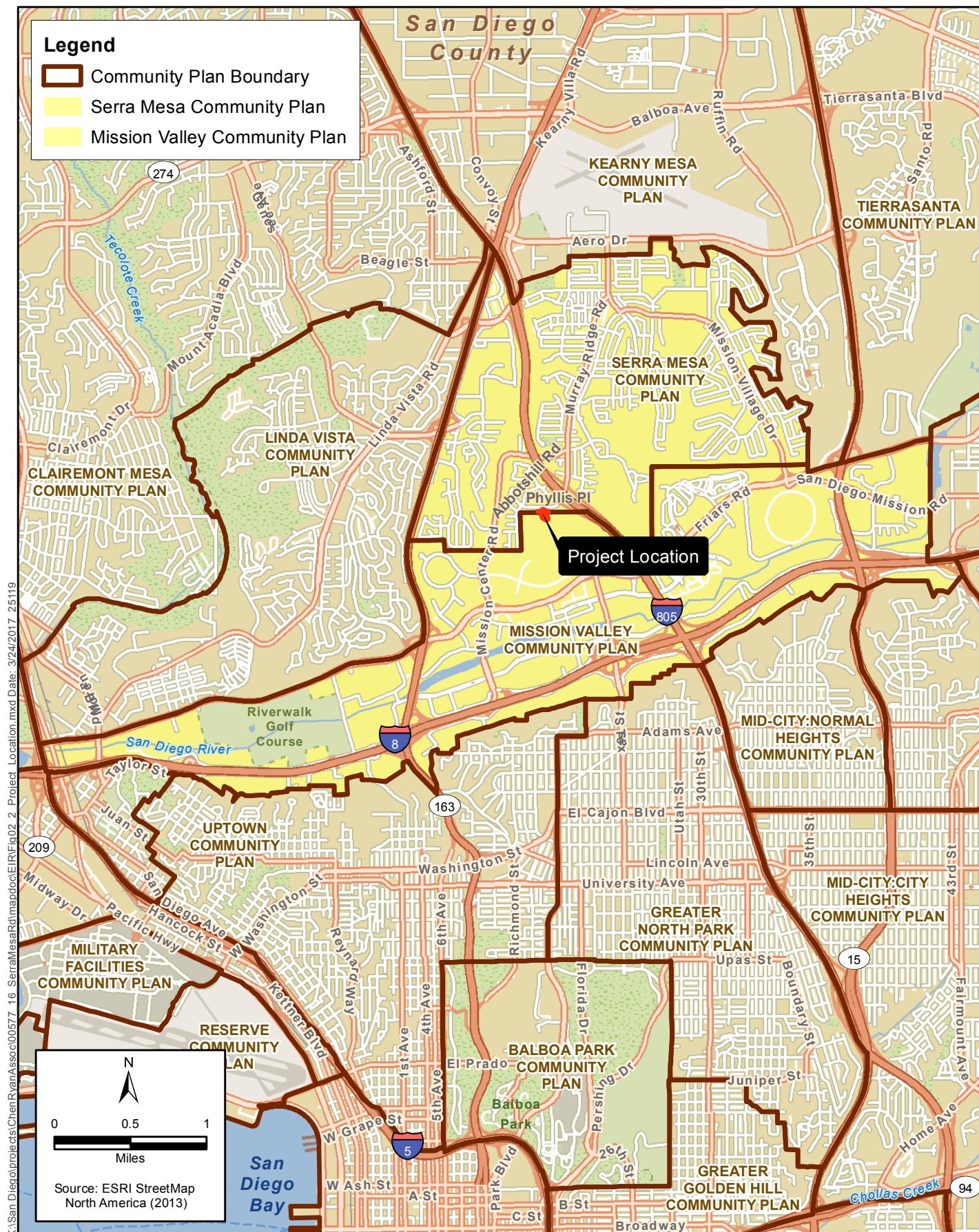
2.1.2 Surrounding Uses

Figure 2-3 shows the uses surrounding the project site. To the north, the project site is bordered by Phyllis Place, a two-lane roadway that is designated to be expanded to four lanes by the Serra Mesa Community Plan. To the north of Phyllis Place is a religious facility (City View Church), and to the northeast along Phyllis Place is a multi-family development (City View Community). To the east of the project site is the existing SDG&E easement south of Phyllis Place (within the Serra Mesa Community Planning Area), a vacant portion of the Quarry Falls site, and the Phyllis Place on-ramp to I-805 south. To the south is another vacant portion of the Quarry Falls site, which is bordered generally to the south by Friars Road. To the immediate southwest/west of the project site, as of April 2015, are vacant graded areas that are planned to include multi-family residential and a dog

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Figure 2-1
Regional Map



**Figure 2-2
Vicinity Map**

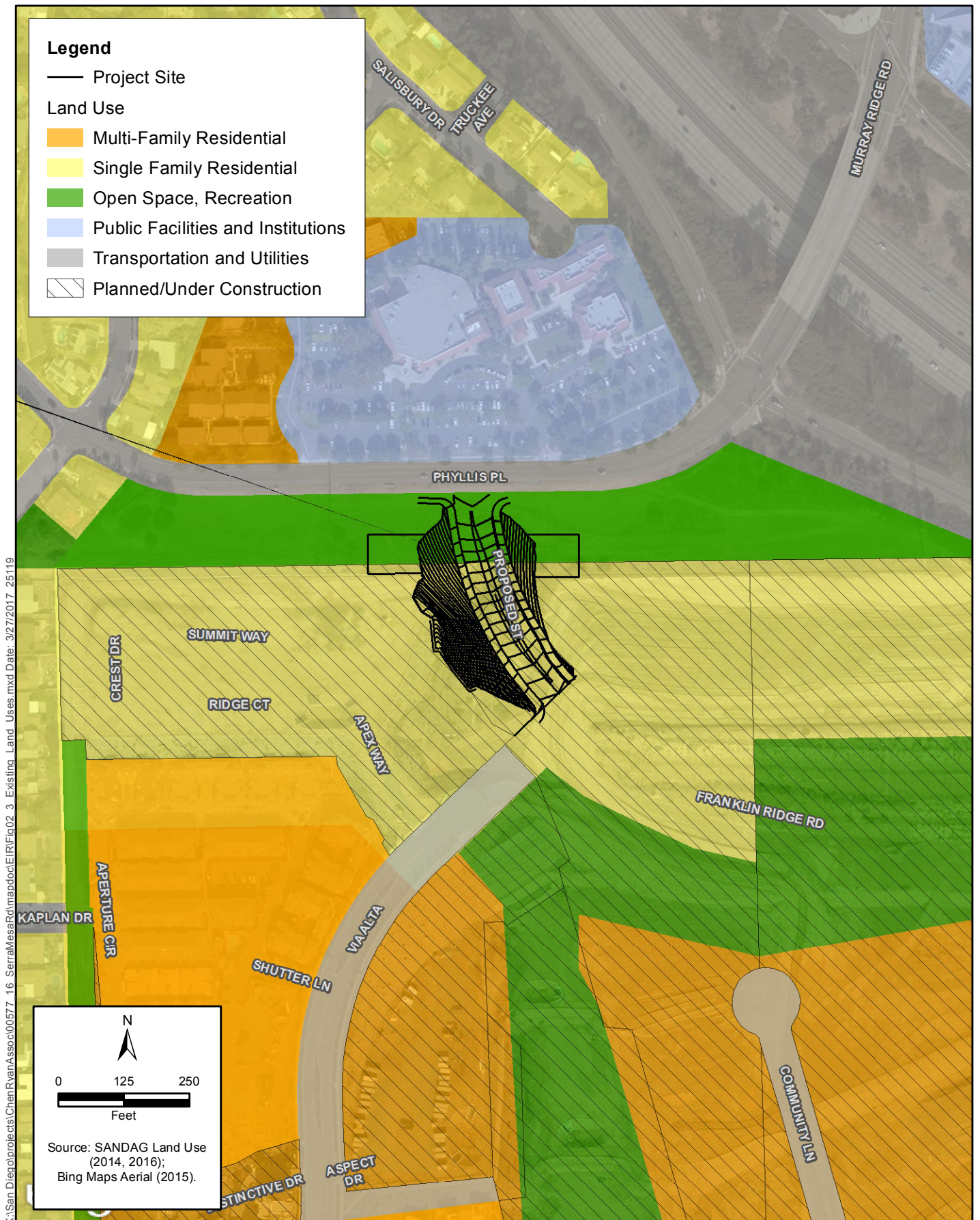


Figure 2-3
Existing Land Uses

park within Quarry Falls. Farther west of the Quarry Falls site, off Abbotshill/Ainsley Road, are single-family homes.

The Quarry Falls site encompasses approximately 225 acres immediately south of Phyllis Place. The Quarry Falls project includes development of a mixed-use, walkable community including residential, commercial, and parks and open space development. Franklin Ridge Road and Via Alta Road are roadways within the Quarry Falls site that are modified two-lane collector roads with left-turn pockets within an 86-foot-wide right-of-way accompanied by a 16-foot-wide median. The Quarry Falls PEIR shows these two streets meeting in the northern portion of the site and includes Class II bike lanes and a 6-foot-wide sidewalk on either side of each street.

2.2 Existing Physical Site Conditions

The project site is primarily disturbed, though it does not contain any buildings or structures. The project site contains one vegetation community and two land cover types. Approximately 0.25 acre of disturbed coastal sage scrub, a sensitive vegetation community, occurs within a portion of the project site. This is considered disturbed due to the low percentage cover of native species (approximately 20–45%). Approximately 1 acre of disturbed habitat was observed on site. This is a land cover type characterized by a predominance of nonnative species, often introduced and established through human action. Approximately 0.9 acre of developed land, defined as an area that has been constructed upon, was also observed on site.

The topography of the project site generally slopes downward naturally toward the southern extent of the Quarry Falls site. The highest elevation on site occurs along the northern portion of the proposed project at the existing road shoulder and sidewalk south of Phyllis Place (292 feet AMSL). The lowest elevation on site occurs in the central portion of the project site at 225 feet AMSL.

The project site is underlain by deposits of the Mission Valley Formation overlying deposits of Stadium Conglomerate. Engineered fill materials also occur on site. Five surficial soil types and one geologic formation were identified underlying the project site. The surficial deposits consist of compacted fill, undocumented fill, topsoil, alluvium, and Terrace Deposits underlain by the Stadium Conglomerate.

2.3 Existing Transportation Network

As the proposed project comprises a roadway connection, existing transportation facilities that make up the local network are briefly discussed below; however, Section 5.2, *Transportation and Circulation*, provides a detailed discussion of the existing transportation network, impacts, and mitigation measures.

2.3.1 Existing Roadway Network

Figure 2-4 shows the existing roadway network within the vicinity of the project site. A brief description of each roadway is provided below.

Phyllis Place/Murray Ridge Road runs in a northeasterly direction. Currently it functions as a two-lane roadway from Abbotshill Road to Pinecrest Avenue. Its ultimate classification in the Serra

Mesa Community Plan (2011) is a four-lane roadway. Murray Ridge Road provides the Serra Mesa Community access to I-805 and Mission Valley (via Mission Center Road). Parking currently exists on both sides for the majority of Phyllis Place and Murray Ridge Road. Murray Ridge Road also has Class II bike lanes and is served by Metropolitan Transit System (MTS) bus route 928.

Friars Road is an east-west regionally significant roadway that runs from the Navajo community to the east, where it becomes Mission Gorge Road and heads east into Santee, to Sea World Drive in Mission Bay to the west. Friars Road provides direct access to Qualcomm Stadium, Hazard Center, and Fashion Valley Mall. Within the vicinity of the project site, Friars Road functions as a six-lane roadway. There is no parking on Friars Road within the project study area. Friars Road has Class II bike lanes. The speed limit is 50 miles per hour (mph).

Mission Center Road is a north-south roadway that connects the Serra Mesa Community to Friars Road and eventually to I-8. It functions as a four-lane roadway between Mission Center Court and Friars Road with an ultimate classification of a six-lane roadway. Mission Center Road provides access to the project site, and the speed limit is 35 mph. Parking is prohibited along Mission Center Road. Mission Center Road has Class II bike lanes and is served by MTS bus route 928.

Via Alta and Franklin Ridge Road, according to the Quarry Falls PEIR, would provide north-south travel through Quarry Falls. Via Alta begins at the Creekside District in the western portion of Quarry Falls, traversing the Foothills District. Franklin Ridge Road has not been fully constructed at the time this DEIR was prepared. However, it would begin at the eastern terminus of Quarry Falls Boulevard. These streets have been designed to meet in the northern portion of the Specific Plan. These would be constructed as modified two-lane collector roads with left-turn pockets within 86-foot-wide rights-of-way and a 16-foot-wide median. The median would be reduced in width to 6 feet in order to allow for turn lanes. Class II bikeways and a 6-foot-wide sidewalk, separated from the streets by an 8-foot-wide parkway, would occur on both sides of Via Alta and Franklin Ridge Road. Neither street would allow for parking.

Civita Boulevard, according to the Quarry Falls PEIR,² would be constructed as the primary circulation spine for Quarry Falls. Paralleling Friars Road, Quarry Falls Boulevard would provide a vehicular, pedestrian, and bicycle connection between Mission Center Road on the west and Qualcomm Way on the east. The Quarry Falls Specific Plan includes varying treatments for Quarry Falls Boulevard as it extends from Mission Center Road to Via Alta and Qualcomm Way to Franklin Ridge Road.

2.3.2 Existing Transit Network

Transit opportunities in the vicinity of the project site include bus service and the trolley, both of which are operated by MTS. There are numerous bus routes that serve both communities, but also provide access to the Fashion Valley Transit Center, where commuters can then board the trolley.

As shown in Figure 2-5, several bus routes traverse the Mission Valley and Serra Mesa communities; however, the most pertinent to the vicinity of the project site include MTS bus routes 25 and 928. MTS route 25 runs from the Fashion Valley Transit Center northeast through Linda Vista, Mesa College, along Aero Drive in Serra Mesa, east to Tierrasanta, then back west ending at Kearny Mesa

² This roadway was originally called “Quarry Falls Boulevard” in the Quarry Falls PEIR, but has since been renamed along with the project. It is referred to as Civita Boulevard throughout this document.

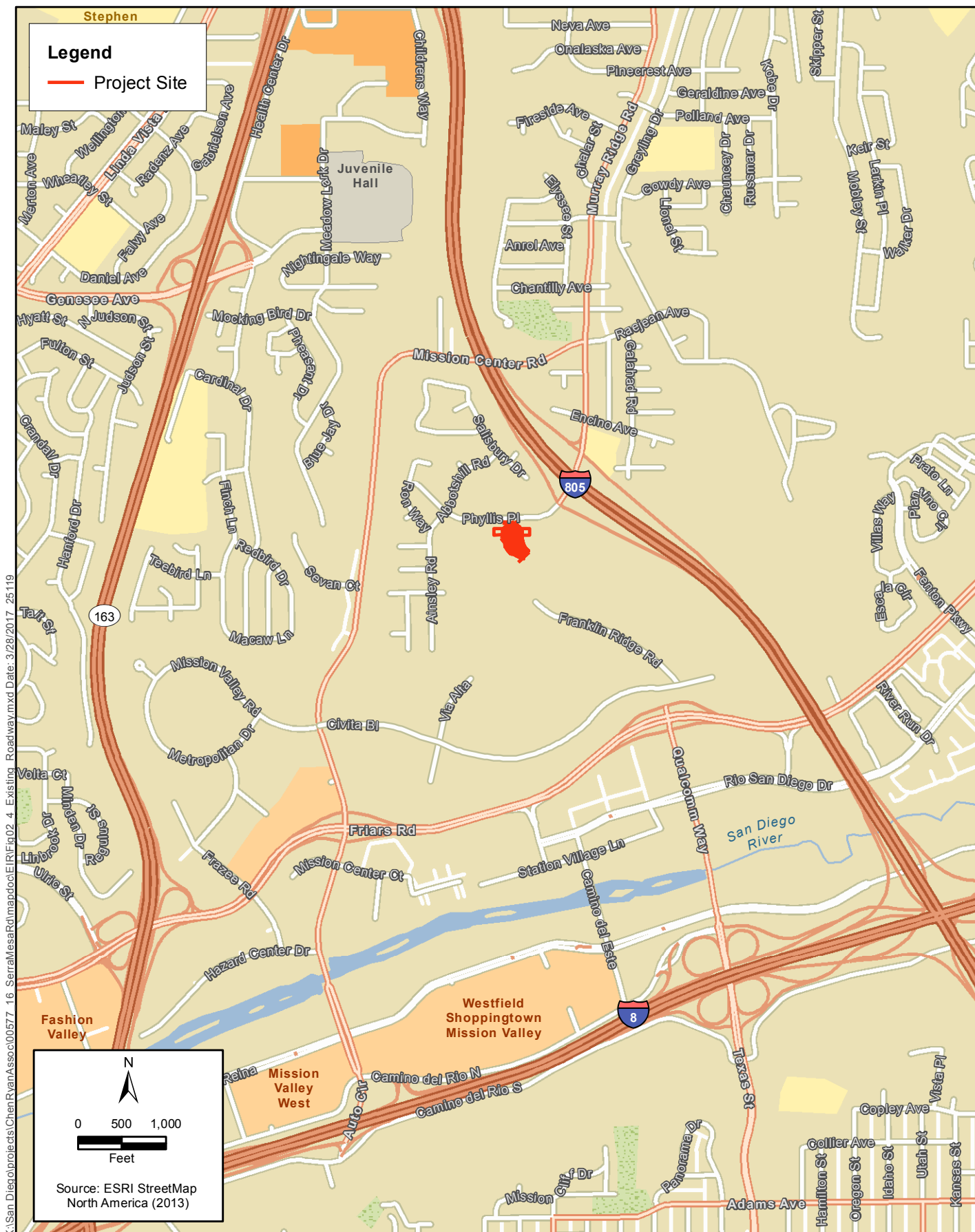
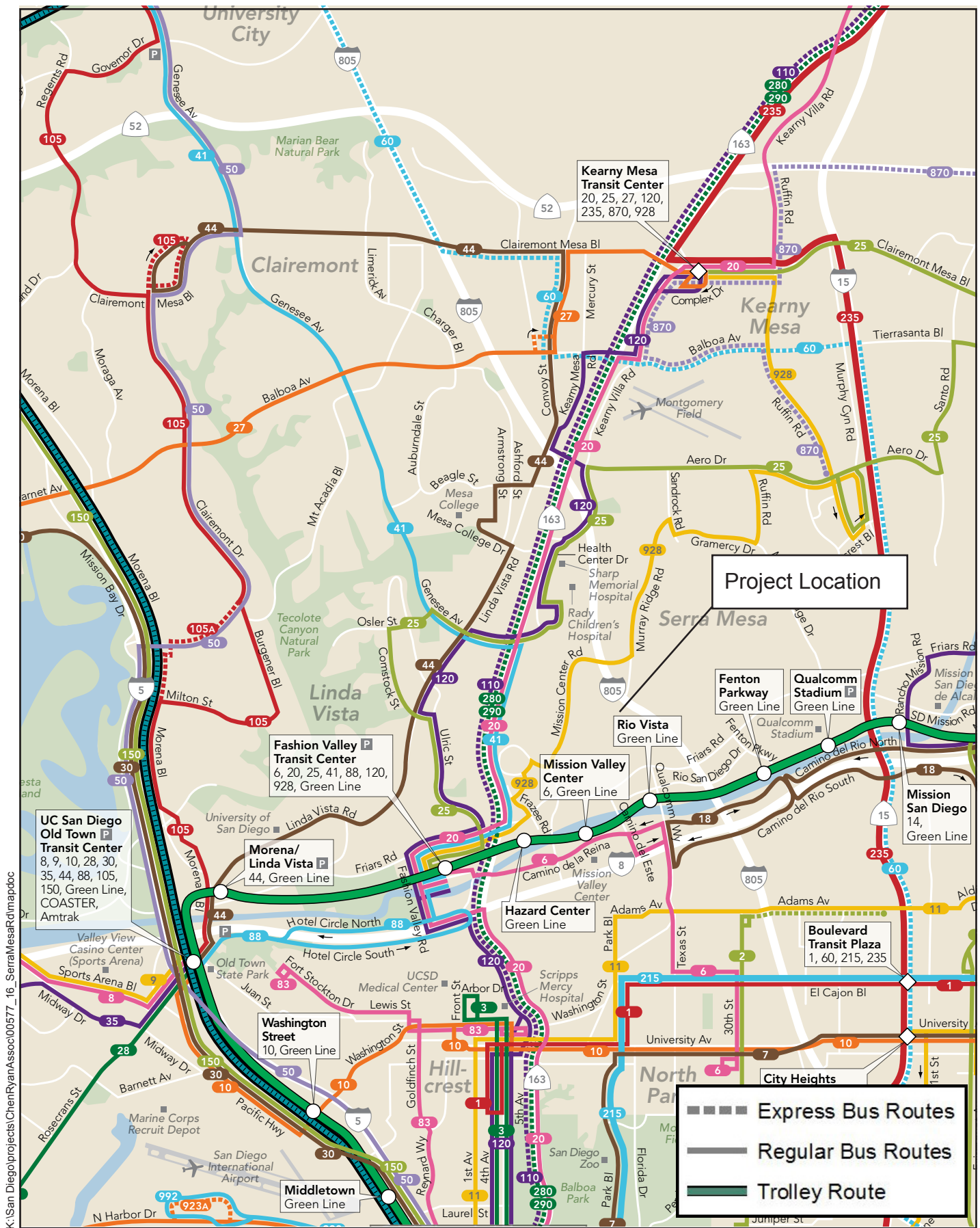


Figure 2-4
Existing Roadway Network



Source: SANGIS

Figure 2-3
Existing Transit Facilities within Project Vicinity

Transit Center. MTS route 928 also begins at the Fashion Valley Transit Center and runs northeast toward the vicinity of the project site via Mission Center Road, through Serra Mesa via Murray Ridge Road, then eventually north to the Kearny Mesa Transit Center via Ruffin Road.

The MTS trolley system's Green Line service runs through Mission Valley connecting Old Town and Downtown San Diego with Qualcomm Stadium, San Diego State University, and cities to the east. Within Mission Valley, the Green Line runs parallel to and along Friars Road with stops at Fashion Valley Transit Center, Mission Center Road/Hazard Center Drive, Mission Valley Center, Qualcomm Way (Rio Vista), Fenton Parkway, and Qualcomm Stadium. The MTS Green Line also connects with the Blue Line and Orange Line in Downtown San Diego to connect with the San Diego/Mexico border, and Southeast San Diego, Lemon Grove, and La Mesa. Extension of the system is planned for a northerly route to the University of California at San Diego and to University Towne Center in the next few years.

There are two trolley stations within the vicinity of the project site (see Figure 2-5): the Rio Vista Station and the Mission Valley Center Station. The Rio Vista Station is not currently served by any MTS bus routes and does not have any dedicated parking for transit users. The Mission Valley Center Station is served by MTS bus route 6, which runs from Fashion Valley to North Park via Camino de la Reina, Texas Street, and El Cajon Boulevard. There is no dedicated parking for transit users at the Mission Valley Center Station. Therefore, there are currently no bus routes or parking opportunities at the trolley stations within the immediate vicinity of the project site, although opportunities do exist to connect to the Fashion Valley Station, as previously detailed above.

2.3.3 Existing Pedestrian and Bicycle Circulation Network

Pedestrian facilities are provided as sidewalks and multi-use trails. Bicycle opportunities are provided by bikeways. The City has three classifications for bikeways: Class I (Bike Path or Trail), Class II (Bike Lane), and Class III (Bike Route). The City also has other bikeway designations including Freeway Shoulder, Cycle Track, and Bicycle Boulevard. A Class I bike path is located on the north side of Friars Road west of Fashion Valley Road to Sea World Drive, while a Cycle Track is located on the south side. A Class II bike lane is provided along Friars Road east of Fashion Valley Road. Additionally, there are Class II bike lanes along Mission Center Road and Qualcomm Way. Class I paths for both pedestrians and bicyclists have been developed within the San Diego River open space corridor.

The Quarry Falls project also included the provision of a network of publicly accessible trails and pedestrian amenities "to tie together the various open space, parks, recreation, and community activities" (page 3-17 of the Quarry Falls PEIR). A Park Trail was proposed that would traverse the Quarry Falls site from north to south, while a system of Finger Trails was proposed to serve as lateral connections to the various planning districts. The pedestrian trail system, in conjunction with the street network, is proposed to serve pedestrians and bicyclists. In addition, the proposed Phyllis Place Park is a passive-use park that includes a decomposed granite pathway for pedestrians along the south side of Phyllis Place. This park is discussed further within Chapter 3, *Project Description*.

2.4 Existing Emergency Services

Figure 2-6 shows the existing fire and police stations within the vicinity of the project site.

2.4.1 Fire Protection and Emergency Medical Services

The City of San Diego Fire-Rescue Department provides fire protection and emergency services for the project site. In the City, emergency medical services usually arrive first in a fire engine response (also known as first responder). First responders also provide full paramedic care and augment ambulance staffing during transport of critical patients. The paramedic/firefighter is reinforced by a paramedic ambulance.

The project site would be served by the San Diego Fire-Rescue Department Fire Station 45, which is located at 9366 Friars Road, approximately 1.3 miles east of the project site (Trame pers. comm.). Fire Station 45 serves an approximately 4.28-square-mile area in West Mission Valley and its surrounding areas (City of San Diego 2016a). Fire Station 45 opened in November 2015 and contains four battalion chief vehicles, Fire Engine 45, and two HAZMAT response units. In fiscal year 2016, Fire Station 45 responded to more than 3,080 incidents, including fire, rescue, emergency medical, non-emergency medical, and hazards.

Fire Station 28 at 3880 Kearny Villa Road, approximately 1.9 miles north of the project site, opened in 1958 and serves 7.76 square miles within Kearny Mesa/Montgomery Field and its surrounding areas and could also serve the project site (City of San Diego 2016b). The station contains a fire engine, truck, water tender, foam apparatus, and crash apparatus. In fiscal year 2016, Fire Station 28 responded to more than 3,581 incidents, including fire, rescue, emergency medical, urgent medical, non-emergency medical, and hazards.

As detailed in the City's General Plan (2008), fire and emergency medical response services are to be provided to ensure that service standards are attained for existing development and new development, as it occurs. Appropriate equipment and staffing should be assigned to the facilities to ensure adequate response to the population and the structure types that may exist in the community. Additional information is provided in Chapter 7, *Effects Not Found To Be Significant*.

2.4.2 Police Protection

Police services to the project site would be provided by the City of San Diego Police Department (SDPD). Information within this section is based on correspondence with SDPD (City of San Diego 2016c). The project site would be served by officers from the Eastern Division, which services numerous eastern communities including Serra Mesa, Qualcomm, and Mission Valley East. SDPD has mutual aid agreements with all other law enforcement agencies in San Diego County.

Eastern Division is currently staffed with 84 sworn personnel and one civilian employee. Officers work 10-hour shifts. Staffing comprises three shifts that operate from 6:00 a.m.–4:00 p.m. (First Watch), 2:00 p.m.–midnight (Second Watch), and 9:00 p.m.–7:00 a.m. (Third Watch). Using SDPD's recommended staffing guidelines, Eastern Division currently deploys a minimum of nine patrol officers on First Watch, 11 patrol officers on Second Watch, and eight patrol officers on Third Watch. SDPD does not staff individual stations based on ratios of sworn officers per 1,000-population ratio. The goal citywide is to maintain 1.48 officers per 1,000-population ratio. SDPD is currently staffing a ratio of 1.36 sworn officers per 1,000 residents based on the estimated residential population of 1,311,882 in 2015. This ratio does not include the significant population increase resulting from citizens who commute to work from outside of the City of San Diego or those visiting. Additional information is provided in Chapter 7, *Effects Not Found To Be Significant*.

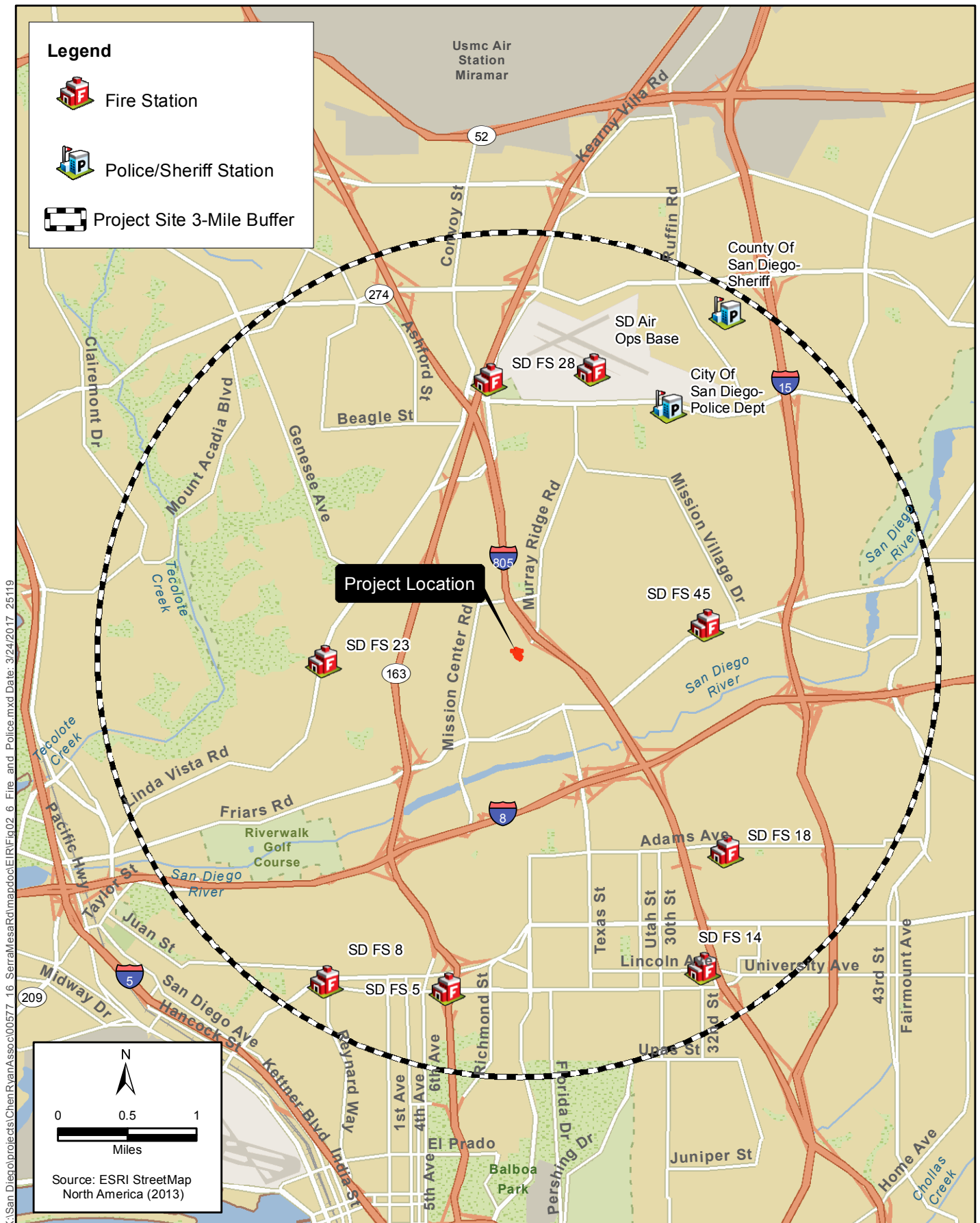


Figure 2-6
Fire and Police Stations within Project Vicinity

The proposed Serra Mesa Community Plan Amendment (CPA) Roadway Connection Project (proposed project) is located on approximately 2 acres in the Serra Mesa and Mission Valley communities of San Diego, California (see Figures 2-1 and 2-2). The proposed project consists of construction and operation of a four-lane major street, complete with bicycle lanes and pedestrian pathways, extending from Phyllis Place in Serra Mesa southward to Via Alta and Franklin Ridge Road in Mission Valley (Figure 3-1).

The proposed project would require an amendment to the Serra Mesa Community Plan. This amendment would require map and text changes to the plan to include the roadway connection as a four-lane major street and revise the Street Classification and the Bikeways and Pedestrian Walkway figures in the currently adopted Serra Mesa Community Plan.

3.1 Project Objectives

The City of San Diego (City) has identified the following objectives for the proposed project.

- Resolve the inconsistency between the Mission Valley Community Plan and the Serra Mesa Community Plan by providing a multi-modal linkage from Friars Road in Mission Valley to Phyllis Place in Serra Mesa.
- Improve local mobility in the Serra Mesa and Mission Valley planning areas.
- Alleviate traffic congestion and improve navigational efficiency to and from local freeway on- and off-ramps for the surrounding areas.
- Improve emergency access and evacuation route options between the Serra Mesa and Mission Valley planning areas.
- Provide a safe and efficient street design for motorists, cyclists, and pedestrians that minimizes environmental and neighborhood impacts.

3.2 Project Background

3.2.1 Project Initiation

Currently, there is a discrepancy between the Mission Valley Community Plan and Serra Mesa Community Plan regarding a roadway connection south from Phyllis Place. The Mission Valley Community Plan calls for a roadway connection; the Serra Mesa Community Plan does not include the connection on the roadway map (included in its Transportation Element).

Concerning the roadway connection, the Mission Valley Community Plan (adopted June 1985) states:

Public streets of adequate capacity to connect Stadium Way and Mission Center Road with I-805 at Phyllis Place will be needed when urban development occurs north of Friars Road

between Mission Center Road and I-805. Provision of these streets will not be considered until the sand and gravel operation has ceased and resource depletion has occurred. Additionally, the exact alignment will be determined by detailed engineering studies, by agreement between the City and the property owner at the time urban development takes place on these parcels.

On May 11, 2005, Quarry Falls, a limited liability corporation, submitted an application to the City for a CPA, general plan amendment, rezoning, specific plan, master planned development permit, site development permit, vesting tentative map, and conditional use permit/reclamation plan amendment for the Quarry Falls project. The Quarry Falls site is primarily within the Mission Valley Community Plan area, bordered on the south by Friars Road, on the north by Phyllis Place (within the Serra Mesa Community Plan area), on the east by I-805, and on the west by Mission Center Road (Figure 3-2).

As detailed in Chapter 1, *Introduction*, a Program Environmental Impact Report (PEIR) was prepared for the Quarry Falls project. Several alternatives within the Quarry Falls PEIR analyzed a potential road connection from the Quarry Falls development north to Phyllis Place. Specifically, Alternative 4 (Road Connection to Phyllis Place) analyzed the potential environmental impacts of the road connection itself. Figure 3-3 depicts the Road Connection to Phyllis Place Alternative that was shown in the Quarry Falls PEIR.

On October 21, 2008, the City Council held a public hearing and approved the Quarry Falls Project. As part of the actions by which it approved the Quarry Falls Project, the City Council initiated an amendment (Staff Recommendation Number 6) that directed City staff to analyze an amendment to the Serra Mesa Community Plan to include a street connection between Phyllis Place and Friars Road in the Serra Mesa Community Plan Transportation Element.

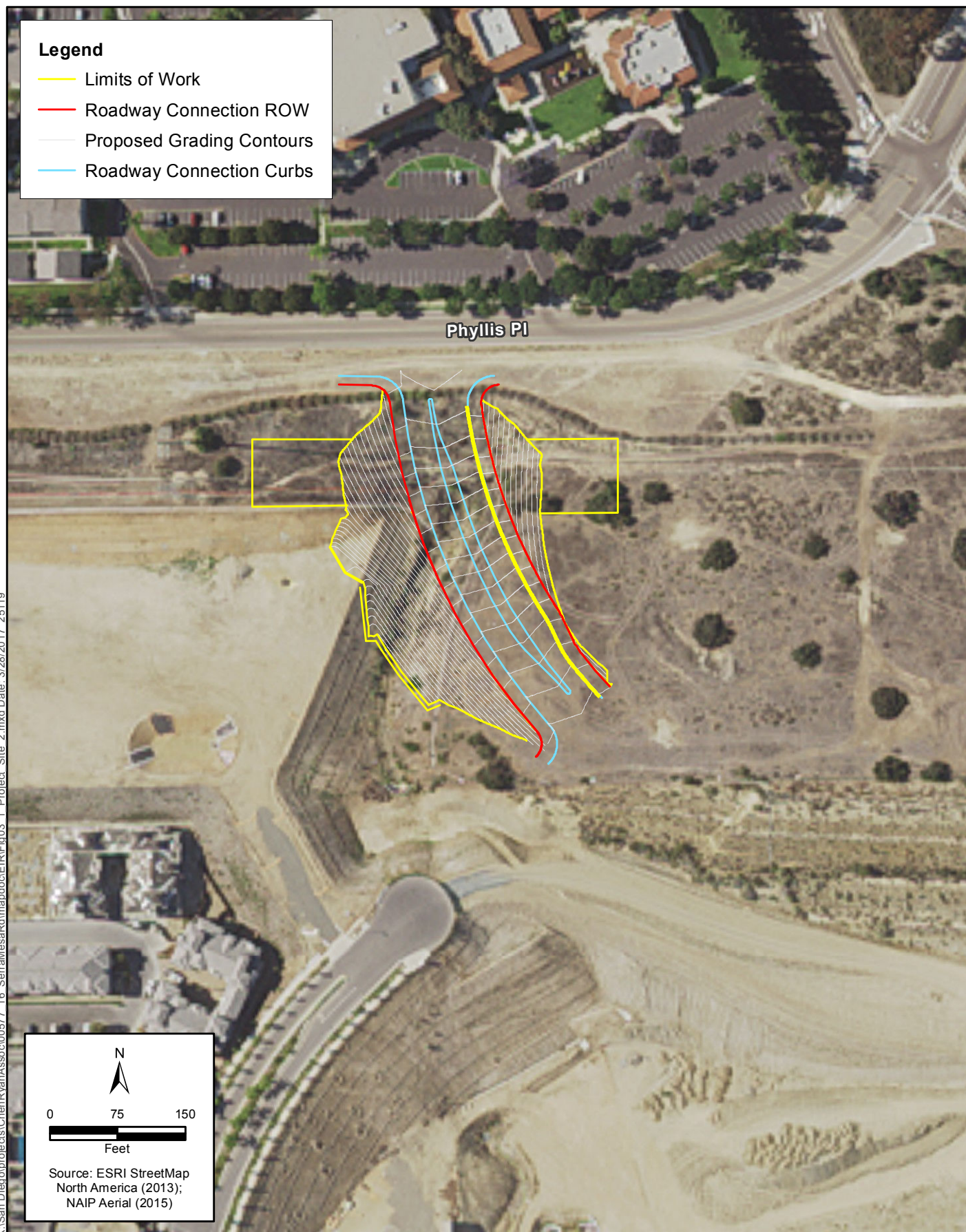
The Staff Recommendation (City Council Resolution R-304297) stated:

The City Council directs staff to analyze the following issues in relation to the street connection and land use plan amendments:

1. Whether police and fire response times would be improved with the road connection;
2. Whether the road connection could serve as an emergency evacuation route;
3. Whether it is feasible to make the road available for emergency access only; and
4. Whether pedestrian and bicycle access would be improved by the street connection.

Subsequently, on January 23, 2012, the City's Development Services Department circulated a Notice of Preparation for an EIR for the proposed project, stating that the project included a CPA, site development permit, and construction of the road. Prior to public review, however, the site development permit and construction of the road were removed from the scope and the CPA was analyzed at a "programmatic" level. On April 18, 2016, the PEIR was circulated for public review by the City's Planning Department. After considering the comments received during the public review period, the City decided to analyze the road connection with a project-level analysis. The additional description and analysis warranted revisions to the draft PEIR, which in turn led the City to decide to replace the PEIR with a project-level EIR and recirculate for a second public review.

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**Figure 3-1
Project Site**



Public Open Space is publicly owned or includes an easement for general public use

Source: Quarry Falls PEIR, 2008

Figure 3-2
Quarry Falls Specific Plan Land Use Plan



Source: Quarry Falls PEIR, 2008

Figure 3-3
Road Connection to Phyllis Place, Alternative 4 (as depicted in Quarry Falls PEIR)

3.2.2 Relationship to Quarry Falls Project

The Quarry Falls mixed-use project was approved by the City Council in 2008 and is currently under construction. As previously detailed in Chapter 1, *Introduction*, the Quarry Falls PEIR is incorporated by reference throughout this DEIR and is available for review at the City's website;¹ a hard copy is available at the City Planning Department.²

The Quarry Falls PEIR stated that the proposed project would include a development cap that would prohibit the project from exceeding 4,780 residential units, 603,000 square feet of retail space, and 620,000 square feet of office/business park uses. The project would also include 31.8 acres of public and private parks, civic uses, open space and trails, and an optional school site. Construction of Segments A, B/C, and F on the southwestern portion of the site has been completed. Land uses within this area include currently occupied residences. The remaining portions of the Quarry Falls site will include multiple uses, including residential, mixed-use/commercial, and open space/park areas. Figure 3-4 shows the phasing plan for the Quarry Falls project.

Quarry Falls has several areas for open space and recreational uses, including parks. The Quarry Falls Park as a whole is approximately 17 acres in size and when ultimately constructed will extend from the southern boundary of the Serra Mesa community to the north side to Quarry Falls Boulevard on the south. The Quarry Falls Park is composed of several smaller parks, trails, pathways, and other recreational uses, including two in the vicinity of the project site.

Phyllis Place Park is a proposed linear park that would be located on the southern side of Phyllis Place. It would be a 1.33-acre linear park for passive use activities. A series of overlooks would be provided with benches, tables, and interpretive panels. Special features include an overlook seating area, children's play areas that would include natural play components, and islands of planters along the primary walkway. The landscaping would include low-water-use California native plants.

The Quarry Falls developer has processed two General Development Plans for Phyllis Place Park that have been approved: one that assumed the road connection would occur (Figure 3-5a) and one that did not (Figure 3-5b). In either case, the acreage within the park would remain the same. The road connection would also be adjacent to the Upper Springs Park (as titled in the Quarry Falls Specific Plan and shown in Figure 3-6). As of April 2015 (the existing baseline condition), the area where the park would be located was vacant.

In addition, prior to construction, the Quarry Falls project site contained areas identified as Sensitive Lands in the City's Environmentally Sensitive Lands (ESL) Ordinance (Municipal Code Section 143.0100), including a small area (0.18 acre) of disturbed wetlands, as well as upland habitat (coastal sage, scrub, mixed chaparral, and annual grasslands) and a very small amount of steep slopes (less than 700 square feet). The ESL ordinance requires processing of a Site Development Permit (SDP) concurrently with the project's actions. The SDP issued in conjunction with the Quarry Falls project covers the parkland within the Quarry Falls Specific Plan area. The project site is within this covered area; therefore, under the SDP, potential environmental impacts on the ESL have already been accounted for.

¹ <https://www.sandiego.gov/planning/programs/ceqa>

² 1010 Second Avenue, Suite 1200, East Tower, M.S. 413, San Diego, CA 92101

The proposed roadway connection can be accomplished with a public street easement dedication, which is a ministerial decision (Process 1) involving an administrative City staff level review. An amendment to add the roadway connection to the parkland in the SDP as part of this ministerial process, may include but not be limited to associated mapping actions, the dedication of the roadway easement, and construction review of any other associated public improvements that may be required as part of the project. It is reasonably foreseeable that the roadway could be proposed and implemented without further discretionary review if the proposed project were to be approved and this DEIR were to be certified.

If the project were to be completed and its mitigation measures implemented, that fact could affect one or more of the impacts identified as significant in the Quarry Falls EIR for which the City previously imposed mitigation and for which CEQA and the U.S. Constitution impose requirements regarding nexus and proportionality. To the extent the Quarry Falls permittee were to present substantial evidence that demonstrated to the City's satisfaction that a significant impact were reduced or eliminated as a result of the roadway project, the City could consider, via the Substantial Conformance Review process, the appropriateness of amending that project's mitigation measures so as to help ensure that the mitigation imposed addresses the actual impacts of the project and conforms to the City's obligation to respect Constitutional limitations.

The City is not proposing to construct or fund the roadway connection but only to analyze the environmental effects of its construction and operation, as directed by the City Council. It is anticipated that the Quarry Falls developer would implement the proposed project; however, the proposed project could be implemented by another entity. The Quarry Falls developer is currently subject to the Mitigation Monitoring and Reporting Program (MMRP) that was approved as part of the Quarry Falls PEIR, including mitigation for traffic impacts. That MMRP assumed that there would not be a roadway connection because the City Council directed the planning staff to further analyze the connection. However, Alternative 4 within the Quarry Falls PEIR included mitigation measures for the roadway connection.

This EIR analyzed and recommends mitigation for certain issues that were previously analyzed in the Quarry Falls EIR. To the extent this EIR identifies mitigation for any impact that was also identified in the Quarry Falls EIR and for which mitigation was previously imposed, the mitigation identified in this EIR should be considered to take precedence because its analysis is based on updated data. For example, it includes an updated traffic study (Appendix C). Therefore, if the road connection (i.e., the proposed project) were to be implemented, the developer of that project would be required to adhere to the traffic/transportation mitigation measures included within this EIR. As a result, with respect to study locations where the two EIRs are congruent, implementation of the mitigation measures included within Section 5.2, Transportation and Circulation, would supersede corresponding traffic/transportation mitigation measures within the Quarry Falls EIR, provided that the Quarry Falls developer demonstrated to the satisfaction of the City Development Services Department that the mitigation sufficiently addresses that impact. To the extent the Quarry Falls EIR studied locations that were not studied in this EIR, the mitigation identified in the Quarry Falls EIR for those impacts would not be affected.

3.3 Project Components

The proposed project consists of (1) construction and operation of a roadway connection from Phyllis Place southward to Franklin Ridge Road and Via Alta Road and (2) an amendment to the



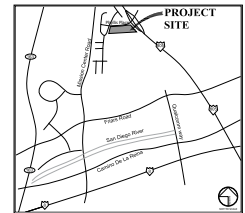
Source: Quarry Falls, LLC, 2012.

Figure 3-4
Quarry Falls Phasing Plan

PARK DESIGN CONCEPT

Phyllis Place Park is a 1.33 acre park site proposed for a disturbed and underdeveloped area of land that is aligned along the road, Phyllis Place. The linear park is for passive use activities; including walking and enjoying spectacular views of Mission Valley along meandering walkways. A series of overlooks are provided with benches, tables and interpretive panels. Special features include a 'Historical Overlook' seating area, children's play areas that will include natural play components, and islands of planters along the primary walkway. The planting palette will include low water use California natives.

SITE MAP



Alternative Showing Road Connection



LEGEND

- | | |
|---|------------------------------|
| ① INTERPRETIVE GARDENS FEATURING CALIFORNIA NATIVES | ⑪ PICNIC TABLES, TYPICAL |
| ② DECOMPOSED GRANITE PATH | ⑫ DRINKING FOUNTAIN |
| ③ PROPERTY LINE | ⑬ TRASH & RECYCLE RECEPTACLE |
| ④ OVERLOOK NODE | ⑭ GUARDRAIL |
| ⑤A 2-5 YEAR OLD CHILDREN'S PLAY AREA | ⑮ INTERPRETIVE SIGNAGE |
| ⑤B 5-12 YEAR OLD CHILDREN'S PLAY AREA | ⑯ VIEWFINDER TELESCOPE |
| ⑥ SEAT WALL | ⑰ DOG STATION |
| ⑦ UTILITY EASEMENT | ⑱ BOULDERS |
| ⑧ FITNESS NODE | ⑲ TRANSMISSION TOWERS |
| ⑨ EXISTING DRIVEWAY | ⑳ SDGE EASEMENT ROAD |
| ⑩ BENCH, TYPICAL | ㉑ ENHANCED CONCRETE |

NATIVE PLANTING PALETTE

SHRUBS

<i>Agave shawii</i> Shaw's Agave	<i>Ceanothus griseus v. horizontalis</i> Carmel Creeper	<i>Rhus ovata</i> Sugar Bush
<i>Arctostaphylos densiflora</i> Howard McMinn Manzanita	<i>Eriogonum fasciculatum</i> 'Dana Point' Dana Point Buckwheat	<i>Ribes viburnifolium</i> Catalina Perfume Currant
<i>Arctostaphylos edmundsii</i> 'Danville' Danville Manzanita	<i>Fremontodendron</i> 'El Dorado Gold' El Dorado Gold Flannel Bush	
<i>Arctostaphylos</i> 'Emerald Carpet' Emerald Carpet Manzanita	<i>Galvezia speciosa</i> 'Firecracker' Firecracker Island Snapdragon	
<i>Artemisia californica</i> 'Montara' Prostrate California Sagebrush	<i>Heteromeles arbutifolia</i> Toyon	
<i>Baccharis pilularis</i> 'Pigeon Point' San Diego Mugwort	<i>Muhlenbergia rigens</i> Deergrass	
<i>Calliandra californica</i> Red Fairyduster	<i>Rhamnus californica</i> 'Eve Case' Eve Case Coffeeberry	
<i>Ceanothus concha</i> Concha Wild Lilac	<i>Rhus integrifolia</i> Lemonadeberry	

PERENNIALS

<i>Encelia californica</i> Coast Sunflower	<i>Penstemon centranthifolius</i> Scarlet Bugler
<i>Epilobium canum</i> California Fuchsia	<i>Penstemon spectabilis</i> Showy Penstemon
<i>Eriodictyon crassifolium</i> Thick-leaved Yerba Santa	<i>Salvia mellifera</i> Black Sage
<i>Lilium pardalinum</i> Leopard Lily	<i>Salvia spathacea</i> Pitcher Sage
<i>Lobelia cardinalis</i> Cardinal Flower	<i>Sisyrinchium bellum</i> Blue-eyed Grass
<i>Lupinus arboreus</i> Bush Lupine	<i>Sisyrinchium californicum</i> Yellow-eyed Grass
<i>Mimulus cardinalis</i> Scarlet Monkey Flower	<i>Zauschneria californica</i> 'Ghostly' Red Red CA Fuchsia
	<i>Zauschneria cana</i> Red California Fuchsia

TREES

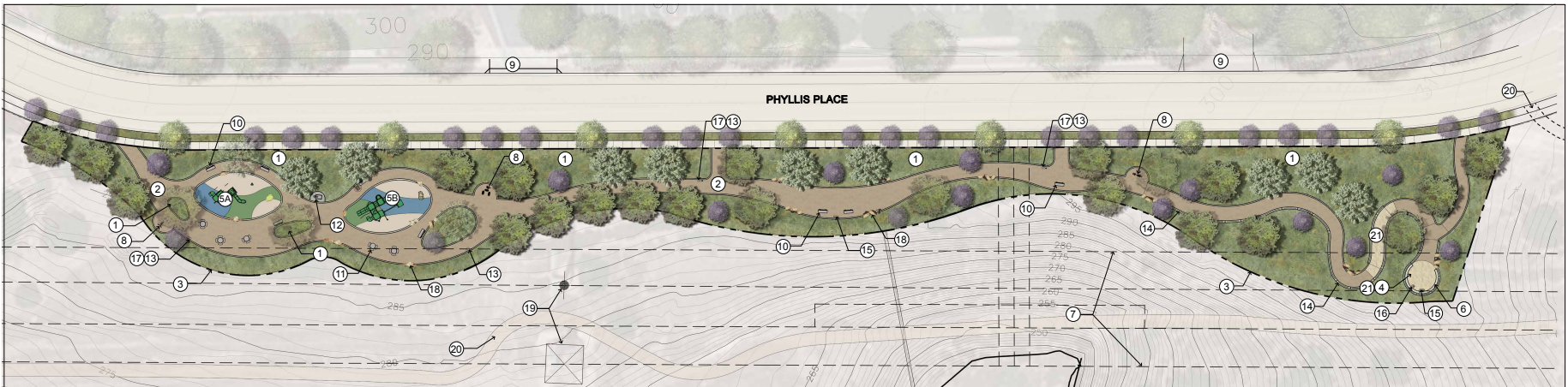
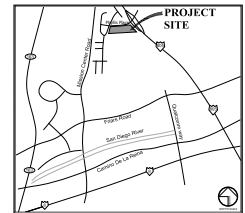
<i>Cercis occidentalis</i> Western Redbud
<i>Cupaniopsis anacardioides</i> Carrotwood
<i>Pinus torreyana</i> Torrey Pine
<i>Quercus agrifolia</i> Coast Live Oak
Existing Trees

PARK DESIGN CONCEPT

Phyllis Place Park is a 1.33 acre park site proposed for a disturbed and underdeveloped area of land that is aligned along the road, Phyllis Place. The linear park is for passive use activities; including walking and enjoying spectacular views of Mission Valley along meandering walkways. A series of overlooks are provided with benches, tables and interpretive panels. Special features include a 'Historical Overlook' seating area, children's play areas that will include natural play components, and islands of planters along the primary walkway. The planting palette will include low water use California natives.

An alternative park plan is included pending notification that a roadway connection may be developed.

SITE MAP



LEGEND

- | | |
|---|------------------------------|
| ① INTERPRETIVE GARDENS FEATURING CALIFORNIA NATIVES | ⑪ PICNIC TABLES, TYPICAL |
| ② DECOMPOSED GRANITE PATH | ⑫ DRINKING FOUNTAIN |
| ③ PROPERTY LINE | ⑬ TRASH & RECYCLE RECEPTACLE |
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| ⑥ SEAT WALL | ⑰ DOG STATION |
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| ⑧ FITNESS NODE | ⑲ TRANSMISSION TOWERS |
| ⑨ EXISTING DRIVEWAY | ⑳ SDG&E EASEMENT ROAD |
| ⑩ BENCH, TYPICAL | ㉑ ENHANCED CONCRETE |

NATIVE PLANTING PALETTE

SHRUBS

<i>Agave shawii</i> Shaw's Agave	<i>Ceanothus griseus v. horizontalis</i> Carmel Creeper	<i>Rhus ovata</i> Sugar Bush
<i>Arctostaphylos densiflora</i> Howard McMinn Manzanita	<i>Eriogonum fasciculatum</i> 'Dana Point' Dana Point Buckwheat	<i>Ribes viburnifolium</i> Catalina Perfume Currant
<i>Arctostaphylos edmundsii</i> 'Danville' Danville Manzanita	<i>Fremontodendron</i> 'El Dorado Gold' El Dorado Gold Flannel Bush	
<i>Arctostaphylos</i> 'Emerald Carpet' Emerald Carpet Manzanita	<i>Galvezia speciosa</i> 'Firecracker' Firecracker Island Snapdragon	
<i>Artemisia californica</i> 'Montara' Prostrate California Segebrush	<i>Heteromeles arbutifolia</i> Toyon	
<i>Baccharis pilularis</i> 'Pigeon Point' San Diego Mugwort	<i>Muhlenbergia rigens</i> Deergrass	
<i>Calliandra californica</i> Red Fairyduster	<i>Rhamnus californica</i> 'Eve Case' Eve Case Coffeeberry	
<i>Ceanothus concha</i> Concha Wild Lilac	<i>Rhus integrifolia</i> Lemonadeberry	

PERENNIALS

<i>Encelia californica</i> Coast Sunflower	<i>Penstemon centranthifolius</i> Scarlet Bugler
<i>Epilobium canum</i> California Fuchsia	<i>Penstemon spectabilis</i> Showy Penstemon
<i>Eriodictyon crassifolium</i> Thick-leaved Yerba Santa	<i>Salvia mellifera</i> Black Sage
<i>Lilium pardalinum</i> Leopard Lily	<i>Salvia spathacea</i> Pitcher Sage
<i>Lobelia cardinalis</i> Cardinal Flower	<i>Sisyrinchium bellum</i> Blue-eyed Grass
<i>Lupinus arboreus</i> Bush Lupine	<i>Sisyrinchium californicum</i> Yellow-eyed Grass
<i>Mimulus cardinalis</i> Scarlet Monkey Flower	<i>Zauschneria californica</i> 'Ghostly' Red Red CA Fuchsia
	<i>Zauschneria cana</i> Red California Fuchsia

TREES

<i>Cercis occidentalis</i> Western Redbud
<i>Cupaniopsis anacardioides</i> Carrotwood
<i>Pinus torreyana</i> Torrey Pine
<i>Quercus agrifolia</i> Coast Live Oak
Existing Trees

Figure 3-5b
Phyllis Place Park without Proposed Roadway



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Source: Quarry Falls Specific Plan, 2008.

Figure 3-6
Quarry Falls Conceptual Park Plan

Serra Mesa Community Plan. Components of the roadway are first discussed, followed by a discussion of the requisite changes to the Serra Mesa Community Plan.

3.3.1 Proposed Roadway

3.3.1.1 Roadway Design

The proposed roadway connection would extend approximately 460 feet south from Phyllis Place to Via Alta and Franklin Ridge Road. The project site evaluated throughout this DEIR encompasses approximately 2 acres, which includes the area required for grading and drainage improvements (see Figure 3-1). The proposed roadway itself would cover approximately 1.25 acre.

The City of San Diego's Street Design Manual (2002) contains guidelines for the physical design of roadways. The guidelines consider the needs of all users of the public right-of-way. The manual includes provisions for street trees and traffic calming, offers pedestrian design guidelines, and discusses how to create streets that are important public places.

The proposed project has been conceptually designed to be consistent with the Street Design Manual. A major street is defined by the manual as:

A street that primarily provides a network connecting vehicles and transit to other major streets and primary arterials, and to the freeway system, and secondarily providing access to abutting commercial and industrial property. It carries moderate-to-heavy vehicular movement, low-to-high pedestrian and bicycle movements, and moderate-to-high transit movement. It has a raised center median, street trees, traffic safety, street lighting, and sidewalks, and may include landscaping, pedestrian-scale lighting, underground utilities, on-street parking, and/or bike lanes.

The proposed roadway would be 460 feet long and classified as a four-lane major street, with an approximately 120-foot right-of-way. The dimensions of the cross-section for the proposed roadway are illustrated in Figure 3-7.

Conceptual design characteristics of the roadway, as analyzed in this DEIR, include the following:

- Design speed: 55 miles per hour
- Minimum radius: 880 feet, with 10% maximum super-elevation
- Maximum grade: 7%

The posted speed for the roadway would very likely be reduced from the design speed because of the relatively short length of the connection, which would transition into a residential area. The posted speed limit would most likely be much less than 55 miles per hour; however, the posted speed cannot be determined before the facility is in operation and is based on the roadway classification. After the project is completed, the City will resurvey the roadway traffic and set the posted speed limit according to the results of that survey, including, but not limited to, the 85th percentile speed. The posted speed would not exceed the design speed, and safety would be a primary consideration for the limit set.

3.3.1.2 Intersection Design

Phyllis Place currently functions as a two-lane collector from Abbotshill Road to Pinecrest Avenue. The ADT capacity of a two-lane collector (as defined by the City) is 15,000 trips. The ultimate

classification of Phyllis Place (as defined by the Serra Mesa Community Plan) is a four-lane major street, which would have the ADT capacity for 40,000 trips.

The proposed project would require a signalized intersection at Phyllis Place. Figure 3-8 shows the cross-section of a standard four-lane major intersection; this would guide the final design for the area where the new roadway would adjoin Phyllis Place. Intersection control would also be required where the proposed roadway would meet Franklin Ridge Road and Via Alta, which are classified as modified two-lane collectors with left-turn pockets. The intersection would be similar to that illustrated in Figure 3-8.

City View Church, located on the north side of Phyllis Place, has a 50-foot-wide driveway that provides primary access to the Church's parking lot. The proposed roadway connection would not align with the City View Church driveway, as it would be located approximately 150 feet west of the driveway. This is because the roadway connection is required to be further west in order to provide adequate sight distance due to the slight curve along Phyllis Place from the I-805 ramps. Therefore, the intersection at Phyllis Place and the proposed roadway would not directly align with the City View Church driveway. The analysis of the proposed roadway and the potential relocation of the driveway is analyzed within Section 5.2, *Transportation and Circulation*.

3.3.1.3 Aesthetic Features and Landscaping

Hardscape features that are common to roadways—such as medians, pedestrian walkways, and retaining features—would be designed to minimize visual impacts on the scenic character of the area. Landscaping along the roadway would be low-maintenance native plantings, in accordance with the City's Landscape Standards (updated April 2016) within the Land Development Manual.

The Landscape Standards contain guidelines concerning plant materials, irrigation systems, and street rights-of-way. For example, planted areas within a center median shall have a minimum width of 2 feet, a minimum inside diameter of 4 feet, and a height no greater than 6 inches above the median curb. A 2-foot maintenance walk shall be provided around the perimeter of medians, inclusive of curbing.

All disturbed slope areas would receive erosion-control hydroseed, and all slope areas with a 4:1 gradient or steeper would also receive stormwater and erosion-control fiber rolls. The hydroseed mix would consist of plant species that are native to Southern California, which could include species similar to those used in the Phyllis Place Park plans for continuity, including California sagebrush (*Artemisia californica*), purple needle grass (*Nassella pulchra*), or lemonadeberry (*Rhus integrifolia*).

The pedestrian walkway would consist of a 5.5-foot-wide walkway within the 22-foot-wide parkway. All walkways would be required to be in conformance with Americans with Disabilities Act standards. Temporary irrigation systems shall be provided for the parkway strips and embankments to establish project landscaping. Long-term maintenance of the parkway strips, embankments, and median shall consist of routine weed abatement and removal of invasive species, which shall be the responsibility of the City of San Diego Streets Division.

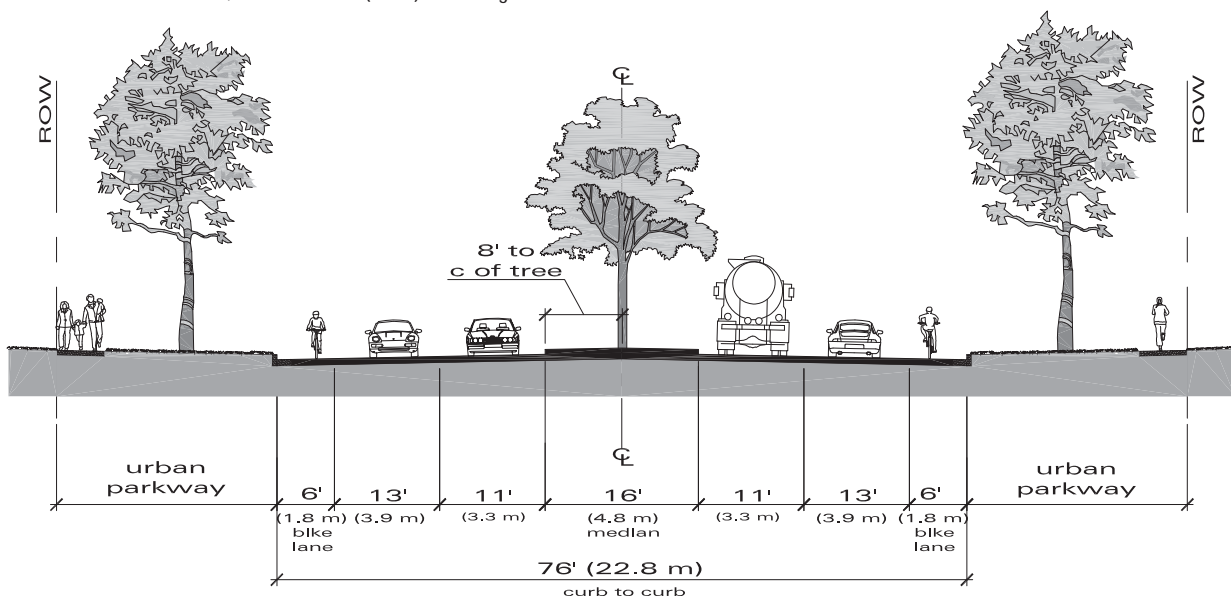
3.3.1.4 Utilities

As stated in the Public Utilities section of the Quarry Falls PEIR, "An existing 20-inch high-pressure gas transmission main crosses the northern portion of the project site, within the Vesting Tentative

Width, Right-of-Way	120 ft. (36.0 m)	
Design ADT	LOS C	30,000
	LOS D	35,000
Design Speed	55 mph (90 km/h)	
Width (includes bike lanes and 16 ft. (4.8 m) raised center median), Curb-to-Curb ^{1,2}	76 ft. (22.8 m)	
Maximum Grade	7%	
Minimum Curve Radius	1,850 ft. (585 m) with no superelevation 1,350 ft. (430 m) with 2% (min.) superelevation 880 ft. (275 m) with 10% (max.) superelevation	
Land Use	Single Dwelling Residential-no front or side yards; Multiple Dwelling Residential-no front or side yards; Community Commercial-no front yards; Regional Commercial; Commercial Office; Visitor Commercial; Church; Public Building; Industrial; Open Space	
Parkway	U-4 (b)	

¹ Widen additional 10 ft. (3.0 m) at approaches to intersecting four-or-six-lane streets to provide a minimum of 250 ft. (75 m) of two-lane left-turn storage, exclusive of transitions. Receiving lanes for dual lefts shall be 12 ft. (3.6 m) wide. In instances where supporting information exists, such as an approved traffic impact study, showing clearly that dual left-turn lanes would not be warranted, the standard curb-to-curb width may be permitted.

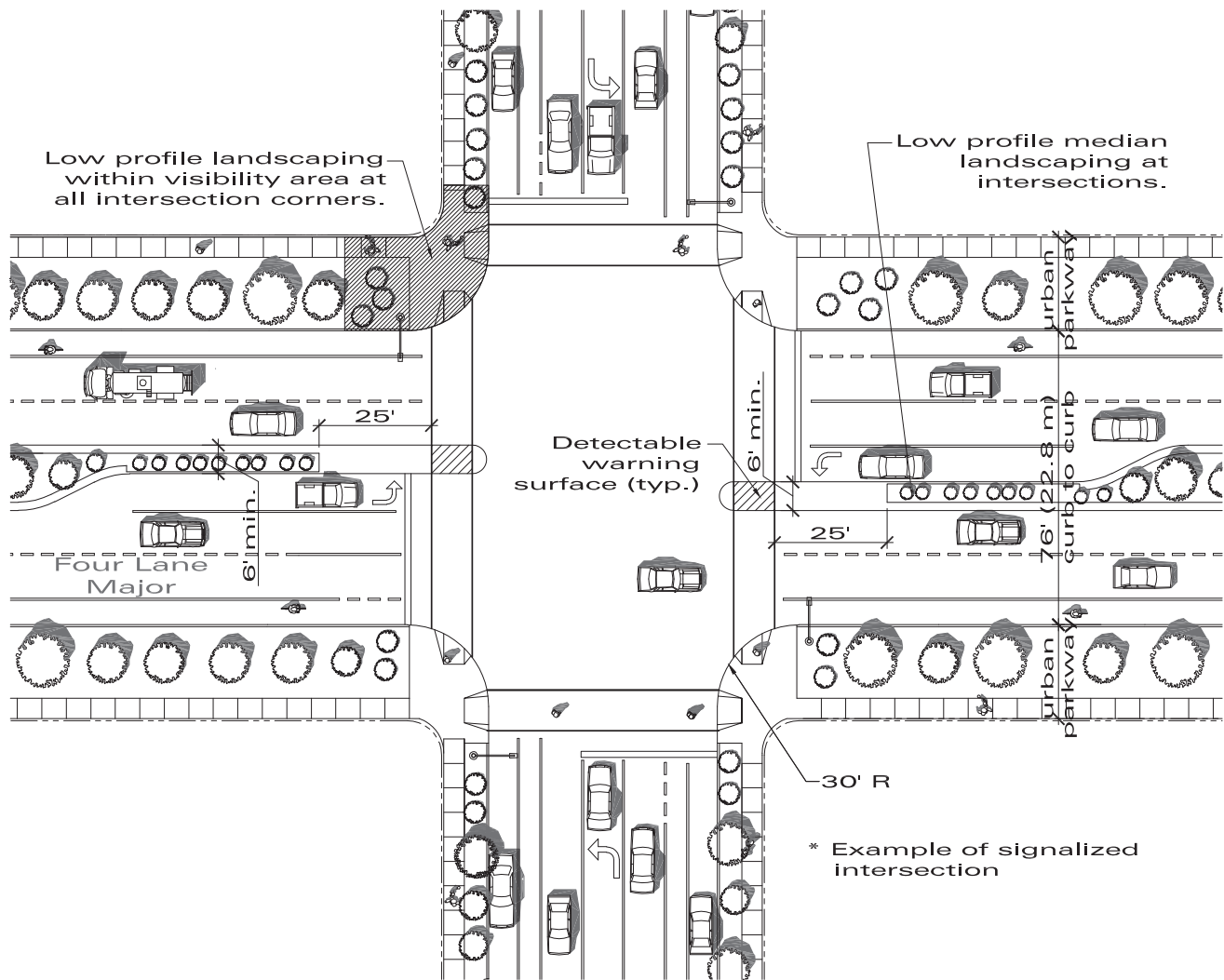
² At intersections, a minimum 6 ft. (1.8 m) wide refuge island shall be maintained in the center median.



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Source: City of San Diego Street Design Manual, 2002

Figure 3-7
Standard Four-Lane Major Roadway Cross-Section



Source: City of San Diego Street Design Manual, 2002

Figure 3-8
Standard Four-Lane Major Roadway Intersection

Map area but outside the Quarry Falls Specific Plan boundary, just south of Phyllis Place. This line runs below the SDG&E [San Diego Gas & Electric] transmission power lines.” This transmission main runs below the project site.

A portion of this high-pressure gas line would be raised within the easement to achieve a preferred depth of 3 feet from finished elevation (Quarry Falls PEIR, page 10-40). The existing portion of the pipeline would be taken out of service and removed following construction of the new portion. The area to conduct this work to bring the gas pipeline to the preferred depth is included within the project site. The Quarry Falls developer coordinated with SDG&E on this approach during preparation of the Quarry Falls PEIR; this approach has been preliminarily accepted by SDG&E, pending final design. The aforementioned transmission power lines are not likely to be affected by project activities; however, further coordination with SDG&E would occur prior to final design.

An existing 6-inch water main runs along the south side of Phyllis Place; however, it is not anticipated that the project would need to relocate this main (Rastakhiz pers. comm.). No sewer or recycled water mains exist within the vicinity of the project site.

3.3.1.5 Drainage

As further detailed in Section 5.8, *Hydrology and Water Quality*, the proposed roadway would require best management practices (BMPs). BMPs would be incorporated into the final design concept to treat potential pollutants from the project prior to discharging off site. The project would be required to comply with the most recent water quality protection standards at the time of construction. Prior to construction, project plans would be reviewed and updated as needed in order to demonstrate compliance with the applicable requirements of the municipal separate storm sewer system permit. The review process would verify that stormwater management objectives were considered in the project planning process and that opportunities to incorporate BMPs have been identified. These BMPs may require updates in order to meet the most recent standards at the time the project is ready to be constructed.

3.3.1.6 Construction

Based on preliminary engineering estimates, grading (assuming no shrink, undercuts, or spoils) would entail 43,500 cubic yards of fill and 0 yards of cut. The maximum fill would be approximately 46 feet. Based on preliminary engineering estimates, project-specific construction assumptions used in the environmental analysis include a 9-month construction period. The roadway would be approximately 460 feet in length and situated within a 2-acre project area. The maximum amount of soil movement would be limited to 500 cubic yards per day. For the purposes of analysis within this DEIR, it is assumed that construction of the roadway could begin in 2017.

The basic steps for roadway construction would include mobilizing equipment to the project site; clearing the road right-of-way; relocating utilities, including drainage culverts and channels; constructing the roadway; installing slope landscaping and enhancements; constructing intersection modifications and adjacent roadway transitions; striping the travel lanes; and installing signals. If the Quarry Falls developer were to implement the project, there would be enough fill material from the existing Quarry Falls site for roadway construction; therefore, it is assumed that haul trips outside of the Quarry Falls site would not be necessary. If another entity were to implement the project and hauling trips would be required, additional analysis would be necessary. The conceptual staging area for project construction is expected to occur on previously cleared land within the

Quarry Falls site. Upon completion of construction, the disturbed parts of the staging area would be cleared, regraded to match existing conditions, and, where appropriate, hydroseeded with the approved native plant palette.

3.3.2 Community Plan Amendment

The proposed project would revise text and figures in the Serra Mesa Community Plan to show a street connection from Phyllis Place (in Serra Mesa) southward to the boundary of the Serra Mesa and Mission Valley Community Plan Areas. The revised figures would include a street alignment to provide a four-lane major street with bicycle and pedestrian facilities. The amendment would result in revisions to all maps of the Serra Mesa Community Plan area, as shown in Appendix A. As further detailed in Section 5.1, *Land Use*, the proposed amendment would not conflict with existing plans, such as the City's General Plan, Climate Action Plan, or Bicycle Master Plan Update. The proposed roadway is included within the Bicycle Master Plan Update as a Class II Bike Route and was also included in the assumptions used to develop the Climate Action Plan.

Chapter 4

History of Project Changes

In compliance with Section 15082 of the State CEQA Guidelines, the City of San Diego Development Services Department circulated the Notice of Preparation (NOP), dated January 23, 2012, to interested agencies, groups, and individuals for a 30-day period. Subsequent to circulation of the NOP, the City Planning Department initiated preparation of a Draft Program Environmental Impact Report (Draft PEIR) and circulated the draft document for a public review from April 18, 2016 to July 5, 2016. The Draft PEIR analyzed the programmatic action of the amendment to include Franklin Ridge Road in the Circulation Element of the Serra Mesa Community Plan.

In light of the public comments received during public review of the Draft PEIR, the construction of the roadway connection was determined to be foreseeable; therefore, a project-level analysis was conducted and included within the recirculated Draft EIR. Further evaluation of the subsequent actions necessary to implement and construct the roadway connection was completed.

This revised and recirculated Draft Environmental Impact Report (DEIR) analyzes impacts at a project level to ensure that all potential significant environmental effects associated with the project are disclosed. The revised Project Description is presented in Chapter 3 and includes construction and operation of a four-lane major street, with bicycle lanes and pedestrian pathways, extending from Phyllis Place in Serra Mesa southward to Via Alta and Franklin Ridge Road in Mission Valley. This revised DEIR has incorporated information and analysis from the Quarry Falls PEIR (July 2008) as it relates to conceptual design of the roadway, environmental setting, and the analysis of impacts, where applicable.

Chapter 5

Environmental Analysis

Sections 5.1 through 5.10 of this chapter contain discussions of the potential significant environmental effects resulting from implementation of the proposed project, including information related to existing site conditions, criteria for determining significance of potential environmental impacts, analyses of the type and magnitude of environmental impacts, and feasible mitigation measures that would reduce or avoid significant environmental impacts.

Potential Environmental Impacts

This chapter provides an analysis of the following potential environmental impacts of the proposed project.

- 5.1 Land Use
- 5.2 Transportation and Circulation
- 5.3 Air Quality
- 5.4 Noise
- 5.5 Biological Resources
- 5.6 Paleontological Resources
- 5.7 Hydrology and Water Quality
- 5.8 Historical Resources
- 5.9 Visual Quality and Neighborhood Character
- 5.10 Greenhouse Gas Emissions

It was determined during the Notice of Preparation scoping period that the proposed project would have either a less-than-significant impact or no impact associated with the following topics: Agriculture and Forestry Resources, Geology and Soils, Health and Safety, Mineral Resources, Population and Housing, Public Services and Facilities, Public Utilities, and Recreation. These topics are described in Chapter 7, *Effects Not Found to be Significant*, of this DEIR.

Format of the Environmental Analysis

Each of the 10 environmental topic sections of this chapter includes the following subsections.

Existing Conditions

According to Section 15125 of the State CEQA Guidelines, an EIR must include a description of the existing physical environmental conditions in the vicinity of a project to provide the “baseline condition” against which project-related impacts are compared. As previously discussed in Chapter 2, *Environmental Setting*, in certain cases, the near-term condition serves as a more appropriate

baseline condition because it would better represent the point in time when the project may become operational. Therefore, some issues that rely on the project traffic data within Sections 5.2, *Transportation and Circulation*, 5.3, *Air Quality*, 5.4, *Noise*, and 5.10, *Greenhouse Gas Emissions*, utilize the near-term baseline. Where this occurs, it is stated as such within these sections.

Regulatory Framework

This subsection provides a summary of regulations, plans, policies, and laws at the federal, state, and local levels that are relevant to the proposed project as they relate to the particular environmental resource area in discussion.

Impact Analysis

This subsection describes the methodology used for the analysis of the potential environmental impacts of the proposed project, identifies the criteria for determining the significance of potential impacts, states a conclusion as to whether the environmental impacts would be considered significant and unavoidable, less than significant with mitigation incorporated, or less than significant (see definitions under *Impact Discussion* and *Mitigation Measures*, below). Each topic analyzed is divided into specific issues, based on potential impacts, and is separated by construction and operation impacts wherever relevant. The discussion of potential impacts is based on the applicable threshold of significance (see *Significance Determination Thresholds*, above) for each issue. Where potential impacts are significant, mitigation measures are identified, as feasible, to minimize, rectify, reduce, eliminate, or compensate for the significant impacts with the goal of reaching a less-than-significant impact determination.

Impact Discussion

The analysis of environmental impacts considers both the construction and operation of the proposed project. As required by Section 15126.2(a) of the State CEQA Guidelines, direct, indirect, short-term, long-term, on-site, and/or off-site impacts are addressed, as appropriate, for the environmental issue being analyzed. This DEIR utilizes the following terms to describe the level of significance of impacts identified during the course of the environmental analysis.

- **No Impact:** used when the project's construction and/or operation would have no adverse effect on a resource.
- **Less than Significant:** used to refer to impacts resulting from implementation of the proposed project that are not likely to exceed the defined thresholds of significance, and potentially significant impacts that are reduced to a level that does not exceed the defined thresholds of significance after implementation of mitigation measures. In the latter case, the determination may also be stated as "less than significant with mitigation incorporated."
- **Significant:** often used to refer to impacts resulting from implementation of the proposed project that exceed the defined thresholds of significance and can be applied before identification of any mitigation measures. A "significant effect" is defined by Section 15382 of the State CEQA Guidelines as "a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment [but] may be considered in determining whether the physical change is significant." For impacts that exceed a

threshold of significance, mitigation measures that avoid or reduce the potential impact are identified, which may cause the impact to be reclassified as less than significant if it is sufficiently reduced, or the impact may remain significant, in which case it is referred to as a significant and unavoidable impact (or unavoidable significant impact).

- **Significant and Unavoidable:** used to refer to significant impacts resulting from implementation of the proposed project that cannot be eliminated or reduced to below standards of significance through implementation of mitigation measures.

Mitigation Measures

Section 15126.4 of the State CEQA Guidelines requires an EIR to “describe feasible measures which could minimize significant adverse impacts.” Mitigation includes avoiding an impact altogether, minimizing impacts, rectifying impacts, reducing or eliminating impacts over time, or compensating for impacts by replacing or providing substitute resources. The State CEQA Guidelines define feasibility as “capable of being accomplished in a successful manner within a reasonable period of time taking into account economic, legal, social, technological, or other considerations.” This subsection lists the mitigation measures that could reduce the severity of impacts identified in the *Impact Discussion* subsection. Mitigation measures are the specific environmental requirements for construction or operation of the proposed project that will be included in the Mitigation Monitoring and Reporting Program and adopted as conditions of approval for the proposed project.

5.1 Land Use

Land use and planning issues refer to the proposed project's compatibility with surrounding land uses and its consistency with land use plans and policies that have regulatory jurisdiction over the project site. This section describes the existing land uses that could be adversely affected by the proposed project, outlines the applicable laws and regulations related to land use and planning, and analyzes the proposed project's compatibility with surrounding development, its consistency with applicable plans and regulations, such as the City of San Diego General Plan and Serra Mesa Community Plan, and its potential to conflict with any applicable habitat conservation plan or natural community conservation plan. The determination of significance regarding any inconsistency with development regulations or plan policies is evaluated in terms of the potential for the inconsistency to result in physical changes to the environment that would be considered significant under CEQA.

5.1.1 Existing Conditions

The existing characteristics on the project site and within the surrounding area are described in Chapter 2, *Environmental Setting*. For the reader's convenience, this section restates the existing site conditions provided in Chapter 2 as they apply to land use and planning.

5.1.1.1 Onsite Land Uses

Land Use

Within the City, land use categories are assigned by the General Plan and are then further refined by Community Plans. Land use categories define what type of use (i.e., residential, commercial) are allowed on a certain property. The proposed project, which consists of a roadway, would be considered a public right-of-way land use. Figure 5.1-1 shows the General Plan land use designations.

The project site has a General Plan land use category of Residential. As previously described, the project site is within the Serra Mesa and Mission Valley community plan areas. The Serra Mesa Community Plan designates the project site as "Low-Density Residential." Within the Mission Valley portion, the project site is within the Quarry Falls Specific Plan area, which is designated as Multi-Use under the Mission Valley Community Plan.

Zoning

Zoning categories typically define development regulations within a property, such as building height, floor-area ratio, and parking requirements. Figure 5.1-2 shows the zoning designations of the project site. There are four zoning designations that apply to the project site, as currently zoned by the City's Municipal Code: RS-1-7, which is for single-family residential use (minimum of 5,000-square-foot lots); RM-2-4, which is for medium-density multiple dwelling units (one dwelling unit for each 1,750 square feet of lot area); RM-3-8, which is for medium-density multiple dwelling units (maximum of one dwelling unit for each 1,000 square feet of lot area); and OP-2-1, which is for open

space park uses including passive and some active uses (San Diego Municipal Code, Chapter 13). Roadways are not subject to zoning restrictions. Current zoning would allow for a street connection as proposed; therefore, rezoning of the site under would not be required.

Existing Site Conditions

The project site is partially within the boundary of the Quarry Falls site and partially within an undeveloped, primarily disturbed hillside. The project site is also within a San Diego Gas & Electric (SDG&E) easement, which contains an active energy transmission line (four-post towers) running east-west at the northern portion of the project site, adjacent to Phyllis Place. A fiber optic utility easement extends parallel to Phyllis Place approximately 10 feet south of the back of the curb.

Planned Land Uses

As previously described in Chapter 3, *Project Description*, the Quarry Falls Park is approximately 17 acres in size and when ultimately constructed will extend from the southern boundary of the Serra Mesa community to the north side to Quarry Falls Boulevard on the south. The Quarry Falls Park is composed of several smaller parks, trails, pathways, and other recreational uses, including two in the vicinity of the proposed roadway.

Phyllis Place Park is a linear park located on the southern side of Phyllis Place (see Figures 3-5a and 3-5b). The Quarry Falls developer has processed two General Development Plans for the park, which were approved by the City Council: one for if the road connection were to occur and another for if it were not to occur. In either case, the acreage within the park would remain the same. The road connection would also be adjacent to the Upper Springs Park (as titled in the Quarry Falls Specific Plan; see Figure 3-6 within this DEIR). This park would be located west of the proposed roadway connection.

5.1.1.2 Surrounding Land Uses

To the north, the project site is bordered by Phyllis Place, a two-lane roadway that is designated to be four lanes by the Serra Mesa Community Plan. To the north of Phyllis Place is a religious facility (City View Church), and to the northeast along Phyllis Place is a multi-family development (City View Community). To the east of the project site is the existing SDG&E easement south of Phyllis Place (within the Serra Mesa community), a vacant portion of the Quarry Falls site, and the Phyllis Place on-ramp to Interstate (I-) 805 south. To the south is another vacant portion of the Quarry Falls site, which is bordered generally to the south by Friars Road. To the west is existing residential development within the Quarry Falls site and an SDG&E easement. Farther west of the Quarry Falls site, off Abbotshill/Ainsley Road, are single-family homes.

The Quarry Falls site encompasses approximately 225 acres immediately south of Phyllis Place. The Quarry Falls project includes development of a mixed-use, walkable community including residential, commercial, and parks and open space development. Franklin Ridge Road and Via Alta Road are roadways within the Quarry Falls site that are modified two-lane collector roads with left-turn pockets within an 86-foot-wide right-of-way accompanied by a 16-foot-wide median. These two streets will meet in the northern portion of the site and include Class II bike lanes and a 6-foot-wide sidewalk on either side of each street.

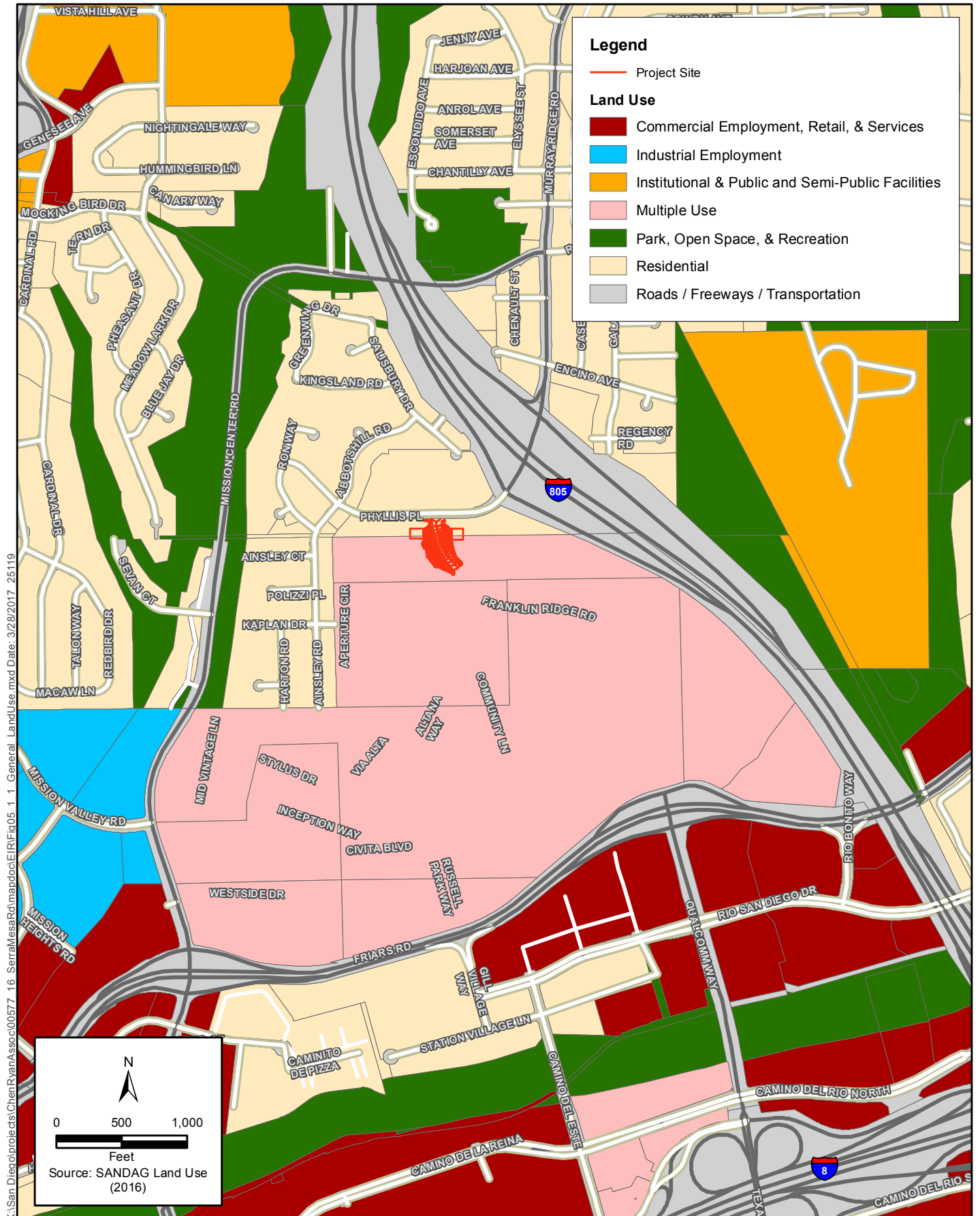
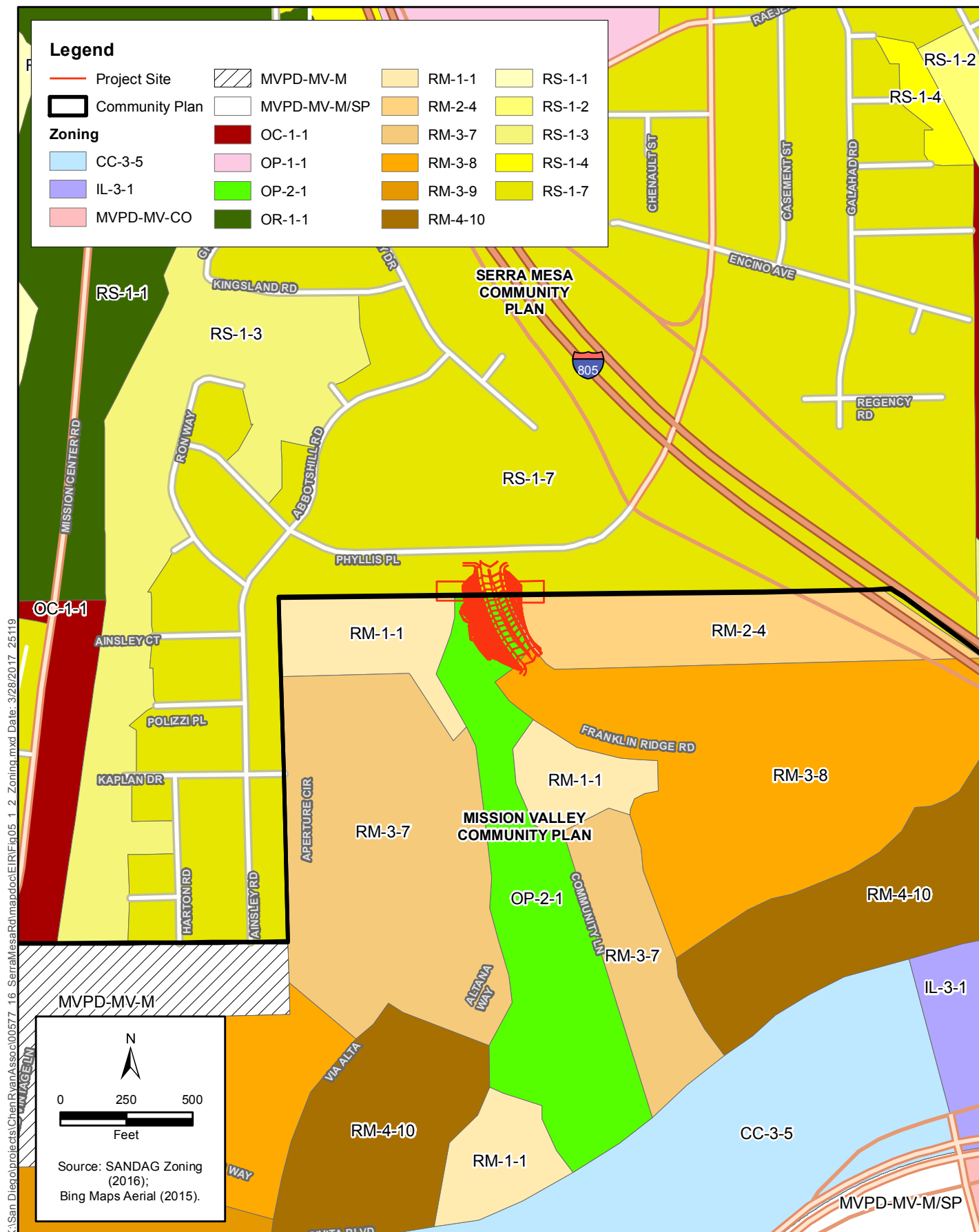


Figure 5.1-1
General Plan Land Use Designation



**Figure 5.1-2
Zoning**

5.1.2 Regulatory Framework

Applicable regulations and the associated agencies with regulatory authority and oversight are described below. The regulations discussed are limited to those set forth within the region and the City, as there are no applicable federal or state land use regulations for the proposed project.

5.1.2.1 Local

City of San Diego General Plan

California requires cities and counties to prepare and adopt a general plan to set out a long-range vision and comprehensive policy framework. The state also mandates that the plan be updated periodically to ensure relevance and utility. The City's General Plan was amended and unanimously adopted by the City Council on March 10, 2008, and the associated Land Use and Street System map was updated on March 15, 2010. The General Plan builds on many of the goals and strategies of the former 1979 General Plan, in addition to offering new policy direction in the areas of urban form, neighborhood character, historic preservation, public facilities, recreation, conservation, mobility, housing affordability, economic prosperity, and equitable development. It recognizes and explains the critical role of the community planning program as the vehicle to tailor the City of Villages strategy for each neighborhood. It also outlines the plan amendment process and other implementation strategies, and considers the continued growth of the City beyond the year 2020.

Most environmental goals relevant to the proposed project are contained within the General Plan's Land Use and Community Planning, Mobility, Urban Design, Economic Prosperity, and Noise Elements, as presented below.

Land Use and Community Planning Element: The purpose of this element is to guide future growth and development into a sustainable citywide development pattern while maintaining or enhancing quality of life. The Land Use and Community Planning Element addresses land use issues that apply to the City as a whole. The community planning program is the mechanism to refine citywide policies, designate land uses, and make additional site-specific recommendations. The Land Use and Community Planning Element establishes the structure to respect the diversity of each community, and includes policy direction to govern the preparation of community plans. The element also provides policy direction for zoning and policy consistency, the plan amendment process, coastal planning, airport land use compatibility planning, annexation policies, balanced communities, equitable development, and environmental justice.

Mobility Element: This element strives to improve mobility in the City by providing policies that support a balanced, multimodal transportation network while minimizing environmental and neighborhood impacts. The element contains policies that help make walking more viable for short trips, and addresses various other transportation choices in a manner that strengthens the City of Villages land use vision and helps to achieve a sustainable environment.

Urban Design Element: "Urban design" describes the physical features that define the character or image of a street, neighborhood, community, or the City as a whole. Urban design provides the visual and sensory relationship between people and the built and natural environment. The built environment includes buildings and streets, and the natural environment includes features such as shorelines, canyons, mesas, and parks as they shape and are incorporated into the urban framework.

Citywide urban design recommendations are necessary to ensure that the built environment continues to contribute to the qualities that distinguish the City as a unique living environment.

Economic Prosperity Element: The Economic Prosperity Element includes policies intended to improve economic prosperity by ensuring that the economy grows in ways that strengthen the City's industries. This element links economic prosperity goals with land use distribution and employment land use policies. Employment land includes land used by industrial, commercial service, and commercial retail users.

Public Facilities, Services, and Safety Element: The Public Facilities, Services, and Safety Element addresses facilities and services that are publicly managed and have a direct influence on the location of land uses. Publicly or privately managed organizations, such as healthcare facilities, are also included, as they too affect land uses and public health and safety.

Recreation Element: The purpose of the Recreation Element is to preserve, protect, acquire, develop, operate, maintain, and enhance public recreation opportunities and facilities throughout the City for all users. The Recreation Element provides guidelines and policies to address recreation challenges such as increased demand, increased pressure to develop open space lands for recreational purposes, inequitable distribution of parks, and the need to balance competing land uses.

Conservation Element: The Conservation Element provides for the long-term conservation and sustainable management of the City's natural resources. Goals of the Conservation Element include reducing the City's overall carbon dioxide footprint, preserving and enhancing coastal resources, protecting and restoring water bodies, meeting regional air quality standards, and reducing GHG emissions.

Noise Element: The purpose of the Noise Element is to protect people living and working in the City from excessive noise. The Noise Element provides goals and policies to guide compatible land uses and incorporates noise attenuation measures for new uses to protect people living and working in the City from an excessive noise environment. This purpose becomes more relevant as the City continues to grow with infill and mixed-use development, consistent with the Land Use and Community Planning Element.

Serra Mesa Community Plan

A portion of the project site is within the Serra Mesa community. The Serra Mesa Community Plan (originally adopted in 1977) encompasses approximately 6,596 acres and is characterized by the following major land uses: (1) Residential Development; (2) Commercial Development with subcategories of Professional Office, Local (neighborhood and convenience), Community Shopping Center, Regional General, Recreation/Visitor, and Health Institutional Complex; (3) Open Space; (4) Schools and Other Community Facilities; and (5) Parks and Recreation. The project site is within the southern portion of the Phyllis Abbotshill neighborhood of the Serra Mesa Community Plan area.

The Serra Mesa Community Plan, as amended on April 26, 2011, includes the following elements: Commercial, Parks and Recreation, Community Facilities, Transportation, Environmental Management, and Implementation. The goals and objectives of each of the elements that are relevant to the proposed project are summarized below.

Commercial Element: The Commercial Element contains goals and proposals aimed at encouraging the development of commercial districts that provide a wide variety of goods and services while improving the community environment.

Parks and Recreation Element: The Parks and Recreation Element provides basic guidelines to ensure high-quality, sufficient parks and recreational facilities for local residents of Serra Mesa; to continue development of bicycle and pedestrian improvements, which would also link parks, schools, and shopping opportunities throughout the neighborhood; and to explore opportunities for joint-use facilities between the City and local schools.

Community Facilities Element: The primary goal of the Community Facilities Element is to maintain all existing community facilities and services and secure financing to upgrade those that are affected by community growth and change. This element stresses that all community facilities and services respond to changing community characteristics to ensure that facilities and services remain adequate as the community builds out.

Transportation Element: The Transportation Element includes goals and proposals to provide a safe and efficient multimodal transportation system, including parking, while minimizing adverse environmental impacts. Alternative modes of transportation and traffic management programs are also promoted as ways to improve the circulation system.

Environmental Management Element: The Environmental Management Element includes objectives and proposals to manage the physical, biological, and socioeconomic environment, and ensure the preservation and conservation of community resources for future generations.

Implementation Element: The Implementation Element summarizes the implementation proposals necessary to fulfill the goals of the Serra Mesa community. The proposals are presented by category as follows: plan review and maintenance, citizen participation, development phasing, rezoning proposals (to bring in consistency with the plan), a summary table of public facilities (existing and proposed), and a summary of major plan proposals.

Mission Valley Community Plan

A portion of the project site is within the Mission Valley community. The Mission Valley Community Planning Area encompasses approximately 2,418 net acres and is characterized as an urbanized community, in which the major components of existing land uses include (1) Commercial, (2) Residential, and (3) Industrial.

The Mission Valley Community Plan, as amended in May 2013, includes the following elements: Land Use, Transportation, Open Space, Development Intensity, Community Facilities, Conservation, Cultural and Heritage Resources, Urban Design, and Implementation. The goals and objectives of each of the elements that are relevant to the proposed Community Plan Amendment (CPA) are summarized below.

Land Use Element: The Land Use Element encourages the redevelopment of vacant lands to mixed/integrated use lands. This element encourages varied land development that provides amenities to residents such as recreation, shopping, employment, and cultural opportunities.

Transportation Element: The Transportation Element includes objectives and proposals to establish and maintain a balanced transportation system that encompasses the street system, public transit, parking and goods delivery, bikeways, and pedestrian circulation. An emphasis is placed on closing gaps and correcting various deficiencies in the surface street system that have hindered mobility through the planning area.

Concerning the roadway connection, this section states:

Public streets of adequate capacity to connect Stadium Way and Mission Center Road with I-805 at Phyllis Place will be needed when urban development occurs north of Friars Road between Mission Center Road and I-805. Provision of these streets will not be considered until the sand and gravel operation has ceased and resource depletion has occurred. Additionally, the exact alignment will be determined by detailed engineering studies, by agreement between the City and the property owner at the time urban development takes place on these parcels.

Open Space Element: The Open Space Element identifies three key components that make up the community's open space linkage system: the San Diego River, prominent hillsides, and parks and recreation. This element encourages the linkage of all three of the key components into a visually and physically cohesive unit. A Hillside Review Overlay Zone is also established in this element, which guides development in these areas.

Development Intensity Element: The purpose of the Development Intensity Element is to establish guidelines for intensity of development due to the finite traffic capacity on the projected circulation system of the planning area. Development Intensity Districts are proposed to ensure compatibility between street carrying capacity and the maximum development intensity to enhance and maintain a high quality of life in the community.

Community Facilities Element: The Community Facilities Element identifies the community facilities in the planning area, which are to be maintained or expanded as needed while keeping an adequate level of service. This element's main objective is to maintain a high level of service for the full range of community facilities necessary in an urbanized area.

Conservation Element: The Conservation Element focuses on the conservation and protection of the following resources: air, water, land, and energy. Objectives, proposals, and design guidelines are outlined in this element to protect and enhance the quality of Mission Valley's air and water resources while conserving water, land, and energy resources.

Cultural and Heritage Resources: The Cultural and Heritage Resources Element includes objectives and proposals for the area's archaeological and historical sites, landmarks, and semipublic cultural facilities. Objectives include identification and preservation of archaeological and historical sites in the plan area.

Urban Design Element: The Urban Design Element identifies two functional categories that require special design considerations: (1) design protection areas, such as the San Diego River, hillsides, and landmarks, and (2) transportation corridors, including freeways, street systems, and light rail transit. Urban design in Mission Valley focuses on form and function of the community, which ties the community together.

Implementation Element: The Implementation Element recognizes that several issues and solutions to problems are unaddressed; therefore, this section provides guidance to put the entire plan into effect. Specific implementation mechanisms and responsibilities relating to public facility financing, schools, transportation improvements phasing, and legislative implementation are covered.

City of San Diego Climate Action Plan

In December 2015, the City adopted its Climate Action Plan (CAP). The CAP identifies measures to meet GHG reduction targets for 2020 and 2035. The CAP consists of a 2010 inventory of GHG emissions, a “Business As Usual” projection for emissions in 2020 and 2035, state targets, and emission reductions with implementation of the CAP. The City identifies GHG reduction strategies focusing on energy- and water-efficient buildings; clean and renewable energy; bicycling, walking, transit, and land use; zero waste; and climate resiliency. Accounting for future population and economic growth, the City projects GHG emissions will be approximately 15.9 million metric tons of carbon dioxide equivalent (MMT CO₂e) in 2020 and 16.7 MMT CO₂e in 2035. To achieve its proportional share of the state reduction targets for 2020 (Assembly Bill 32) and 2050 (Executive Order S-3-05), the City would need to reduce emissions below the 2010 baseline by 15% in 2020 and 50% by 2035. To meet these goals, the City must implement strategies that reduce emissions to approximately 11.0 MMT CO₂e in 2020 and 6.5 MMT CO₂e in 2035. Through implementation of the CAP, the City is projected to reduce emissions even further below targets by 1.2 MMT CO₂e by 2020 and 205,462 metric tons of CO₂e by 2035. The proposed project’s consistency with the CAP is analyzed in Section 5.10, *Greenhouse Gas Emissions*, of this DEIR.

City of San Diego Bicycle Master Plan

The City’s Bicycle Master Plan provides a framework for making cycling a more practical and convenient transportation option for a wide variety of San Diegans with different riding purposes and skill levels. The plan recommends projects, policies, and programs to assist the City in improving bicycle infrastructure, based on a bicycle needs analysis. The Bicycle Master Plan calls for, among other things, the maintenance and improvement of the bikeway network and roadways regularly used by bicyclists.

The City’s Bicycle Master Plan Update proposes Class II (Bike Lane) facilities along Phyllis Place with a connection to Via Alta, Franklin Ridge Road, and Civita Boulevard. The Class II Bike Lane is shown connecting north toward Phyllis Place and across I-805 to Murray Ridge Road. It is also shown connecting to Friars Road from two points on the south from Civita Boulevard.

City of San Diego Land Development Code

Chapters 11 to 15 of the San Diego Municipal Code are referred to as the Land Development Code (LDC), as they contain the City’s planning, zoning, subdivision, and building regulations that regulate how land is to be developed within the City. The LDC contains Citywide base zones that specify permitted land use, density, floor-area ratio, and other development requirements for given zoning classifications, as well as overlay zones and supplemental regulations that provide additional development requirements.

Environmentally Sensitive Lands Regulations: According to Section 143.0110 of the LDC, Environmentally Sensitive Lands Regulations apply to areas with any of the following: sensitive biological resources, steep hillsides, coastal beaches, sensitive coastal bluffs, and Special Flood Hazard Areas. Development on a site containing environmentally sensitive lands requires a Site Development Permit in accordance with Section 125.0502 of the LDC. The project site contains steep hillsides and sensitive biological resources.

Historical Resources Regulations: The purpose of the City's Historical Resources Regulations, found in Section 143.0251 of the LDC, is to protect, preserve, and, where damaged, restore the historical resources of San Diego, which include historical buildings, historical structures or objects, important archaeological sites, historical districts, historical landscapes, and traditional cultural properties. These regulations are intended to ensure that development occurs in a manner that protects the overall quality of historical resources. The Historic Resources Regulations require that development affecting designated historical resources or historical districts shall provide full mitigation for the impact on the resource, in accordance with the Historical Resources Guidelines of the Land Development Manual, as a condition of approval. If development cannot, to the maximum extent feasible, comply with the development regulations for historical resources, then a project would require a permit.

City of San Diego Multiple Species Conservation Program Subarea Plan

The Multiple Species Conservation Program (MSCP) is part of a comprehensive habitat conservation planning program for southwestern San Diego County. A goal of the MSCP is to preserve a network of habitat and open space to protect biodiversity while allowing development in less-sensitive lands. Local jurisdictions, including the City, implement their portions of the MSCP through subarea plans, which describe specific implementing mechanisms.

The City's MSCP Subarea Plan was adopted in March 1997 (City of San Diego 1997). The MSCP Subarea Plan is a plan and process for the City to issue permits under the federal Endangered Species Act (ESA) (16 U.S.C. [U.S.C.] 1531 et seq.), California Endangered Species Act (California Fish and Game Code Sections 2050–2116), and California Natural Communities Conservation Planning Act of 1991 (California Fish and Game Code Sections 2800–2835). The primary goal of the MSCP Subarea Plan is to conserve viable populations of sensitive species and to conserve biodiversity while allowing for reasonable economic growth.

"MSCP Covered" refers to species covered by the City's federal incidental take permit (ITP) issued pursuant to Section 10(a) of the federal ESA (16 U.S.C. 1539(a)(2)(A)). Under the federal ESA, an ITP is required when non-federal activities would result in "take" of a threatened or endangered species. A habitat conservation plan must accompany an application for a federal ITP. Take authorization for federally listed wildlife species covered in the habitat conservation plan is generally effective upon approval of the habitat conservation plan.

As of April 20, 2010, the City may no longer rely on its federal ITP for authorization for incidental take of two vernal pool animal species and five plant species (seven vernal pool species). Development involving the take of these seven vernal pool species requires authorization from the U.S. Fish and Wildlife Service through the federal process until the City completes a new habitat conservation plan and enters into another implementing agreement for a new federal ITP for those species. Until the City's ITP for the seven vernal species is obtained, development that would involve

take of any of the seven vernal pool species requires authorization from the U.S. Fish and Wildlife Service through the federal process.

The Multi-Habitat Planning Area (MHPA) consists of areas within which the permanent MSCP preserve would be assembled and managed for biological resources. The MSCP identifies a 56,831-acre MHPA in the City for preservation of core biological resource areas and corridors targeted for preservation. The project site is not located within the MHPA.

San Diego Forward: The Regional Plan

The San Diego Association of Governments adopted San Diego Forward: The Regional Plan on October 9, 2015. The plan is an update of the Regional Comprehensive Plan for the San Diego Region and the 2050 Regional Transportation Plan/Sustainable Communities Strategy, combined into one document. The Regional Plan provides a blueprint for San Diego's regional transportation system in order to effectively serve existing and projected workers and residents within the San Diego region. In addition to the 2050 Regional Transportation Plan, the Regional Plan includes a Sustainable Communities Strategy, in compliance with Senate Bill 375. The Sustainable Communities Strategy aims to create sustainable, mixed-use communities conducive to public transit, walking, and biking by focusing future growth in the previously developed, western portion of the region along the major existing transit and transportation corridors. The purpose of the Sustainable Communities Strategy is to help the region meet the greenhouse gas (GHG) emissions reductions set by the state Air Resources Board. The Regional Plan has a horizon year of 2050 and projects regional growth and the construction of transportation projects over this time period. It should be noted that this plan focuses on expanding regional transportation projects, such as public transit, bike routes and walking paths, and managed lanes on highways. The plan does not focus on or address local roadway networks.

Montgomery Field Airport Land Use Compatibility Plan

The project site is within an Airport Land Use Compatibility Plan (ALUCP) for Montgomery Field (Figure 5.1-3). The ALUCP intends to safeguard the general welfare of the inhabitants in the vicinity of airports and the public in general. The ALUCP provides policies and criteria for the City of San Diego to implement and for the San Diego County Airport Land Use Commission (ALUC) to use when reviewing development proposals that require rezones and/or plan amendments. The City of San Diego implements the ALUCP policies and criteria with the Supplemental Development Regulations contained in the Airport Land Use Compatibility Overlay Zone (Chapter 13, Article 2, Division 15 of the City's Municipal Code).

In San Diego County, the ALUC function rests with the Board of the San Diego County Regional Airport Authority, in accordance with section 21670.3 of the California Public Utilities Code. As established by state law (Pub. Util. Code, Section 21670), the ALUC has the responsibility to both "provide for the orderly development of airports" and "prevent the creation of new noise and safety problems." ALUC policies thus have the dual objective of protecting against constraints on airport expansion and operations that can result from encroachment of incompatible land uses and minimizing the public's exposure to excessive noise and safety hazards. To meet these objectives, the ALUCPs address potential compatibility impacts related to four specific airport-related factors/layers: (1) noise—exposure to aircraft noise; (2) safety—land use factors that affect safety

both for people on the ground and the occupants of aircraft; (3) airspace protection—protection of airport airspace; and (4) overflight—annoyance and other general concerns related to aircraft overflights.

Montgomery Field is approximately 2 miles to the north of the project site. The project site is within Review Area 2 of the Airport Influence Area (AIA) for Montgomery Field. The Montgomery Field ALUCP is the fundamental tool used by the San Diego County Regional Airport Authority, acting in its capacity as the San Diego County ALUC, in fulfilling its purpose of promoting airport land use compatibility with Montgomery Field. Specifically, this ALUCP: (1) provides for the orderly growth of the airport and the area surrounding the airport; and (2) safeguards the general welfare of the inhabitants in the vicinity of the airport and the public in general (Pub. Util. Code Section 21675(a)). In essence, this ALUCP serves as a tool for the ALUC to use in fulfilling its duty to review land use plans and development proposals within the AIA at Montgomery Field. The ALUCP provides compatibility policies and criteria applicable to local agencies in their preparation or amendment of general plans and to landowners in their design of new development.

5.1.3 Significance Determination Thresholds

5.1.3.1 Issue Questions

As identified in the City's CEQA Significance Determination Thresholds (City of San Diego 2016), impacts related to land use would be significant if the project would:

1. Require a deviation or variance, and the deviation or variance would in turn result in a physical impact on the environment
2. Result in a conflict with the environmental goals, objectives, and recommendations of the community plan in which it is located
3. Conflict with the provisions of the City's MSCP Subarea Plan or other approved local, regional, or state habitat conservation plan
4. Physically divide an established community
5. Result in land uses which are not compatible with an adopted ALUCP

It should be noted that merely being inconsistent with an existing plan or regulation would not necessarily be considered a significant impact under CEQA; rather, the inconsistency must result in a substantial adverse effect on the environment.

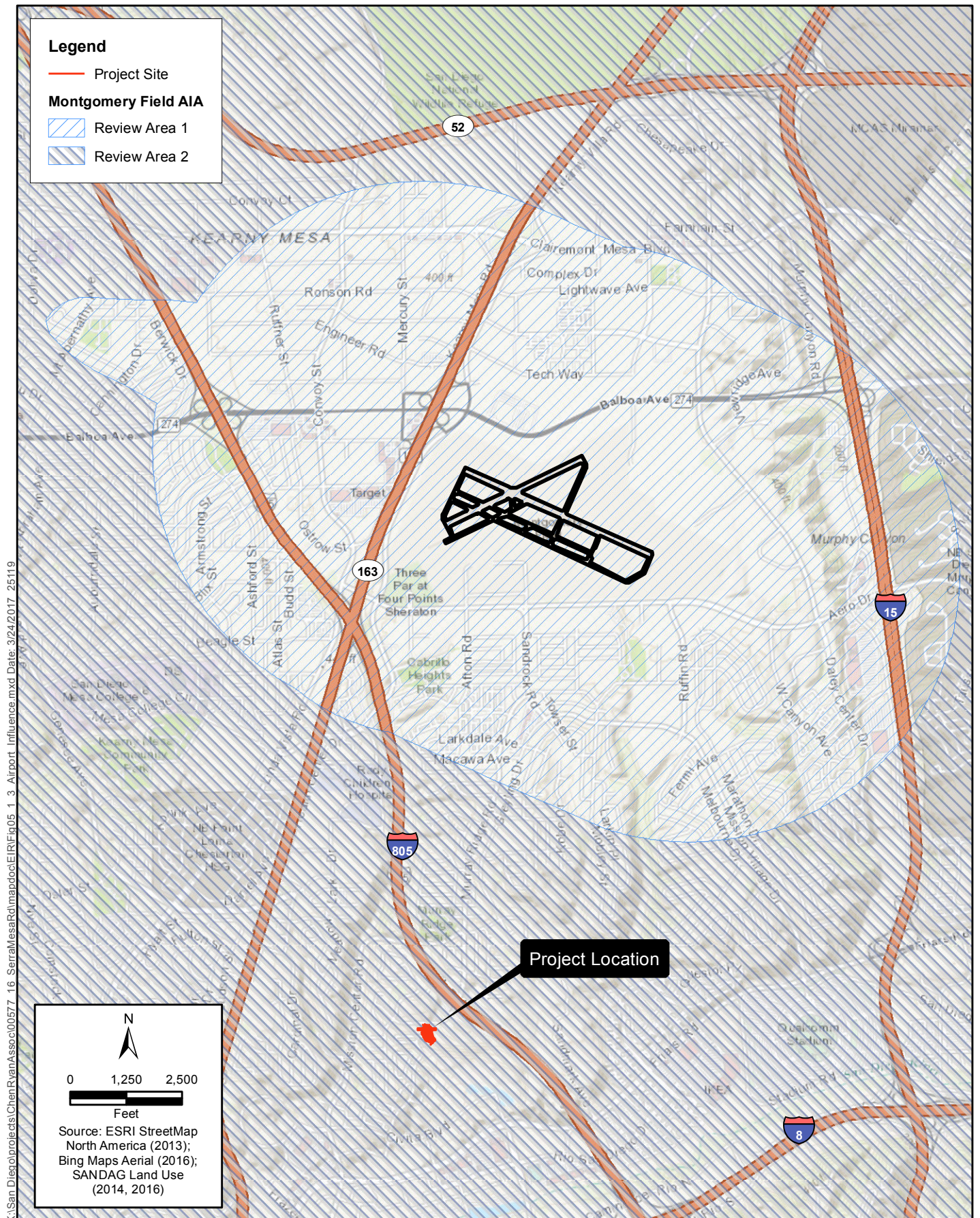


Figure 5.1-3
Montgomery Field Airport Influence Area

5.1.4 Impact Analysis

Issue 1: Land Use Compatibility

Would the proposed project require a deviation or variance, and the deviation or variance would in turn result in a physical impact on the environment?

5.1.4.1 Impact Discussion

A deviation or variance from development regulations is typically sought by a project that involves the development of buildings that would not meet certain development regulations, such as a deviation for buildings to be taller in height than what is allowed. As the proposed project involves a roadway, the proposed project would not require any deviations or variances from building development regulations. As the project contains steep slopes, it is subject to the Environmentally Sensitive Lands (ESL) Regulations. As previously detailed in Chapter 3, *Project Description*, the ESL Regulations require processing of a Site Development Permit (SDP) concurrently with the project's actions. The SDP issued in conjunction with the Quarry Falls project covers the parkland within the Quarry Falls Specific Plan area. Under the SDP, potential environmental impacts on the ESL have already been accounted for.

The amendment to add the roadway connection to the parkland in the SDP would be subject to the specific plan's Project Review Category 1, a ministerial process. The Project Review Category 1 requires that applications for construction permits be consistent with the Land Development Code Base Zone Use categories and development regulations applied to the district or subdistrict, and that applications be processed pursuant to Process One, *Substantial Conformance Review*. This process includes projects that are consistent with the setback regulation deviations identified in the Specific Plan and Master Planned Development Permit. In addition, the transfer of average daily traffic within the same district and between the same land use is processed pursuant to this process. The proposed project would not meet any of the triggers for the other project categories (2 through 5) in the Quarry Falls Specific Plan, and the specific plan map would not need to be revised to show the roadway connection. Therefore, implementation of the proposed roadway connection would be consistent with ESL Regulations and no deviations from the regulations would be required.

As previously described, the project site is designated by the General Plan as Residential, by the Serra Mesa Community Plan as Low-Density Residential, and by the Mission Valley Community Plan as multiple use (through the Quarry Falls Specific Plan). The project site is zoned as: RS-1-7, which is for single-family residential use (minimum of 5,000-square-foot lots); RM-2-4, which is for medium-density multiple dwelling units (one dwelling unit for each 1,750 square feet of lot area); RM-3-8, which is for medium-density multiple dwelling units (maximum of one dwelling unit for each 1,000 square feet of lot area); and OP-2-1, which is for open space park uses including passive and some active uses (San Diego Municipal Code, Chapter 13).

The proposed project entails the construction and operation of a roadway and an amendment to the Serra Mesa Community Plan to include the roadway connection. As such, the proposed project would be classified as public right-of-way and would not conflict with existing land uses because public right-of-way is needed to access parcels no matter which land use designation they may be located in and because it would not preclude development of any parcels.

Indirect impacts of the roadway would potentially result from the vehicles on the roadway and the associated noise or pollutants that have the potential to affect sensitive receivers, such as nearby residents or those using the park or the church on the north side of Phyllis Place near the project site. The potential indirect impacts of the project, including air quality and noise, are analyzed throughout this DEIR (see Sections 5.3, *Air Quality*, and 5.4, *Noise*). As demonstrated in those sections, the proposed project would not conflict with planned land uses, including the parks to be located adjacent to the roadway within the Quarry Falls site.

From a land use compatibility perspective, the roadway would not conflict with the use of either of the parks within Quarry Falls Park. The proposed project would be consistent with the Quarry Falls project, as detailed within the Quarry Falls Specific Plan. As stated in Section 4.2 of the Quarry Falls Specific Plan:

The Quarry Falls land use design and circulation plan do not include the alignment of a northern street connection to Phyllis Place. The project design does not preclude such a connection and therefore is consistent with the Transportation Element of the Mission Valley Community Plan. Should the Serra Mesa Community Plan be amended at a future date to include the road connection, such an action would be found to be consistent with the Quarry Falls Specific Plan and therefore not require an amendment to this plan.

With regard to Phyllis Place Park, the Quarry Falls developer processed two separate approved General Development Plans for the park—one with and one without the roadway connection. In either scenario, the proposed park would retain the same acreage. Although the roadway would require a public right-of-way area that would interrupt the park, the park is a linear design that would still remain connected to the overall system using a pedestrian crossing at the intersection. The proposed project would somewhat divide the park by placing a roadway in between the two portions of it; however, this would not represent a significant impact on the environment, as the proposed project would not result in hazards to pedestrians/park users. The roadway itself would be designed in accordance with applicable City regulations, including the Street Design Manual (City of San Diego 2002) and the intersection at Phyllis Place would be signalized and would include a signalized pedestrian crossing. Therefore, impacts would be less than significant.

5.1.4.2 Significance of Impact

The proposed project would not require a deviation or variance from development regulations. It would not conflict with existing or planned land uses in the vicinity of the project site, nor would it lead to indirect impacts otherwise not addressed in this document. Impacts would be less than significant.

5.1.4.3 Mitigation Measures

Impacts would be less than significant; therefore, no mitigation measures would be required.

5.1.5 Impact Analysis

Issue 2: Land Use Plan Consistency

Would the proposed project result in a conflict with the environmental goals, objectives, and recommendations of the community plan in which it is located?

5.1.5.1 Impact Discussion

The proposed project's consistency with pertinent environmental goals, policies, and recommendations are provided in Table 5.1-1 and Table 5.1-2. The land use consistency analysis takes several factors into consideration. Overall, as shown in the consistency tables (see Table 5.1-1 and Table 5.1-2), the proposed project would implement and uphold the goals, policies, guidelines, and recommendations contained within the existing City of San Diego General Plan and the Serra Mesa Community Plan.

Specifically, the proposed project is consistent with planning goals identified in the Mobility Element of the General Plan, as the roadway would balance the needs of multiple users of the public right-of-way by providing vehicle, bicycle, and pedestrian lanes/sidewalks. Moreover, it would provide a linkage within and between communities (Mission Valley and Serra Mesa) and would expand personal travel options by providing a roadway connection from Serra Mesa to the trolley stations in Mission Valley that would allow pedestrians and cyclists a dedicated route.

The bicycle and pedestrian features would be compatible with the bicycle routes indicated in the Transportation Element of the Serra Mesa Community Plan by increasing connectivity to the community bikeway system and the bicycle route systems in adjoining communities (City of San Diego 2011), as well as priorities in the City's General Plan and Bicycle Master Plan. The Serra Mesa Community Plan includes environmental guidelines with respect to steep slopes and development. The project site is located on a steep slope on the western and eastern sides of the site. As discussed in DEIR Section 7.3, *Geologic Conditions*, measures have been provided to ensure that slope stability would be maintained; therefore, no significant impacts would occur regarding slope stability.

Table 5.1-1. Proposed Project's Consistency with the City of San Diego 2008 General Plan

Policy/ Recommendation Number	Goal/Recommendation	Proposed Project	Proposed Project Consistency/ Inconsistency
Land Use and Community Planning Element			
Policy LU-B.2	Identify a more refined street system that is included in the General Plan Land Use and Streets Map through the community plan update and amendment process.	The proposed project intends to refine the local street system within the Serra Mesa and Mission Valley communities by analyzing a proposed roadway connection that would provide access between communities, to the regional freeways, and to local transit opportunities.	The proposed project is consistent with this policy.
Policy LU-C.1.c	Maintain consistency between community plans and the General Plan, as together they represent the City's comprehensive plan. In the event of an inconsistency between the General Plan and a community plan, action must be taken to either: (1) amend the community plan, or (2) amend the General Plan in a manner that is consistent with the General Plan's guiding principles.	The amendment to the Serra Mesa Community Plan would provide consistency between the Serra Mesa Community Plan and the Mission Valley Community Plan. The proposed project would also be consistent with the General Plan as it would provide a linkage between communities, increase mobility options within the communities (including increased access to transit opportunities such as the trolley), and provide vehicle congestion relief within some areas.	The proposed project is consistent with this policy.
Policy LU-C.2.f	Establish a mobility network to effectively move workers and residents.	The proposed project would enhance the existing mobility network by including a street connection between the communities of Serra Mesa and Mission Valley.	The proposed project is consistent with this policy.
Policy LU-C.5.c	Concurrently update plans of contiguous planning areas in order to comprehensively address common opportunities such as open space systems or the provision of public facilities and common constraints such as traffic congestion.	The proposed project would include a street connection between Serra Mesa and Mission Valley. The current Mission Valley Community Plan designated the proposed project site for multiple use development, allowing for a relatively large scale real estate project. The Quarry Falls Specific Plan addressed the large scale development of the proposed project area. According to the traffic impact studies (Appendix	The proposed project is consistent with this policy.

Policy/ Recommendation Number	Goal/Recommendation	Proposed Project	Proposed Project Consistency/ Inconsistency
		C), the proposed project, when constructed in the future, would provide more direct access to regional freeways and businesses, which would generally alleviate traffic congestion on neighborhood streets, but would see a rise in delay at certain areas near freeway ramps. Overall, the project would improve community access in the Serra Mesa community and the Mission Valley community.	
Policy LU-D.1	Require a General Plan and community plan amendment for proposals that involve a change in community plan-adopted land use or density/intensity range; a change in the adopted community plan development-phasing schedule; or a change in plan policies, maps, and diagrams.	The proposed project would change the adopted street classification and functional street system roadway maps. Therefore, a CPA is required.	The proposed project is consistent with this policy.
Policy LU-D.3	Evaluate all plan amendment requests through the plan amendment initiation process and present the proposal to the Planning Commission or City Council for consideration.	The proposed project was initiated by City Council Resolution 304297 and through the approval process will meet these procedural requirements.	The proposed project is consistent with this policy.
Policy LU-D.12	Evaluate specific issues that were identified through the initiation process, whether the proposed amendment helps achieve long-term community goals, as well as any additional community-specific amendment evaluation factors.	The proposed project would include a street connection to achieve long-term community goals. It would solve an inconsistency between the Serra Mesa Community Plan and the Mission Valley Community Plan.	The proposed project is consistent with this policy.
Policy LU-H.6	Provide linkages among employment sites, housing, and villages via an integrated transit system and a well-defined pedestrian and bicycle network.	The proposed project would include a street connection that would, if constructed, provide a street system with pedestrian and bicycle components that would enhance these networks and provide linkages among employment sites, housing, and villages.	The proposed project is consistent with this policy.

Policy/ Recommendation Number	Goal/Recommendation	Proposed Project	Proposed Project Consistency/ Inconsistency
Environmental Justice Goal I	Improve mobility options and accessibility in every community.	The proposed project is a street connection between two communities designed to increase mobility options and accessibility in Serra Mesa and Mission Valley.	The proposed project is consistent with this goal.
Policy LU-I.7	Treat all people fairly with respect to the development, adoption, implementation, and enforcement of transportation policies, plans, and projects.	Traffic reports have been prepared for the proposed project (Appendix C) that analyze the implementation of the project's transportation-related impacts on the adjacent communities and residences.	The proposed project is consistent with this policy.
Policy LU-I.11	Implement the City of Villages concept for mixed-use, transit-oriented development as a way to minimize the need to drive by increasing opportunities for individuals to live near where they work, offering a convenient mix of local goods and services and providing access to high-quality transit services.	The proposed project, if implemented, would increase circulation options for the Serra Mesa and Mission Valley communities, particularly linking the community of Serra Mesa to the Quarry Falls site, which upon buildout would provide a mix of local goods and services to both communities. The Quarry Falls site incorporates access points to high-quality transit services, which would become more readily/easily available to those living in the community of Serra Mesa.	The proposed is consistent with this policy.
Mobility Element			
A. Walkable Community Goal II	Create a safe and comfortable pedestrian environment.	The proposed project would include a street connection. Sidewalks would be included as part of the future implementation of the roadway (if constructed), as well as a landscape buffer between the sidewalk and road for a safe and comfortable pedestrian linkage to the surrounding communities.	The proposed project is consistent with this goal.

Policy/ Recommendation Number	Goal/Recommendation	Proposed Project	Proposed Project Consistency/ Inconsistency
A. Walkable Community Goal III	A complete, functional, and interconnected pedestrian network that is accessible to pedestrians of all abilities.	The proposed project would include a street connection that if implemented would include sidewalks that would serve as an Americans with Disabilities Act (ADA) compliant pedestrian facility that would link the communities of Serra Mesa and Mission Valley.	The proposed project is consistent with this goal.
A. Walkable Community Goal IV	Greater walkability achieved through pedestrian-friendly street, site, and building design.	The proposed project would include a street connection that if implemented would be designed to address pedestrian needs by providing pedestrian facilities such as sidewalks and landscaping along the roadway extension.	The proposed project is consistent with this goal.
Policy ME-A.6	<p>Work toward achieving a complete, functional, and interconnected pedestrian network.</p> <ul style="list-style-type: none"> a. Ensure that pedestrian facilities such as sidewalks, trails, bridges, pedestrian-oriented and street lighting, ramps, stairways, and other facilities are implemented as needed to support pedestrian circulation. <ul style="list-style-type: none"> 1. Close gaps in the sidewalk network. 2. Provide convenient pedestrian connections between land uses, including shortcuts where possible. 3. Design grading plans to provide convenient and accessible pedestrian connections from new development to adjacent uses and streets. b. Link sidewalks, pedestrian paths, and multipurpose trails into a continuous regionwide network where possible. e. Routinely accommodate pedestrian facilities and amenities into private and public plans and projects. 	The proposed project would include a street connection. The future implementation of the proposed project would close the gaps in the sidewalk network connecting the communities of Serra Mesa and Mission Valley. This street connection, including pedestrian facilities, would be linked to the Quarry Falls site.	The proposed project is consistent with this policy.

Policy/ Recommendation Number	Goal/Recommendation	Proposed Project	Proposed Project Consistency/ Inconsistency
C. Street and Freeway System Goal I	A street and freeway system that balances the needs of multiple users of the public right-of-way.	The proposed project, if constructed, would provide a balance within the street system for the geographic area, as future implementation would include a sidewalk and bicycle facilities within the public right-of-way.	The proposed project is consistent with this goal.
C. Street and Freeway System Goal II	An interconnected street system that provides multiple linkages within and between communities.	The proposed project would resolve a conflict between two community plans and include a street connection that would provide a linkage between the communities.	The proposed project is consistent with this goal.
C. Street and Freeway System Goal III	Vehicle congestion relief.	The proposed project, if implemented, would provide more direct access to regional freeways and businesses, which would generally alleviate traffic congestion on neighborhood streets, but would see a rise in delay at certain areas near freeway ramps. Overall, the project would improve community access in the Serra Mesa community and the Mission Valley community. Specific areas of vehicle congestion relief are discussed in the traffic report (see Appendix C) and Section 5.2, <i>Transportation and Circulation</i> , of this DEIR.	The proposed project is consistent with this goal.
Policy ME-C.1	<p>Identify the general location and extent of streets, sidewalks, trails, and other transportation facilities and services needed to enhance mobility in community plans.</p> <p>a. Protect and seek dedication or reservation of right-of-way for planned transportation facilities through the planning and development review process.</p> <p>b. Implement street improvements and multimodal transportation improvements as needed with new development and as areas redevelop over time.</p> <p>c. Identify streets or street segments where special</p>	<p>The Mission Valley Community Plan identifies the need for a street connection at I-805 and Phyllis Place to Mission Center Road and Qualcomm Way; the proposed project includes a street connection and, if implemented in the future, a street that would include automobile, pedestrian, and bicycle access to meet multimodal improvement standards.</p> <p>The residents of the Serra Mesa and Mission Valley community planning areas have been included in the public review process and solicited for review and comments on the DEIR</p>	The proposed project is consistent with this policy.

Policy/ Recommendation Number	Goal/Recommendation	Proposed Project	Proposed Project Consistency/ Inconsistency
	design treatments are desired to achieve community goals. e. Increase public input in transportation decision making, including seeking input from multiple communities where transportation issues cross community boundaries.	for this project. Additionally, a public scoping meeting was held February 7, 2012, and the proposed project will be presented to the Serra Mesa Community Planning Group and the Mission Valley Community Planning Group.	
Policy ME-C.2	Provide adequate capacity and reduce congestion for all modes of transportation on the street and freeway system.	Traffic impact studies have been prepared for the implementation of the proposed project (Appendix C) that analyze the project's transportation-related impacts on the adjacent communities. The proposed project would include a street connection that, if constructed, would alleviate community congestion in many areas, provide necessary emergency access points, and provide linkages for pedestrians, bicyclists, and motorists for the communities of Serra Mesa and Mission Valley.	The proposed project is consistent with this policy.
Policy ME-C.3	Design an interconnected street network within and between communities that includes pedestrian and bicycle access while minimizing landform and community character impacts.	The proposed project would include a street connection linking the communities of Serra Mesa and Mission Valley. Impacts on community character and landform would be minimal because the surrounding area is already developed with homes, streets, and a church.	The proposed project is consistent with this policy.
Policy ME-C.2.a	Identify locations where the connectivity of street networks could be improved through the community plan update and amendment process, the Regional Transportation Plan update process, and discretionary project review.	The proposed project identifies a location to connect street networks between two communities.	The proposed project is consistent with this policy.

Policy/ Recommendation Number	Goal/Recommendation	Proposed Project	Proposed Project Consistency/ Inconsistency
Policy ME-K.4	Determine necessary transportation improvements to serve new development at the community plan level and, where necessary, at the project level.	The proposed project would include a street connection. The Lead Agency (i.e., the City Council) will ultimately determine if the proposed roadway connection would be necessary to serve existing and planned development.	The proposed project is consistent with this policy.
Urban Design Element			
Policy UD-A.2	Use open space and landscape to define and link communities. a. Link villages, canyons, open space and other destinations together by connecting them with trail systems, bikeways, landscaped boulevards, formalized parks, and/or natural open space, as appropriate.	The proposed project would include a street connection that, if constructed, would link the communities of Serra Mesa and Mission Valley.	The proposed project is consistent with this policy.
Policy UD-B.5	Design or retrofit streets to improve walkability, strengthen connectivity, and enhance community identity. a. Design or retrofit street systems to achieve high levels of connectivity within the neighborhood street network that link individual subdivisions/projects to each other and the community. b. Avoid closed-loop subdivisions and extensive cul-de-sac systems, except where the street layout is dictated by the topography or the need to avoid sensitive environmental resources. c. Design open-ended cul-de-sacs to accommodate visibility and pedestrian connectivity, when development of cul-de-sacs is necessary. d. Emphasize the provision of high-quality pedestrian and bikeway connections to transit stops/stations, village centers, and local schools.	The proposed project would include a street connection that, if constructed, would: a. Link the current and future development in the community of Mission Valley to the community of Serra Mesa. b. Prevent the Quarry Falls site from being a closed-loop subdivision. c. Not include cul-de-sac elements. d. Facilitate pedestrian and bicycle connections. e. Be designed to City standards to ensure appropriate speeds. f. Provide a gateway from Serra Mesa to Mission Valley and vice versa. h. Not applicable. g. Clarify roadway intersections associated with the proposed project though the use of landscaping. i. Create a linkage between the communities of	The proposed project is consistent with this policy.

Policy/ Recommendation Number	Goal/Recommendation	Proposed Project	Proposed Project Consistency/ Inconsistency
	<ul style="list-style-type: none"> e. Design new streets and consider traffic calming where necessary to reduce neighborhood speeding. f. Enhance community gateways to demonstrate neighborhood pride and delineate boundaries. g. Clarify neighborhood roadway intersections through the use of special paving and landscape. h. Develop a hierarchy of walkways that delineate village pathways and link to regional trails. i. Discourage use of walls, gates, and other barriers that separate residential neighborhoods from the surrounding community and commercial areas. 	Serra Mesa and Mission Valley. No gates, walls, or other barriers would be used.	
Policy UD-C.6	<p>Design project circulation systems for walkability.</p> <ul style="list-style-type: none"> a. Extend existing street grid patterns into development within existing fine-grained neighborhoods. b. Design a grid or modified-grid internal project street system, with sidewalks and curbs, as an organizing framework for development in village centers. c. Provide pedestrian shortcuts through the developments to connect destinations where the existing street system has long blocks or circuitous street patterns. d. Use pedestrian amenities, such as curb extensions and textured paving, to delineate key pedestrian crossings. e. Design new connections and remove any barriers to pedestrian and bicycle circulation in order to enable people to walk or bike, rather than drive, to neighboring destinations. f. Lay out streets to take advantage of and maximize 	<p>The proposed project would include a street connection between the communities of Serra Mesa and Mission Valley. This connection, if constructed, would remove connectivity barriers between the two areas.</p> <p>In addition, bicycle and pedestrian facilities would increase walkability in the area and accommodate pedestrian activity. The proposed project would also maximize the public viewshed of Mission Valley, as seen from Serra Mesa.</p>	The proposed project is consistent with this policy.

Policy/ Recommendation Number	Goal/Recommendation	Proposed Project	Proposed Project Consistency/ Inconsistency
	<p>vistas into public viewsheds.</p> <p>g. Share and manage commercial, residential, and public parking facilities where possible to manage parking for greater efficiency (see also Mobility Element, Section G).</p> <p>h. Incorporate design features that facilitate transit service along existing or proposed routes, such as bus pullout areas, covered transit stops, and multimodal pathways through projects to transit stops.</p>		
Policy UD-C.7	Enhance the public streetscape for greater walkability and neighborhood aesthetics.	The proposed project would include a street connection to encourage greater walkability. Additionally, the implementation of the proposed project would provide additional ingress and egress to the adjacent Quarry Falls site, which would improve circulation in the immediate area and provide greater access throughout.	The project is consistent with this policy.
Conservation Element			
Policy CE-G.1	Preserve natural habitats pursuant to the MSCP, preserve rare plants and animals to the maximum extent practicable, and manage all City-owned native habitats to ensure their long-term biological viability.	The proposed project, if implemented, would require mitigation prior to construction for impacts on the MSCP in the form of payment to the City of San Diego's Habitat Acquisition Fund, which is required for projects that impact sensitive habitats within the MSCP as indicated in Section 5.5, <i>Biological Resources</i> .	The proposed project is consistent with this policy.
Policy CE-G.2	Prioritize, fund, acquire, and manage open spaces that preserve important ecological resources and provide habitat connectivity.	The proposed project, if implemented, would require mitigation prior to construction to provide payment to the City of San Diego's Habitat Acquisition Fund as indicated in Section 5.5, <i>Biological Resources</i> .	The proposed project is consistent with this policy.

Table 5.1-2. Proposed Project's Consistency with the Serra Mesa Community Plan

Goal/ Recommendation Number	Goal/Objective/Proposal	Proposed Project	Proposed Project Conformance/ Nonconformance
Parks and Recreation Element			
Goals	To develop pedestrian and bicycle linkages connecting open space, neighborhood and community parks, schools, and shopping facilities.	The proposed project, if implemented, would include pedestrian and bicycle linkages.	The project is in conformance with this goal.
Proposals – Fire Protection	Evaluation of fire protection should be continued to assure adequate coverage in the community.	The proposed project, if implemented, would provide additional fire protection access and exit points.	The proposed project is in conformance with this proposal.
Proposals – Police Protection	The present response time should be continually evaluated. Police emphasis should be placed on protection of the community. Crime prevention, community relations, and crime-inhibiting design programs should be emphasized both in residential and in commercial/ industrial areas.	The proposed project, if implemented, would provide additional police protection access and exit points.	The proposed project is in conformance with this proposal.
Transportation Element			
Proposals – Streets and Highways	Hillside and canyon views should be preserved when new streets are constructed.	The proposed project, if implemented, would not include any buildings or objects to obstruct views from Phyllis Place looking out to Mission Valley.	The proposed project is in conformance with this proposal.
	Street widening and other improvements should be minimized and compatibility with the total landscape should be assured.	The proposed project, if implemented, would be not require significant cut into the hillside and would mimic the existing contours, avoiding unnecessary width expansions.	The proposed project is in conformance with this proposal.

Goal/ Recommendation Number	Goal/Objective/Proposal	Proposed Project	Proposed Project Conformance/ Nonconformance
Proposals – Bicycle Routes	A community bikeway system should be designed as shown on the Bikeways Map. This system should be developed so as to adequately serve the major bicycle traffic generators identified in the Plan and connect with the bicycle route systems in adjoining communities.	The proposed project, if implemented, would include a bicycle facility that would link Serra Mesa to the community of Mission Valley.	The proposed project is in conformance with this proposal.
	Means of improving transportation linkages and lessening the impact of motorized vehicular traffic on the environment should be considered. Two possibilities are the “bicycle park-bus ride” and “piggy back” bicycle-bus transportation concepts.	The proposed project, if implemented, would improve transportation linkages for bicycles between the Serra Mesa and Mission Valley Communities	The proposed project is in conformance with this proposal.
Environmental Management Element			
Goal	To manage the physical, biotic, and socioeconomic environment of the community in the context of the San Diego region to ensure improved quality of life, respect the environmental constraints, and preserve community resources for all residents and succeeding generations.	The proposed project would respect the site’s environmental constraints as it would not significantly alter the hillsides within the project site. The project’s grading includes the addition of fill to the side of the hillsides and would not involve cutting into the hillside. The proposed project would also mitigate for impacts on sensitive vegetation communities (disturbed coastal sage scrub).	The proposed project is in conformance with this goal.
Proposals	Open space should be preserved and hillsides conserved by rigorous development controls, as shown on the accompanying map. Open space and hillside conservation areas are limited to slopes of 25% or greater, that poses potential risks to development, and are otherwise environmentally sensitive.	The project site is located on a slope of 25% or greater and would therefore be subject to development controls, including the ESL Regulations. As previously detailed, the proposed project would not significantly alter the hillside through grading operations and would also include slope stability measures that would be implemented as part of the proposed project design.	The proposed project is in conformance with this proposal.

Goal/ Recommendation Number	Goal/Objective/Proposal	Proposed Project	Proposed Project Conformance/ Nonconformance
	Any public improvements such as road, drainage channels, and utility services or any lessee development should be compatible with open space objectives. Public road improvements within open space areas are often not feasible due to the steep terrain and habitat preservation requirements; therefore, unimproved public road easements located within open space areas should be vacated and remain unbuilt. No through roads should be permitted to traverse designated open space.	The proposed project would include a street connection that would not occur within a designated open space area.	The proposed project is in conformance with this proposal.
Objective – Physical Environment – Urban Design	To preserve and enhance the physical environment, visual appearance, safety, identity, and character of the Serra Mesa community through aesthetic improvement and careful urban design.	This proposed project would include a street connection. No buildings or other actions are proposed that would impact the safety, identity, and character of the Serra Mesa and Mission Valley communities. Drought-tolerant landscaping would enhance the physical environment.	The proposed project is in conformance with this objective.
Proposal – Physical Environment – Urban Design	Diversity within neighborhoods should be encouraged to improve “sense of place” by varying the type of street surfaces, sidewalks, lights, signs and other street furniture, innovative yet tasteful remodeling, and individually distinctive landscaping.	The proposed project is partially located within the Quarry Falls site, which has a Specific Plan that details requirements for roadways that are developed within the site. The proposed roadway would conform to the design features within the Specific Plan, which intends to improve “sense of place” by providing a unifying design theme for the Quarry Falls project.	The proposed project is in conformance with this proposal.

5.1.5.2 Significance of Impact

As discussed in Tables 5.1-1 and 5.1-2, the proposed project would be consistent with the applicable goals, policies, guidelines, and recommendations contained within the existing General Plan, Serra Mesa Community Plan, and the Mission Valley Community Plan. As such, the proposed project would not result in a significant impact due to an inconsistency or conflict with the General Plan or the Serra Mesa Community Plan. Impacts would be less than significant.

5.1.5.3 Mitigation Measures

Impacts would be less than significant; therefore, no mitigation measures are required.

5.1.6 Impact Analysis

Issue 3: MSCP Consistency

Would the proposed project conflict with the provisions of the City's MSCP Subarea Plan or other approved local, regional, or state habitat conservation plan?

5.1.6.1 Impact Discussion

As described in Section 5.5, *Biological Resources*, the project site is not within the MHPA. Therefore, implementation of the proposed project would not conflict with the provisions of the MSCP or associated MHPA. Additionally, implementation of mitigation measures provided in Section 5.5, *Biological Resources*, would mitigate impacts on sensitive biological resources to a less-than-significant level. Therefore, the proposed project would be consistent with the MSCP. (Please also refer to Section 5.5 for additional discussion related to the City's MSCP.)

5.1.6.2 Significance of Impact

The project site is not within the City's MHPA boundaries. The proposed project would not result in a significant impact due to an inconsistency or conflict with the City's MSCP Subarea Plan and any applicable MHPA Adjacency Guidelines. In addition, the proposed project would not conflict with any adopted environmental plans. Impacts would be less than significant.

5.1.6.3 Mitigation Measures

Impacts would be less than significant; therefore, no mitigation measures are required.

5.1.7 Impact Analysis

Issue 4: Community Division

Would the proposed project physically divide an established community?

5.1.7.1 Impact Discussion

The proposed project would include a roadway connection close to regional roadways and freeways (I-805) that, if constructed, would provide a direct connection between the Serra Mesa and Mission Valley community planning areas and more access options for regional trips. Serra Mesa and Mission Valley are currently somewhat divided in the vicinity of the project site due to intervening topography and steep slopes. As such, the street connection between the two adjacent communities would not divide an existing community but would help link them; thus, the proposed project would help achieve the General Plan goal of providing an interconnected street system that provides multiple linkages within and between communities. Impacts would be less than significant.

5.1.7.2 Significance of Impact

The proposed project would not result in the division of an established community, as it involves a roadway that would provide a linkage between the Serra Mesa and Mission Valley communities. Therefore, impacts would be less than significant.

5.1.7.3 Mitigation Measures

Impacts would be less than significant; therefore, no mitigation measures are required.

5.1.8 Impact Analysis

Issue 5: ALUCP Consistency

Would the proposed project result in land uses which are not compatible with an adopted ALUCP?

5.1.8.1 Impact Discussion

The Montgomery Field ALUCP defines the project site as being outside the noise contours (60 decibels community noise equivalent level) and outside the airport's AIA – Review Area 1, which consists of locations where noise and safety concerns are pertinent to new development. The project site is within AIA – Review Area 2 (see Figure 5.1-3), which is limited to overflight and airspace factors. Therefore, the project is subject to additional criteria as specified in Section 5.1.2, as well as requirements for determinations by the Federal Aviation Administration and the San Diego County Regional Airport Authority in its role as the ALUC.

The proposed project would not include construction of vertical structures that may conflict with overflight zones or land uses established within the Montgomery Field ALUCP, and would not require a change to air station flight operations, approach minimums, or departure routes. Additionally, the proposed project would not interfere with aircraft communications systems, navigation systems, or other electrical systems. Furthermore, the implementation of the proposed

project would not involve reflective lighting that would interfere with aircrew vision, and would not include development uses that would attract birds or waterfowl such as landfills, feed stations, or certain types of vegetation. For the above-stated reasons, the project would not conflict with the ALUCP for Montgomery Field.

5.1.8.2 Significance of Impact

The project would not result in land uses that are incompatible with an adopted ALUCP; impacts would be less than significant.

5.1.8.3 Mitigation Measures

Impacts would be less than significant; therefore, no mitigation measures are required.

5.2 Transportation and Circulation

This section analyzes transportation and circulation conditions in the vicinity of the project site, including roadway, intersection, and freeway capacity in relation to vehicle traffic. It also analyzes how the project would affect alternative modes of transportation, potential traffic hazards, and community travel times.

The following discussion summarizes the *Serra Mesa CPA Street Connection Traffic Technical Report* (traffic study) prepared by Chen Ryan Associates in September 2016, included as Appendix C to this DEIR. The traffic study utilized data from the previous traffic study, *Franklin Ridge Road Connection Traffic Impact Study*, which was prepared by KOA Corporation in January 2015. The previous traffic study prepared by KOA Corporation is included as an appendix to the traffic study.

There were two relevant CEQA cases addressing the types of analysis scenarios to be included in an EIR: (1) *Sunnyvale West Neighborhood Association v. City of Sunnyvale City Council* (6th Dist. 2010) 190 Cal. App.4th 1351 (Sunnyvale West), and (2) *Neighbors for Smart Rail v. Exposition Metro Line Construction Authority* (2013) 5 Cal. 4th 439 (Neighbors). The decision in the first CEQA case indicated that changes associated with a project should be compared to the existing conditions baseline only to establish project-related impacts, which generally is the time the Notice of Preparation is issued. However, the California Supreme Court ruled in the second case that a future year baseline can be justified if substantial evidence in the administrative record supports a conclusion that an analysis based on existing conditions would be misleading or without informational value to decision-makers and future users of the EIR.

As previously detailed in Chapter 2, *Environmental Setting*, traffic counts were collected in 2011 and verified in 2013 to represent the existing conditions. However, consistent with the Neighbors decision, the existing conditions are provided for informational purposes and are not used to determine project-related impacts. Rather, the impact analysis uses the reasonably foreseeable near-term traffic conditions modeled for the Near-Term Scenario (Year 2017) as the baseline. This is a more conservative and more accurate approach than using the existing conditions because the Near-Term Scenario takes into account projects that have been implemented since 2013. In addition, it is possible the project would not be built for some time and by using near-term conditions rather than existing conditions, the analysis better predicts what the conditions would be like into the future at a point when the project may be implemented. If the existing conditions were used in place of the future near-term conditions, projects that are under construction, planned for construction, or otherwise recently operational would not be factored into the project impact analysis. Accordingly, consistent with the Neighbors decision, traffic conditions for the Near-Term Scenario are considered the near-term baseline conditions for CEQA purposes and are used as a basis for determining project-related traffic impacts.

5.2.1 Existing Conditions

5.2.1.1 Study Area

Transportation and circulation related to the proposed project would affect roadway segments and intersections surrounding the project site under the jurisdiction of the City of San Diego. It would

also affect metered freeway ramps and freeway mainline segments under the jurisdiction of the California Department of Transportation (Caltrans). As such, the study area was defined according to the City's *Traffic Impact Study Manual* (1998) requirements. The *Traffic Impact Study Manual* requires that a study area include all roadway segments, intersections, and freeway segments where the project would contribute 50 or more peak hour trips in either direction. Figure 5.2-1 shows the project study area roadway segments and intersections. The traffic study area that was analyzed consists of 29 roadway segments, 19 existing and 5 future intersections, 3 freeway mainline segments, and 2 metered freeway ramps. The traffic study area is bordered generally by Aero Drive to the north, Rio San Diego Drive to the south, and Mission Center Road and Northside Drive to the west and east, respectively.

Roadway Corridors

Several regionally and locally significant roadways and freeways traverse the study area (Figure 5.2-2). Each of the key transportation facilities is discussed below.

East-West Roadway Facilities

Friars Road is an east-west regionally significant arterial that runs from the Navajo community to the east, where it becomes Mission Gorge Road and heads east into Santee, to Sea World Drive in Mission Bay to the west. Friars Road provides direct access to Qualcomm Stadium, Hazard Center, and Fashion Valley Mall. Within the project study area, Friars Road functions as a six-lane Expressway from Frazee Road to River Run Road, and a six-lane Prime Arterial from River Run Drive to Northside Drive. Friars Road has an ultimate classification of a six-lane Expressway from Frazee Road to Interstate (I) 15 per the Mission Valley Community Plan. Parking is prohibited on Friars Road within the project study area. Friars Road has Class II bike lanes. The speed limit is 50 miles per hour (mph).

Rio San Diego Drive runs east/west parallel to Friars Road, ultimately feeding back into Friars Road along cross-streets. The roadway functions as a four-lane Major roadway, which is also its ultimate classification per the Mission Valley Community Plan. Rio San Diego Drive has two lanes in each direction, a two-way left turn lane, and a center median at Qualcomm Way. Rio San Diego Drive becomes Fenton Marketplace Driveway at Fenton Parkway, then terminates at Northside Drive. Parking is permitted along both sides of Rio San Diego Drive within the project study area, from Qualcomm Way to Rio Bonito Way. Rio San Diego Drive does not have any bicycle facilities within the study area and does not serve any Metropolitan Transit System (MTS) bus routes.

Civita Boulevard¹ is a roadway that runs east-west and services the Quarry Falls development with two lanes in each direction and a center median. It becomes Mission Valley Road west of Mission Center Road, and Russell Parkway to the east where it curves south and terminates at Friars Road.

North-South Roadway Facilities

Mission Center Road is a north-south arterial that connects the Serra Mesa Community to Friars Road and eventually to I-8. It functions as a four-lane Major Arterial between Mission Center Court and Friars Road, with an ultimate classification as a six-lane Major. Mission Center Road then functions as a five-lane Major Arterial between Friars Road and Mission Valley Road. From Mission

¹ This roadway was originally called "Quarry Falls Boulevard" in the Quarry Falls PEIR, but has since been renamed along with the project. It is referred to as Civita Boulevard throughout this document.

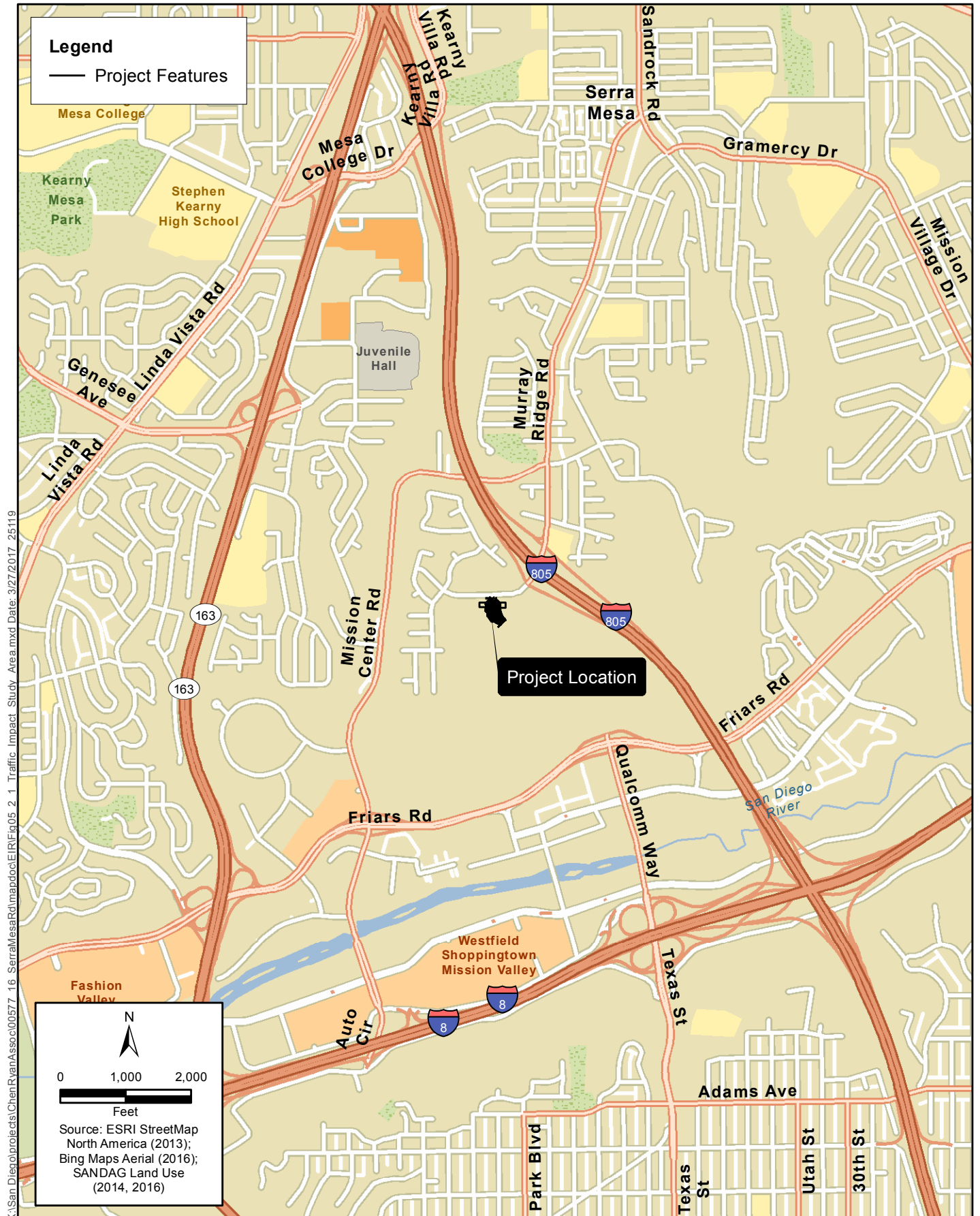


Figure 5.2-1
Traffic Impact Study Area

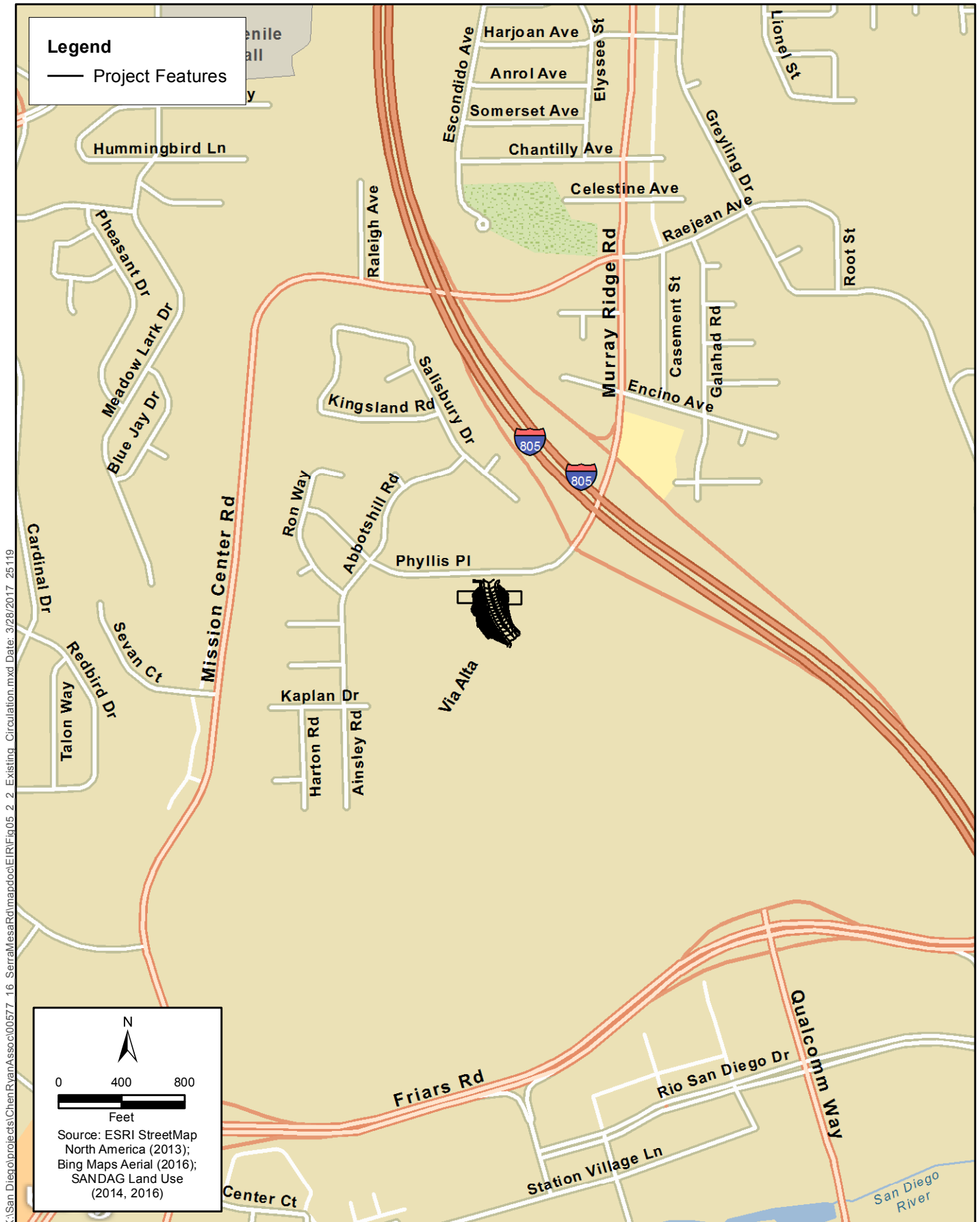


Figure 5,2-2
Existing Circulation Network

Valley Road to Sevan Court, Mission Center Road/Civita Boulevard functions as a four-lane Major, which is also its ultimate classification. Lastly, Mission Center Road/Civita Boulevard then continues north as a three-lane Collector from Sevan Court to the I-805 overpass and a two-lane Collector with no fronting property to Murray Ridge Road, with an ultimate classification along this segment of a four-lane Collector. Mission Center Road provides access to the project site, and the speed limit is 35 mph. Parking is prohibited along Mission Center Road. Mission Center Road has Class II bike lanes and MTS bus route 928.

Phyllis Place/Murray Ridge Road runs in a northeasterly direction. Currently it functions as a two-lane collector from Abbotshill Road to Pinecrest Avenue where Phyllis Place becomes Murray Ridge Road north of Encino Avenue. Its ultimate classification in the Serra Mesa Community Plan (2011) is a four-lane Major. Murray Ridge Road provides the Serra Mesa Community access to I-805 and Mission Valley (via Mission Center Road). Parking currently exists on both sides for the majority of Phyllis Place and Murray Ridge Road. Murray Ridge Road also has Class II bike lanes and MTS bus route 928.

Via Alta is currently the primary entrance to the residential uses that have been constructed within the northwestern portion of the Quarry Falls site. It begins at the south from Westside Drive and runs in a northeasterly direction where it meets with Franklin Ridge Road. The roadway functions as a two-lane Major Arterial and has a landscaped median and left-turn pockets throughout. The roadway provides Class II bike lanes in both directions.

Franklin Ridge Road was not constructed as of the time this writing (2017). It is assumed to be constructed for the Near-Term Scenario analyzed within Section 5.2.4, below. From Via Alta, it would run in a southeasterly direction to Civita Boulevard. This roadway would function as a two-lane Major Arterial and, similar to Via Alta, would have a landscaped median and left-turn pockets throughout. The roadway would provide Class II bike lanes in both directions.

Qualcomm Way runs north-south from I-8 to Friars Road and provides direct access to the Quarry Falls development project site. The roadway functions as a six-lane Major, which is also its ultimate classification. Raised medians and left-turn lanes at signalized intersections are provided. Parking along Qualcomm Way is prohibited. The roadway provides Class II bike lanes in both directions and the speed limit is 40 mph.

Sandrock Road runs north-south connecting the community of Serra Mesa to the community of Kearny Mesa at Aero Drive. The roadway functions as a two-lane Collector with a continuous center turn lane. Sandrock Road has an ultimate classification of a four-lane Major street per the Serra Mesa Community Plan. There are no existing bus routes that travel along Sandrock Road within the study area. Parking is permitted on both sides of the street and Class II buffered bike lanes currently exist along both sides of the roadway. The roadway provides access to commuters within the study area. The posted speed limit of Sandrock Road from Murray Ridge Road to Aero Drive is 35 mph.

Freeway Facilities

I-805 is a north-south facility splitting from I-5 in Sorrento Valley and running parallel to I-5 to just north of the US-Mexico International Border, where the freeways merge back together. The freeway is maintained and operated by Caltrans. I-805 has nine to ten mixed-flow/general purpose lanes (five northbound lanes, five to six southbound lanes) and varying auxiliary lanes throughout the study area. It is accessible via the Phyllis Place/Murray Ridge Road interchange within the study area.

Existing Intersections

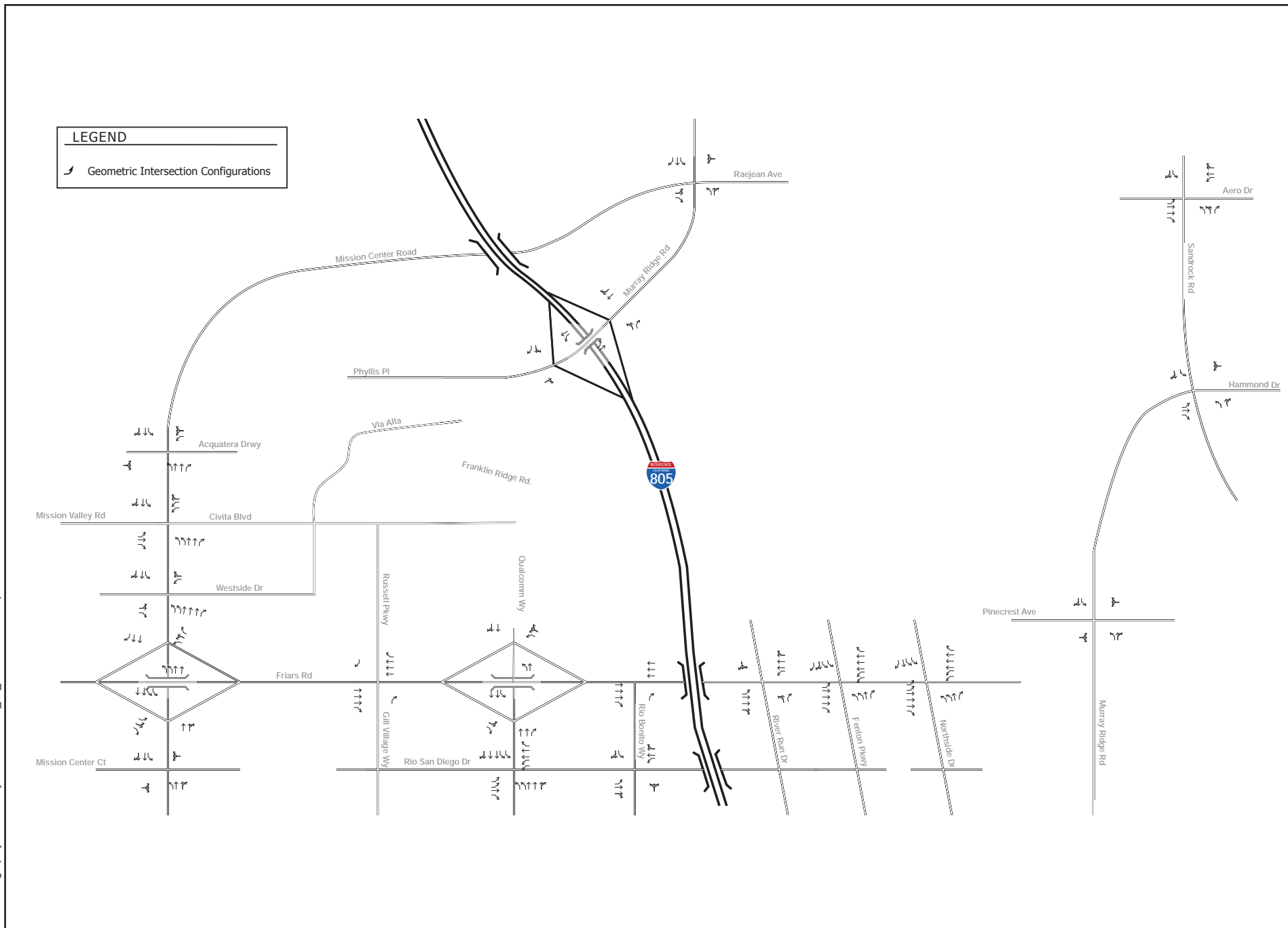
The study area includes existing and future intersections, roadway segments, and freeway segments. Figure 5.2-1 shows the existing intersection configurations within the study area. The following key study area existing intersections were analyzed for the project. It should be noted that the numbering below correlates to the numbers on Figure 5.2-1.

1. Friars Road and River Run Road
2. Friars Road and Fenton Parkway
3. Friars Road and Northside Drive
4. Mission Center Road and Murray Ridge Road/Phyllis Place
5. Mission Center Road and Aquatera Driveway
6. Mission Center Road and Mission Valley Road (Civita Boulevard)
7. Mission Center Road and Westside Drive (Mission Center Driveway)
8. Mission Center Road and Friars Road eastbound (EB) ramps
9. Mission Center Road and Friars Road westbound (WB) ramps
10. Mission Center Road and Mission Center Court
11. Aero Drive and Sandrock Road
12. Murray Ridge Road and Sandrock Road
13. Murray Ridge Road and Pinecrest Avenue
14. I-805 northbound (NB) ramps and Murray Ridge Road
15. I-805 southbound (SB) ramps and Phyllis Place
16. Qualcomm Way and Friars Road EB ramps
17. Qualcomm Way and Friars Road WB ramps
18. Qualcomm Way and Rio San Diego Drive
19. Rio San Diego Drive and Rio Bonito Way

Future Intersections

The following key study area “future” intersections were analyzed for the project. These roadways are associated with the Quarry Falls project. It should be noted that some of these intersections have been constructed since the existing conditions were developed (2013) and are assumed to be constructed in the Near-Term Scenario (Year 2017).

20. Phyllis Place and Franklin Ridge Road
21. Via Alta and Franklin Ridge Road
22. Via Alta and Civita Boulevard (previously named Quarry Falls Boulevard)
23. Civita Boulevard and Russell Parkway (Gill Village Way)
24. Qualcomm Way and Civita Boulevard



Source: KOA Corporation, 2015.

Figure 5.2-3
Existing Intersection Configurations

Roadway Segments

The following study area roadway segments were analyzed for the project.

1. Civita Boulevard between Mission Center Road and Via Alta
2. Civita Boulevard between Via Alta and Russell Parkway
3. Civita Boulevard between Russell Parkway and Qualcomm Way
4. Civita Boulevard between Qualcomm Way and Franklin Ridge Road intersections
5. Franklin Ridge Road between Via Alta and Civita Boulevard
6. Franklin Ridge Road between Via Alta and Phyllis Place
7. Friars Road between Mission Center Road and Qualcomm Way
8. Friars Road between Qualcomm Way and River Run Drive
9. Friars Road between Fenton Parkway and Northside Drive
10. Mission Center Road between Hazard Center Drive and Friars Road
11. Mission Center Road between Friars Road to Westside Drive (Mission Center Driveway)
12. Mission Center Road between Westside Drive (Mission Center Driveway) and Mission Valley Road
13. Mission Center Road between Mission Valley Road and Aquatera Driveway
14. Mission Center Road between Aquatera Driveway and Murray Ridge Road
15. Murray Ridge Road between I-805 NB ramps and Mission Center Road
16. Murray Ridge Road between Mission Center Road and Pinecrest Avenue
17. Murray Ridge Road between Pinecrest Avenue and Sandrock Road
18. Phyllis Place between Abbotshill Road and Franklin Ridge Road
19. Phyllis Place between Franklin Ridge Road and I-805 SB ramps
20. Phyllis Place between I-805 SB ramps and I-805 NB ramps
21. Qualcomm Way between Civita Boulevard and Friars Road WB ramps
22. Qualcomm Way between Friars Road WB ramps and Friars Road EB ramps
23. Qualcomm Way between Friars Road EB ramps and Rio San Diego Drive
24. Rio San Diego Drive between Qualcomm Way and Rio Bonito Way
25. Russell Parkway between Civita Boulevard and Friars Road
26. Sandrock Road between Murray Ridge Road and Aero Drive
27. Via Alta between Franklin Ridge Road and Civita Boulevard
28. Via Alta between Civita Boulevard and Westside Drive (Mission Center Driveway)
29. Westside Drive (Mission Center Driveway) between Mission Center Road and Via Alta

Freeway Mainline Segments

The following freeway mainline segments were analyzed for the project.

1. I-805 between State Route (SR) 163 and Mesa College Drive
2. I-805 between Mesa College on-ramps and Murray Ridge Road
3. I-805 between Murray Ridge Road and I-8

Metered Freeway Ramps

The following freeway ramps were analyzed for the project.

1. I-805 at Phyllis Place SB ramp/Phyllis Place
2. I-805 at Phyllis Place NB ramp/Phyllis Place

5.2.1.2 Existing Transportation Conditions

Traffic operations at the intersections, roadway segments, and freeway ramps identified above were assessed under the existing conditions analysis in the traffic study. To determine the existing traffic volumes at the study intersections, intersection movement counts were taken on a typical weekday during the morning (7:00 a.m. to 9:00 a.m.) and evening (4:00 p.m. to 6:00 p.m.) peak periods in May 2011. Average daily traffic (ADT) volumes were also collected along the study roadway segments over a 24-hour period during the months of May and June in 2011. Additional ADT counts were taken in June 2013 to verify and confirm that the counts taken in 2011 were still valid. Existing peak-hour traffic volumes and existing ADT volumes, including the comparison between the 2011 and 2013 counts, are included in Appendix C.

Roadway Segments

To determine if a roadway segment is operating effectively, a level of service (LOS) grade is applied. LOS is an index used to quantitatively evaluate the operational quality of the roadway segments in the study area. LOS on roadway segments is determined by the ratio of the roadway's volume divided by its design capacity, a metric known as volume to capacity (V/C) ratio. LOS takes into account factors such as roadway geometries, signal phasing, speed, travel delay, freedom to maneuver, and safety, and expresses these conditions using a letter-graded scale, with "A" representing free flow and "F" representing considerable congestion and delay. Table 5.2-1 provides a more detailed explanation of varying LOS.

Table 5.2-1. Level of Service Definitions

LOS Category	Definition of Operation
A	This LOS represents a completely free-flow condition, where the operation of vehicles is virtually unaffected by the presence of other vehicles and only constrained by the geometric features of the highway and by driver preferences.
B	This LOS represents a relatively free-flow condition, although the presence of other vehicles becomes noticeable. Average travel speeds are the same as in LOS A, but drivers have slightly less freedom to maneuver.
C	At this LOS the influence of traffic density on operations becomes marked. The ability to maneuver within the traffic stream is clearly affected by other vehicles.
D	At this LOS, the ability to maneuver is notably restricted due to traffic congestion, and only minor disruptions can be absorbed without extensive queues forming and the service deteriorating.
E	This LOS represents operations at or near capacity. LOS E is an unstable level, with vehicles operating with minimum spacing for maintaining uniform flow. At LOS E, disruptions cannot be dissipated readily, thus causing deterioration down to LOS F.
F	At this LOS, forced or breakdown of traffic flow occurs; although operations appear to be at capacity, queues form behind these breakdowns. Operations within queues are highly unstable, with vehicles experiencing brief periods of movement followed by stoppages.
Source: Transportation Research Board 2010	

Roadway segment capacity within the project study area is based on the City of San Diego's *Traffic Impact Study Manual* (1998), and provided as Table 5.2-2. The City considers LOS D an acceptable LOS for roadway operations.

Table 5.2-2. Roadway Classifications and LOS Standards

Roadway Classification	LOS A	LOS B	LOS C	LOS D	LOS E
Expressway	30,000	42,000	60,000	70,000	80,000
Prime Arterial	25,000	35,000	50,000	55,000	60,000
Major Arterial (6-lane, divided)	< 20,000	< 28,000	< 40,000	< 45,000	< 50,000
Major Arterial (4-lane, divided)	< 15,000	< 21,000	< 30,000	< 35,000	< 40,000
Collector (4-lane w/ center lane)	< 10,000	< 14,000	< 20,000	< 25,000	< 30,000
Collector (4-lane w/o center lane)	< 5,000	< 10,000	< 13,000	< 15,000	< 20,000
Collector (2-lane w/ continuous left-turn lane)	< 5,000	< 10,000	< 13,000	< 15,000	< 20,000
Collector (2-lane no fronting property)	< 4,000	< 5,500	< 7,500	< 9,000	< 10,000
Collector (2-lane commercial-industrial fronting)	< 2,500	< 3,500	< 5,000	< 6,500	< 8,000
Collector (2-lane multi-family)	< 2,500	< 3,500	< 5,000	< 6,500	< 8,000
Sub-Collector (2-lane single family)	-	-	2,200	-	-
Source: City of San Diego 1998					

Existing conditions were determined for roadway segments within the study area. As summarized in Table 5.2-3, all study area segments currently operate at LOS D or better except for the following.

- Mission Center Road between Aquatera Driveway and Murray Ridge Road (LOS E)
- Murray Ridge Road between I-805 NB ramp and Mission Center Road (LOS F)
- Murray Ridge Road between Mission Center Road and Pinecrest Avenue (LOS E)

Table 5.2-3. Roadway Segments: Existing Conditions

Roadway	Segment	Existing Conditions				
		Lanes/ Functional Class	Capacity	ADT	V/C	LOS
Friars Rd	Mission Center Rd to Qualcomm Wy	6E	80,000	33,219	0.415	B
	Qualcomm Wy to Fenton Pkwy	6E	80,000	36,466	0.456	B
	Fenton Pkwy to Northside Dr	6P	60,000	34,886	0.581	B
Mission Center Rd	Hazard Center Dr to Friars Rd	4M	40,000	20,827	0.521	B
	Friars Rd to Mission Center Drwy (Westside Dr)	5M	45,000	22,759	0.506	B
	Mission Center Drwy (Westside Dr) to Mission Valley Rd	5M	45,000	20,013	0.445	B
	Mission Valley Rd to Aquatera Drwy	4M	40,000	9,035	0.226	A
	Aquatera Drwy to Murray Ridge Rd	2C NF	10,000	9,035	0.904	E
Murray Ridge Rd	I-805 NB ramp to Mission Center Rd	2C CL	15,000	17,441	1.163	F
	Mission Center Rd to Pinecrest Ave	2C CL	15,000	14,074	0.938	E
	Pinecrest Ave to Sandrock Rd	2C CL	15,000	9,502	0.633	C
Phyllis Pl	Abbotshill Rd to I-805 SB ramp	2C NF	10,000	2,420	0.242	A
	I-805 SB ramp to I-805 NB ramp	2C CL	15,000	10,770	0.718	D
Qualcomm Wy	Civita Blvd to Friars Rd WB ramp	6M	50,000	1,858	0.037	A
	Friars Rd WB ramp to Friars Rd EB ramp	6M	50,000	9,367	0.187	A
	Friars Rd EB ramp to Rio San Diego Dr	6M	50,000	14,050	0.281	A
Rio San Diego Dr	Qualcomm Wy to Rio Bonito Wy	4C	30,000	18,420	0.614	C
Sandrock Rd	Murray Ridge Rd to Aero Dr	2C CL	15,000	10,686	0.712	D

Source: Appendix C

2C CL = 2-lane Collector with a continuous left-turn lane; 2C NF = 2-lane Collector with no fronting property; 4C = 4-lane Collector; 4M = 4-lane Major Street; 5M = 5-lane Major Street; 6E = 6-lane Expressway; 6P = 6-lane Prime Arterial

Intersections

The *Highway Capacity Manual 2010* (Transportation Research Board 2010) defines LOS in terms of delay or, more specifically, average stopped delay per vehicle. Delay is a measure of driver and/or passenger discomfort, frustration, fuel consumption, and lost travel time. This technique uses 1,900 vehicles per hour per lane as the maximum saturation volume of an intersection. This saturation

volume is adjusted to account for lane width, on-street parking, pedestrians, traffic composition (i.e., percentage of trucks), and shared lane movements (i.e., through and right-turn movements originating from the same lane). The LOS criteria used for signalized intersections is described in Table 5.2-4. The City considers LOS D or better during the AM and PM peak hours to be acceptable for intersection LOS.

Table 5.2-4. Signalized Intersection LOS Criteria

Average Stopped Delay Per Vehicle (seconds)	Level of Service Characteristics
<10.0	<i>LOS A</i> describes operations with very low delay. This occurs when progression is extremely favorable, and most vehicles do not stop at all. Short cycle lengths may also contribute to low delay.
10.1–20.0	<i>LOS B</i> describes operations with generally good progression and/or short cycle lengths. More vehicles stop than for <i>LOS A</i> , causing higher levels of average delay.
20.1–35.0	<i>LOS C</i> describes operations with higher delays, which may result from fair progression and/or longer cycle lengths. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant at this level, although many still pass through the intersection without stopping.
35.1–55.0	<i>LOS D</i> describes operations with high delay, resulting from some combination of unfavorable progression, long cycle lengths, or high volumes. The influence of congestion becomes more noticeable, and individual cycle failures are noticeable.
55.1–80.0	<i>LOS E</i> is considered the limit of acceptable delay. Individual cycle failures are frequent occurrences.
>80.0	<i>LOS F</i> describes a condition of excessively high delay, considered unacceptable to most drivers. This condition often occurs when arrival flow rates exceed the <i>LOS D</i> capacity of the intersection. Poor progression and long cycle lengths may also be major contributing causes to such delay.
Source: Transportation Research Board 2010	

Existing peak-hour intersection conditions were determined for intersections within the study area. LOS analysis focused on peak hour intersection operations, which is the time of the day when traffic is at its heaviest. As shown in Table 5.2-5, all study area intersections currently operate at LOS D or better.

Table 5.2-5. Intersections: Existing Peak-Hour Conditions

Intersection	Peak	Existing Conditions	
		Delay (sec.)	LOS
1. Friars Rd and River Run Rd	AM	10.8	B
	PM	14.6	B
2. Friars Rd and Fenton Pkwy	AM	20.8	C
	PM	24.1	C
3. Friars Rd and Northside Dr	AM	17.1	B
	PM	43.4	D
4. Mission Center Rd and Murray Ridge Rd/Phyllis Pl	AM	29.6	C
	PM	29.5	C
5. Mission Center Rd and Aquatera Drwy	AM	16.0	B
	PM	15.7	B
6. Mission Center Rd and Mission Valley Rd (Civita Blvd)	AM	19.0	B
	PM	22.1	C
7. Mission Center Rd and Westside Dr (Mission Center Drwy)	AM	16.6	B
	PM	17.1	B
8. Mission Center Rd and Friars Rd/EB ramps	AM	8.5	A
	PM	12.6	B
9. Mission Center Rd and Friars Rd/WB ramps	AM	9.1	A
	PM	11.3	B
10. Mission Center Rd and Mission Center Ct	AM	13.9	B
	PM	23.5	C
11. Aero Dr and Sandrock Rd	AM	8.6	A
	PM	7.7	A
12. Murray Ridge Rd and Sandrock Rd	AM	17.6	B
	PM	17.6	B
13. Murray Ridge Rd and Pinecrest Ave	AM	13.8	B
	PM	14.0	B
14. Murray Ridge Rd and I-805 NB ramp	AM	8.8	A
	PM	10.0	A
15. Murray Ridge Rd and I-805 SB ramp	AM	14.0	B
	PM	19.8	B
16. Qualcomm Wy and Friars Rd EB ramp	AM	10.8	B
	PM	10.4	B
17. Qualcomm Wy and Friars Rd WB ramp	AM	19.0	B
	PM	20.4	C
18. Qualcomm Wy and Rio San Diego Dr	AM	12.5	B
	PM	21.0	C
19. Rio San Diego Dr and Rio Bonito Wy	AM	14.6	B
	PM	15.4	B
Source: Appendix C			

Freeway Ramp Meter Analysis

Ramp meter analysis was conducted on I-805 SB and NB ramps at Murray Ridge Road. The ramp meter rates were provided by Caltrans in January 2015. The analysis performed is based on using the median ramp meter rate. The existing ramp meter analysis under existing conditions is summarized in Table 5.2-6.

Table 5.2-6. Ramp Meters: Existing Conditions

Ramp Location	Meter Rate¹ (veh/hr)²	Demand (veh/hr)	Excess Demand (veh/hr)	Delay (min)³	Queue (feet)⁴
AM Peak Hour					
Murray Ridge – I-805 NB on-ramp	851	299	0	0	0
PM Peak Hour					
Murray Ridge – I-805 SB on-ramp	691	520	0	0	0
Murray Ridge – I-805 SB on-ramp (HOV)	691	58	0	0	0

Source: Appendix C

¹ Meter rate is based on the median meter rate provided by Caltrans in January 2015.

² Veh/hr = vehicles per hour

³ Delay = (demand – meter rate)/meter rate * 60 minutes/hour

⁴ Queue = excess demand * 25 feet/vehicle

HOV = high-occupancy vehicle

As shown in Table 5.2-6, under existing conditions, there is no observed delay or queue on any of the existing ramps because the ramp meter rates are greater than the vehicle demand rates.

Freeway Mainline Segments

In September 2016, Caltrans approved its Local Development – Intergovernmental Review Program Interim Guidance (Interim Guidance; Caltrans 2016). The Interim Guidance provides direction to help ensure that Caltrans aligns with State policy through the use of efficient development patterns, innovative demand reduction strategies, and necessary multimodal improvements. The Interim Guidance will remain in effect until superseded by the Caltrans Transportation Analysis Guide and Transportation Impact Study Guidelines, currently under development, which will help implement Caltrans Strategic Management Plan 2015–2020 consistent with Senate Bill 743.

The Interim Guidance and ultimately the Transportation Analysis Guide and Transportation Impact Study Guidelines are intended to set guidelines for Caltrans to transition away from using delay-based analysis, such as LOS or similar measures for freeway mainline segments, in CEQA project review to refocus the attention of analysis to reducing vehicle miles traveled (VMT) on the regional circulation network. The proposed project is a mobility project that would provide a multi-modal connection between two communities that currently lack connectivity. No new trips would be added to the regional circulation network with the proposed project; rather, vehicle trips would be redistributed to other regional circulation network infrastructure. Therefore, consistent with the Caltrans Interim Guidance, a significant impact would occur if the project would result in a substantial increase in VMT when compared to the baseline condition.

As previously detailed at the beginning of this EIR section, the impact analysis utilizes traffic conditions modeled for Year 2017 as the basis for comparing potential traffic impacts associated with the proposed project because it represents the soonest the proposed project could be operational. As such, traffic conditions for Year 2017 would provide a more accurate representation of the direct traffic impacts of the proposed project because they take into account development that has occurred since 2013. Accordingly, traffic conditions for Year 2017 are considered the near-term baseline conditions for CEQA purposes and are similarly used as a basis for comparison of VMT.

Appendix H to this EIR includes the methodology and results of the VMT analyses conducted for the proposed project, which include both a study area VMT analysis and a region-wide (i.e., San Diego County) VMT analysis. As detailed in Appendix H, the existing VMT (Year 2013) for the study area is 424,754, while the region-wide total is 1,422,612. The VMT for the near-term baseline condition (i.e., Year 2017 without the project) is 531,382 within the study area and 1,523,630 for the region.

The following information regarding LOS and V/C ratios is shown for informational purposes. As shown in Table 5.2-7, the corresponding LOS represents an approximation of existing or anticipated future freeway operating conditions in the peak direction of travel during the peak hour. LOS D or better is considered acceptable freeway operations.

Table 5.2-7. Freeway Segment LOS Criteria

LOS	V/C	Congestion/Delay	Traffic Description
<i>Used for freeways, expressways and conventional highways</i>			
A	<0.30	None	Free flow.
B	0.31–0.50	None	Free to stable flow, light to moderate volumes.
C	0.51–0.71	None to minimal	Stable flow, moderate volumes, freedom to maneuver noticeably restricted.
D	0.71–0.89	Minimal to substantial	Approaches unstable flow, heavy volumes, very limited freedom to maneuver.
E	0.90–1.00	Significant	Extremely unstable flow, maneuverability and psychological comfort extremely poor.
<i>Used for conventional highways</i>			
F	>1.00	Considerable	Forced or breakdown flow. Delay measured in average travel speed (mph). Signalized segments experience delays >60.0 seconds/vehicle.
Source: Appendix C			

For informational purposes, existing peak-hour freeway conditions were determined for mainline freeway segments within the study area. Table 5.2-8 shows the existing freeway segment annual average daily traffic volumes. As shown, all study freeway segments currently operate at LOS D or better with the exception of the following.

- I-805 NB from Murray Ridge Road to Mesa College Drive on-ramp (LOS F, AM peak hour)
- I-805 NB from I-8 to Murray Ridge Rd. (LOS F, AM peak hour)
- I-805 SB from Mesa College Drive on-ramp to Murray Ridge Road (LOS F, PM peak hour)

Table 5.2-8. Freeway Mainline Segments: Existing Conditions

Segment	Peak Hour	LOS E Capacity	PHV	V/C	LOS
I-805 Northbound					
Mesa College Dr on-ramp to SR-163	AM	11,200	10,294	0.916	D
	PM	11,200	5,180	0.463	B
Murray Ridge Rd to Mesa College Dr on-ramp	AM	11,200	11,625	1.038	F
	PM	11,200	5,866	0.524	B
I-8 to Murray Ridge Rd	AM	11,200	11,834	1.057	F
	PM	13,000	5,972	0.533	B
I-805 Southbound					
SR-163 to Mesa College Dr on-ramp	AM	11,200	4,454	0.398	A
	PM	11,200	10,177	0.909	D
Mesa College Dr on-ramp to Murray Ridge Rd	AM	11,200	5,044	0.450	B
	PM	11,200	11,526	1.029	F
Murray Ridge Rd to I-8	AM	11,200	5,135	0.395	A
	PM	13,000	11,734	0.903	D
Source: Appendix C					
PHV = Peak Hour Volume ((ADT)(K)(D)/(Truck Factor))					

Existing Transit

Transit opportunities in the vicinity of the project site include bus service and the trolley, both of which are operated by MTS. There are numerous bus routes that serve both communities, but also provide access to the Fashion Valley Transit Center, where commuters can then board the trolley.

Several bus routes traverse the Mission Valley and Serra Mesa communities (see Figure 2-5); however, the most pertinent to the vicinity of the project site include MTS bus routes 25 and 928. MTS route 25 runs from the Fashion Valley Transit Center northeast through Linda Vista, Mesa College, along Aero Drive in Serra Mesa, east to Tierrasanta, then back west ending at Kearny Mesa Transit Center. MTS route 928 also begins at the Fashion Valley Transit Center and runs northeast toward the vicinity of the project site via Mission Center Road, through Serra Mesa via Murray Ridge Road, then eventually north to the Kearny Mesa Transit Center via Ruffin Road.

The MTS trolley system's Green Line service runs through Mission Valley connecting Old Town and Downtown San Diego with Qualcomm Stadium, San Diego State University, and cities to the east. Within Mission Valley, the Green Line runs parallel to and along Friars Road with stops at Fashion Valley Transit Center, Mission Center Road/Hazard Center Drive, Mission Valley Center, Qualcomm Way (Rio Vista), Fenton Parkway, and Qualcomm Stadium. The MTS Green Line also connects with the Blue Line and Orange Line in Downtown San Diego to connect with the San Diego/Mexico border and Southeast San Diego, Lemon Grove, and La Mesa. Extension of the system is planned for a northerly route to the University of California at San Diego and to University Towne Center in the next few years.

There are two trolley stations in the vicinity of the project site (see Figure 2-5): the Rio Vista Station and the Mission Valley Center Station. The Rio Vista Station is not currently served by any MTS bus routes and does not have any dedicated parking for transit users. The Mission Valley Center Station is served by MTS bus route 6, which runs from Fashion Valley to North Park via Camino de la Reina, Texas Street, and El Cajon Boulevard. There is no dedicated parking for transit users at the Mission Valley Center Station.

Pedestrian and Bicycle Circulation

Pedestrian facilities are provided as sidewalks and multi-use trails. Bicycle opportunities are provided by bikeways. The City has three classifications for bikeways: Class I (Bike Path or Trail), Class II (Bike Lane), and Class III (Bike Route). A Class I bike path/trail is designated along Friars Road west of Fashion Valley Road; a Class II bike lane is provided along Friars Road east of Fashion Valley Road. Additionally, there are Class II bike lanes along Mission Center Road and Qualcomm Way. Class I paths for both pedestrians and bicyclists have been developed within the San Diego River open space corridor.

5.2.2 Regulatory Framework

5.2.2.1 State

California Department of Transportation

Caltrans has jurisdiction over the state highway system and is divided into 12 districts. They are responsible for the construction and maintenance of the state highway system. Caltrans establishes acceptable freeway and on- and off-ramp operations based on the Transportation Research Board's *Highway Capacity Manual 2010* (Transportation Research Board 2010).

As discussed above, in September 2016, Caltrans approved the Interim Guidance, which is intended to set guidelines for Caltrans to transition away from using delay-based analysis, such as LOS or similar measures for freeway mainline segments, in CEQA project review to refocus the attention of analysis to reducing VMT on the regional circulation network.

Assembly Bill 1358 – California Complete Streets Act of 2008

Supporting some of the previously referenced regulations/requirements, the California Complete Streets Act of 2008 (Assembly Bill 1358) requires circulation elements as of January 1, 2011, to accommodate the transportation system from a multimodal perspective, including public transit, walking, and biking components.

Senate Bill 743

Senate Bill 743 mandates a change in the way that public agencies evaluate transportation impacts of projects under CEQA, focusing on VMT rather than LOS or other delay-based metrics. SB 743 states that new methodologies under CEQA are needed for evaluating transportation impacts that are better able to promote the state's goals of reducing greenhouse gas emissions and traffic-related air pollution, promoting the development of a multimodal transportation system, and providing clean, efficient access to destinations. It also requires that an update to the CEQA Guidelines occur to

reflect these changes. As of January 2017, the Governor's Office of Planning and Research and the Natural Resources Agency have not finalized the update to the CEQA Guidelines.

5.2.2.2 Local

San Diego Association of Government's San Diego Forward: The Regional Plan

San Diego Forward: The Regional Plan (Regional Plan) was adopted by the San Diego Association of Governments (SANDAG) Board of Directors on October 9, 2015, to establish a long-range blueprint for the San Diego region's growth and development through the year 2050. The Regional Plan was developed in close partnership with the region's 18 cities and the County government, and aims to provide innovative mobility choices and planning to support a sustainable and healthy region, a vibrant economy, and an outstanding quality of life for all. The Regional Plan integrates both the 2004 Regional Comprehensive Plan and the 2050 Regional Transportation Plan and Sustainable Communities Strategy (SCS) into one unified plan. By incorporating the SCS, the Regional Plan is in compliance with Senate Bill 375, which identifies how the region will address greenhouse gas emissions to meet State-mandated levels and focuses on land use planning and transportation issues in an attempt to develop sustainable growth patterns on a regional level.

California State Proposition 111, passed by voters in 1990, established a requirement that urbanized areas prepare and regularly update a Congestion Management Program (CMP). The requirements within the state CMP were developed to monitor the performance of the transportation system, develop programs to address near-term and long-term congestion, and better integrate transportation and land use planning. SANDAG provided regular updates for the state CMP from 1991 through 2008. In October 2009, the San Diego region elected to be exempt from the state CMP, and, since this decision, SANDAG has been abiding by 23 Code of Federal Regulations (CFR) 450.320 to ensure the region's continued compliance with the federal congestion management process. The Regional Plan is the region's long-range transportation plan and SCS, and meets the requirements of 23 CFR 450.320 by incorporating the following federal congestion management process: performance monitoring and measurement of the regional transportation system, multimodal alternatives and non-single occupant vehicle analysis, land use impact analysis, the provision of congestion management tools, and integration with the regional transportation improvement program process.

Riding to 2050, the San Diego Regional Bike Plan

The San Diego Regional Bike Plan (SANDAG 2010) was developed to support the 2004 Regional Comprehensive Plan and the 2050 Regional Transportation Plan in implementing the regional strategy for utilizing the bicycle as a valid form of everyday travel. The bike plan, as a part of the SCS mandated by Senate Bill 375, provides for a detailed Regional Bike Network, as well as the programs that are necessary to support it. Implementation of the Regional Bike Plan would help the region meet goals for reducing greenhouse gas emissions and improving mobility.

City of San Diego Traffic Impact Study Manual

The City's *Traffic Impact Study Manual*, approved in 1998, was created to establish a procedure for determining the type of traffic impact study necessary and to address and establish certain requirements for preparing traffic impact analyses. The manual provides guidance on establishing a study area, deciding how extensive a traffic study should be, setting project phasing, using

background information, and adjusting or compensating for transit stations or mixed-use developments. The manual also provides City thresholds for acceptable roadway and intersection operations and further guidance on the City's internal review process, to aid in traffic study preparation.

City of San Diego Street Design Manual

The City's *Street Design Manual* (City of San Diego 2002) provides information and guidance for the design of public right-of-way that accommodates a variety of potential users, including motorists, pedestrians, and bicyclists. The *Street Design Manual* is divided into six sections: Roadway Design, Pedestrian Design, Traffic Calming, Street Lighting, Parkway Configurations, and Design Standards. The guidelines are focused on the development of new or undeveloped areas as well as redeveloping areas and are not intended to supersede other guidelines developed in other local planning documents, such as community plans, specific plans, and regional transportation plans.

City of San Diego Bicycle Master Plan

The City of San Diego Bicycle Master Plan (2013) provides a framework for making cycling a more practical and convenient transportation option for San Diegans at different riding purposes and skill levels. The Bicycle Master Plan is a 20-year policy document that guides the development and maintenance of San Diego's bicycle network. The bicycle network includes all roadways that bicyclists have the legal right to use, support facilities, and non-infrastructure programs. The plan includes direction for policymakers on expanding the existing bikeway network, connecting gaps, addressing constrained areas, improving intersections, providing for greater local and regional connectivity, and encouraging more residents to bicycle more often. The 2013 update builds on the 2002 version by updating bicycling needs by addressing changes to the bicycle network and overall infrastructure.

City of San Diego Pedestrian Master Plan

The Pedestrian Master Plan (City of San Diego 2006) provides guidelines to the City that will enhance neighborhood quality and mobility options through the facilitation of pedestrian improvement projects. The Pedestrian Master Plan both identifies and prioritizes pedestrian improvement projects through technical analysis and community input programs, which are typically grant-funded.

City of San Diego General Plan

The Mobility Element of the City of San Diego General Plan defines the policies regarding traffic flow and transportation facility design. The purpose of the Mobility Element is to improve mobility through development of a balanced, multimodal transportation network. The main goals of the Mobility Element pertain to walkable communities, transit first, street and freeway system, intelligent transportation systems, Transportation Demand Management, bicycling, parking management, airports, passenger rail, goods movement/freight, and regional transportation coordination and financing.

Mission Valley Community Plan

The Transportation Element of the Mission Valley Community Plan (1985) discusses numerous aspects of the circulation system within the community. The primary objective of the element is to facilitate transportation into, throughout, and out of Mission Valley while seeking to establish and maintain a balanced transportation system. Relevant to the project, the plan discusses gaps in the surface street system. It specifically states (page 76):

Some roadways north of Friars Road will need to be developed as part of the Mission Valley transportation system. These roads will be located in those areas between SR-163 and I-15, which are currently involved in sand and gravel extraction. The roads will be implemented at the time of each individual area's proposed change of land use from sand and gravel extraction to urban development, once resource depletion has occurred.

Serra Mesa Community Plan

The Transportation Element within the Serra Mesa Community Plan states that the transportation system should be well balanced between individual and mass transit conveyances and offer a wide choice among modes of travel. The plan does not specifically mention the proposed roadway connection. The policies within the plan state that: street widening and other improvements should be minimized and compatibility with the total landscape should be ensured; curb cuts along designated primary arterial and major streets should be discouraged; hillside and canyon views should be preserved when new streets are constructed; and unsightly barricades at the ends of minor residential streets should be replaced with cul-de-sacs and loop streets.

5.2.3 Significance Determination Thresholds

5.2.3.1 Issue Questions

The following issue questions are based on the City's Significance Determination Thresholds (2016) and provide the basis for determining significance of impacts on existing transportation and circulation conditions as a result of the proposed project's implementation.²

Impacts are considered significant if the project would result in any of the following.

1. An increase in projected traffic that is substantial in relation to the existing traffic load and capacity of the street system.
2. The addition of a substantial amount of traffic to a congested freeway interchange or ramp, or in a substantial increase in VMT for freeway mainline segments.
3. A substantial impact upon existing or planned transportation systems.
4. An increase in traffic hazards for motor vehicles, bicycles, or pedestrians due to a proposed, non-standard design feature (e.g., poor sight distance or driveway onto an access-restricted roadway).

² On September 2016, Caltrans adopted Interim Guidance for assessing freeway mainline segments, which would replace LOS and other delay metrics with VMT to determine whether a project would result in an impact under CEQA. Therefore, the freeway mainline segment analysis uses VMT rather than LOS to determine if impacts on any freeway mainline segments would occur.

5. Substantial alterations to present circulation movements, including effects on existing public access to beaches, parks, or other open space areas.
6. Conflicts with adopted policies, plans, or programs supporting alternative transportation modes.

5.2.3.2 Methods and Assumptions

Direct traffic impacts are those projected to occur at the time a proposed development becomes operational, including other developments not presently operational but anticipated to be operational at that time (near-term). Additionally, cumulative traffic impacts are those projected to occur at some point after a proposed development becomes operational, such as during subsequent phases of a project and when additional proposed developments in the area become operational (short-term cumulative) or when the affected community plan area reaches full planned buildout (long-term cumulative). Because the proposed project involves an amendment to the Serra Mesa Community Plan, the cumulative impact analysis evaluates the long-term cumulative impacts projected to occur when the Serra Mesa Community Plan reaches full planned buildout, which is anticipated to occur by the year 2035. Accordingly, the cumulative impact analysis under Issue 3 applies the projected traffic conditions for the year 2035. Potential direct and long-term cumulative impacts related to each of these thresholds are discussed in the impact analysis that follows, as appropriate.

The Near-Term Scenario (Year 2017) does not assume that the SR-163/Friars Road interchange or Hazard Center Road extension would be constructed, but other regional improvements beyond the study area are included in SANDAG's model.

The significance of impacts for each study scenario were determined based on the peak-hour intersection analysis, daily roadway segment analysis, and ramp meter analysis, utilizing the quantitative thresholds identified in the City's Significance Determination Thresholds (2016). These thresholds are generally based upon an acceptable increase in the V/C ratio for roadway segments, and upon increases in vehicle delays for intersections and ramps. As previously detailed, based on the Interim Guidance issued by Caltrans, the freeway mainline segment analysis uses VMT rather than LOS to determine if impacts on any freeway mainline segments would occur. A significant impact would occur if the project would result in a substantial increase in VMT when compared to the baseline condition.

In the City of San Diego, LOS D is considered acceptable for roadway and intersection operations. A project is considered to have a significant impact if it degrades the operations of a roadway or intersection from an acceptable LOS (D or better) to an unacceptable LOS (E or F), or if it adds additional delay to a facility already operating at an unacceptable level.

The City's Significance Determination Thresholds (2016) identifies significant impacts if one of the criteria provided in Table 5.2-9 are met. Table 5.2-9 summarizes the City's thresholds for project traffic impacts.

Table 5.2-9. City of San Diego Traffic Impact Significance Thresholds

LOS with Project	Allowable Change Due to Project Impact			
	Roadway Segments	Intersections	Ramp Metering	
	V/C	Speed (mph)	Delay (seconds)	Delay (minutes)
E (or ramp meter delays above 15 minutes)	0.02	1.0	2.0	2.0
F (or ramp meter delays above 15 minutes)	0.01	0.5	1.0	1.0

5.2.4 Impact Analysis

Issues 1 and 2: Roadway Capacity

Would the project result in (1) an increase in projected traffic that is substantial in relation to the existing traffic load and capacity of the street system or (2) the addition of a substantial amount of traffic to a congested freeway interchange or ramp; for mainline freeway segments, result in a substantial increase in VMT over existing conditions?

5.2.4.1 Impact Discussion

The Near-Term scenario compares the Year 2017 roadway, intersection, and freeway facility conditions with the addition of the proposed project. Potential significant direct impacts on roadway facilities are analyzed in terms of changes in V/C ratio, average delay, and LOS in accordance with the City's thresholds outlined in Table 5.2-9 above and VMT for Caltrans' freeway facilities, in accordance with recent guidance published by Caltrans.

Roadway Segments

Table 5.2-10 compares the performance of study area roadway segments under Near-Term conditions with and without the project and displays the changes in V/C ratio and LOS, which are the basis for identification of significant direct impacts on roadway segments associated with the proposed project.

As shown in Table 5.2-10, the proposed project would have a significant direct impact on the following four study area roadway segments.

- Murray Ridge Road, from Mission Center road to Pinecrest Avenue (**Impact TRAF-1**)
- Murray Ridge Road, from Pinecrest Avenue to Sandrock Road (**Impact TRAF-2**)
- Phyllis Place, from Franklin Ridge Road to I-805 SB ramps (**Impact TRAF-3**)
- Phyllis Place, from I-805 SB ramps to I-805 NB ramps (**Impact TRAF-4**)

Table 5.2-10. Roadway Segments: Near-Term Baseline Condition vs Near-Term Project Condition

Roadway Segment	Lanes/ Classification	LOS E Capacity	Near-Term Baseline			Near-Term with Project			Comparison	
			ADT	V/C	LOS	ADT	V/C	LOS	Δ V/C	SI?
Civita Blvd										
Mission Center Rd to Via Alta	4M	40,000	8819	0.220	A	5,227	0.131	A	-0.089	No
Via Alta to Russell Pkwy	4M	40,000	1,7349	0.434	B	11,403	0.285	A	-0.149	No
Russell Pkwy to Qualcomm Wy	4M	40,000	16,705	0.418	B	11,810	0.295	A	-0.123	No
Qualcomm Wy to Franklin Ridge Rd	4M	40,000	7697	0.192	A	9,897	0.247	A	0.055	No
Franklin Ridge Rd										
Via Alta to Civita Blvd	2M	16,667	6,912	0.415	B	12,620	0.757	C	0.342	No
Phyllis Pl to Via Alta	4M	40,000	-	-	-	23,217	0.580	C	0.580	No
Friars Rd										
Mission Center Rd to Qualcomm Wy	6E	80,000	4,7944	0.599	C	40,418	0.505	B	-0.094	No
Qualcomm Wy to Fenton Pkwy	6E	80,000	37,732	0.472	B	39,466	0.493	B	0.021	No
Fenton Pkwy to Northside Dr	6P	60,000	35,586	0.593	C	36,800	0.613	C	0.020	No
Mission Center Rd										
Hazard Center Dr to Friars Rd	4M	40,000	26,753	0.669	C	25,908	0.648	C	-0.021	No
Friars Rd to Mission Center Drwy (Creekside Park Ln)	5M	45,000	23,386	0.520	B	19,596	0.435	B	-0.085	No
Mission Center Drwy (Creekside Park Ln) to Mission Valley Rd	5M	45,000	16,422	0.365	A	13,552	0.301	A	-0.064	No
Mission Valley Rd to Aquatera Drwy	4M	40,000	18,158	0.454	B	8,137	0.203	A	-0.251	No
Aquatera Drwy to Murray Ridge Rd	2C NF	10,000	18,158	1.816	F	8,137	0.814	D	-1.002	No
Murray Ridge Rd										
I-805 NB ramp to Mission Center Rd	2C CL	15,000	23,814	1.588	F	18,165	1.211	F	-0.377	No
Mission Center Rd to Pinecrest Ave	2C CL	15,000	16,904	1.127	F	18,111	1.207	F	0.080	Yes
Pinecrest Ave to Sandrock Rd	2C CL	15,000	12,601	0.840	D	13,476	0.898	E	0.058	Yes
Phyllis Pl										
Abbotshill Rd to Franklin Ridge Rd	2C NF	10,000	2,420	0.242	A	2,420	0.242	A	0.000	No

Roadway Segment	Lanes/ Classification	LOS E Capacity	Near-Term Baseline			Near-Term with Project			Comparison	
			ADT	V/C	LOS	ADT	V/C	LOS	Δ V/C	SI?
Franklin Ridge Rd to I-805 SB ramp	2C NF	10,000	2,420	0.242	A	23,355	2.336	F	2.0935	Yes
I-805 SB ramp to I-805 NB ramp	2C CL	15,000	10,785	0.719	D	17,599	1.173	F	0.454	Yes
Qualcomm Wy										
Civita Blvd to Friars Rd WB ramp	6M	50,000	18,097	0.362	A	19,405	0.388	A	0.026	No
Friars Rd WB ramp to Friars Rd EB ramp	6M	50,000	16,999	0.340	A	19,005	0.380	A	0.040	No
Friars Rd EB ramp to Rio San Diego Dr	6M	50,000	20,560	0.411	B	23,414	0.468	B	0.057	No
Rio San Diego Dr										
Qualcomm Wy to Rio Bonito Wy	4C	30,000	20,917	0.697	D	21,940	0.731	D	0.034	No
Russell Pkwy										
Civita Blvd to Friars Rd	2M	16,667	10,300	0.618	C	9,600	0.576	C	-0.042	No
Sandrock Rd										
Murray Ridge Rd to Aero Dr	2C CL	15,000	10,507	0.700	D	11,366	0.758	D	0.058	No
Westside Dr										
Mission Center Rd to Via Alta	2C CL	15,000	7,174	0.478	C	8,744	0.583	C	0.105	No
Via Alta										
Franklin Ridge Rd to Civita Blvd	2M	16,667	2,957	0.177	A	9,476	0.569	C	0.392	No
Civita Blvd to Westside Dr	2M	16,667	3,435	0.206	A	5,005	0.300	A	0.094	No

Source: Appendix C

Bold letter indicates substandard LOS E or F.

2C CL = 2-lane Collector with a continuous left-turn lane

2C NF = 2-lane collector with no fronting property

4C = 4-lane Collector

4M = 4-lane Major Street

5M = 5-lane Major Street

6E = 6-lane Expressway

6M = 6-lane Major

6P = 6-lane Prime Arterial

SI? = Significant Impact

Intersections

Table 5.2-11 compares the performance of study area intersections under the Near-Term Scenario with and without the project and displays the change in average delay and LOS, which are the basis for identification of significant direct impacts on intersections associated with the proposed project.

As shown in Table 5.2-11, the proposed project would cause a significant direct impact on the following three study area intersections.

- Murray Ridge Road and I-805 NB ramps (PM peak hour) (**Impact TRAF-5**)
- Murray Ridge Road and I-805 SB ramps (PM peak hour) (**Impact TRAF-6**)
- Qualcomm Way and Friars Road WB ramps (PM peak hour) (**Impact TRAF-7**)

Table 5.2-11. Intersections: Near-Term Baseline Condition vs Near-Term Project Condition

Intersection	Traffic Control	Peak Hour	Near-Term Baseline		Near-Term with Project		Comparison	
			Avg. Delay (sec.)	LOS	Avg. Delay (sec.)	LOS	Δ Avg. Delay (sec.)	SI?
1. Friars Rd & River Run Rd	Signal	AM	11.1	B	10.6	B	-0.5	No
		PM	18.7	B	17.4	B	-1.3	No
2. Friars Rd & Fenton Pkwy	Signal	AM	20.6	C	20.4	C	-0.2	No
		PM	30.3	C	31.1	C	0.8	No
3. Friars Rd & Northside Dr	Signal	AM	17.4	B	17.4	B	0.0	No
		PM	64.7	E	64.7	E	0.0	No
4. Mission Center Rd & Murray Ridge Rd/Phyllis Pl	Signal	AM	41.5	D	30.2	C	-11.3	No
		PM	53.5	D	47.8	D	-5.7	No
5. Mission Center Rd & Aquatera Drwy	Signal	AM	17.4	B	18.5	B	1.1	No
		PM	16.5	B	17.2	B	0.7	No
6. Mission Center Rd & Mission Valley Rd (Civita Blvd)	Signal	AM	21.5	C	20.3	C	-1.2	No
		PM	25.4	C	24.8	C	-0.6	No
7. Mission Center Rd & Westside Dr (Mission Center Drwy)	Signal	AM	16.8	B	17.5	B	0.7	No
		PM	15.1	B	15.9	B	0.8	No
8. Mission Center Rd & Friars Rd/EB ramps	Signal	AM	11.0	B	10.7	B	-0.3	No
		PM	15.2	B	13.2	B	-2.0	No
9. Mission Center Rd & Friars Rd/WB ramps	Signal	AM	10.0	A	9.4	A	-0.6	No
		PM	15.2	B	13.8	B	-1.4	No
10. Mission Center Rd & Mission Center Ct	Signal	AM	15.0	B	15.0	B	0.0	No
		PM	25.9	C	26.0	C	0.1	No
11. Aero Dr & Sandrock Rd	Signal	AM	10.6	B	10.6	B	0.0	No
		PM	13.1	B	14.6	B	1.5	No
12. Murray Ridge Rd and Sandrock Rd	Signal	AM	17.6	B	18.0	B	0.4	No
		PM	32.7	C	38.9	D	6.2	No

Intersection	Traffic Control	Peak Hour	Near-Term Baseline		Near-Term with Project		Comparison	
			Avg. Delay (sec.)	LOS	Avg. Delay (sec.)	LOS	Δ Avg. Delay (sec.)	SI?
13. Murray Ridge Rd and Pinecrest Ave	Signal	AM	15.5	B	15.2	B	-0.3	No
		PM	16.7	B	16.5	B	-0.2	No
14. Murray Ridge Rd & I-805 NB ramp	Signal	AM	9.9	A	24.0	C	14.1	No
		PM	11.0	B	59.4	E	48.4	Yes
15. Murray Ridge Rd & I-805 SB ramp	Signal	AM	14.0	B	34.8	C	20.8	No
		PM	21.8	C	141.4	F	119.6	Yes
16. Qualcomm Wy & Friars Rd EB ramp	Signal	AM	15.8	B	14.3	B	-1.5	No
		PM	18.5	B	18.1	B	-0.4	No
17. Qualcomm Wy & Friars Rd WB ramp	Signal	AM	25.0	C	26.1	C	1.1	No
		PM	53.9	D	58.2	E	4.3	Yes
18. Qualcomm Wy & Rio San Diego Dr	Signal	AM	12.8	B	13.5	B	0.7	No
		PM	25.4	C	29.5	C	4.1	No
19. Rio San Diego Dr & Rio Bonito Wy	Signal	AM	14.5	B	14.5	B	0.0	No
		PM	14.9	B	15.6	B	0.7	No
20. Phyllis Pl & Franklin Ridge Rd	Signal	AM	0.0	0	10.9	B	10.9	No
		PM	0.0	0	10.4	B	10.4	No
21. Via Alta & Franklin Ridge Rd	Signal	AM	25.9	C	29.8	C	3.9	No
		PM	22.2	C	28.1	C	5.9	No
22. Via Alta & Civita Blvd	Signal	AM	14.2	B	18.1	B	3.9	No
		PM	16.5	B	19.8	B	3.3	No
23. Civita Blvd & Russell Pkwy/Gill Village Dr	Signal	AM	17.4	B	12.0	B	-5.4	No
		PM	19.5	B	18.9	B	-0.6	No
24. Qualcomm Wy & Civita Blvd	Signal	AM	15.5	B	16.3	B	0.8	No
		PM	15.3	B	16.0	B	0.7	No

Source: Appendix C

Bold letter indicates substandard LOS E or F.

SI? = Significant Impact

Freeway Ramp Meters

Table 5.2-12 compares the study area ramp meter performance under the Near-Term scenario and displays the change in queue length and delay, which are the basis for identification of significant direct impacts on metered freeway ramps associated with the proposed project. As shown in Table 5.2-12, all metered on-ramps within the project study area are projected to operate with fewer than 15 minutes of delay. Based on the criteria outlined in Table 5.2-9, impacts associated with metered freeway on-ramps would be less than significant.

Table 5.2-12. Ramp Metering: Near-Term Baseline Condition vs Near-Term Project Condition

Location	Meter Rate	Near-Term Baseline				Near-Term With Project				Comparison	
		Demand (veh/hr)	Excess Demand (veh/hr)	Delay (min)	Queue (ft)	Demand (veh/hr)	Excess Demand (veh/hr)	Delay (min)	Queue (ft)	Δ Delay (min)	SI?
AM Peak Hour											
Murray Ridge Rd – I-805 NB on-ramp	851	368	0	0	0	838	0	0	0	0	No
PM Peak Hour											
Murray Ridge Rd – I-805 SB on-ramp	691	542	0	0	0	798	107	9	3,112	9	No
Murray Ridge Rd – I-805 SB on-ramp (HOV)	691	60	0	0	0	89	0	0	0	0	No
Source: Appendix C SI? = Significant Impact											

Freeway Mainline

For informational purposes, Table 5.2-13 compares the performance of key study area freeway mainline segments under Near-Term 2017 baseline conditions followed by the Near-term plus project conditions and shows the changes in V/C ratio and LOS. As shown in Table 5.2-13, if the LOS criteria were to be utilized, the project would result in a significant impact at six freeway segments as the increase in V/C ratio would exceed the City's significance criteria (see Table 5.2-9).

Table 5.2-13. Freeway Mainline Segments: Near-Term Baseline Condition vs Near-Term Project Condition

Freeway Segment	AM/PM	LOS E Capacity	2017 without Project			2017 with Project		
			PHV	V/C	LOS	PHV	V/C	LOS
I-805 Northbound								
I-8 to Murray Ridge Rd	AM	11,200	15,859	1.416	F	15,877	1.418	F
	PM	13,000	8,003	0.715	C	8,013	0.715	C
Murray Ridge Rd to Mesa College Dr	AM	11,200	15,854	1.416	F	16,188	1.445	F
	PM	11,200	8,001	0.714	C	8,169	0.729	C
Mesa College Dr to SR-163	AM	11,200	14,339	1.28	F	14,630	1.306	F
	PM	11,200	7,236	0.646	C	7,383	0.659	C
I-805 Southbound								
SR-163 to Mesa College Dr	AM	11,200	6,222	0.556	B	6,348	0.567	B
	PM	11,200	14,217	1.269	F	14,506	1.295	F
Mesa College Dr to Murray Ridge Rd	AM	11,200	6,879	0.614	B	7,024	0.627	C
	PM	11,200	15,720	1.404	F	16,051	1.433	F
Murray Ridge Rd to I-8	AM	11,200	6,881	0.529	B	6,889	0.53	B
	PM	13,000	15,724	1.210	F	15,743	1.211	F

Source: Appendix C

Bold letter indicates substandard LOS E or F.

As noted in Section 5.2.1.2, Caltrans' Interim Guidance and ultimately the Transportation Analysis Guide and Transportation Impact Study Guidelines are intended to set guidelines for Caltrans to transition away from using delay-based analysis, such as LOS or similar measures for freeway mainline segments, in CEQA project review to refocus the attention of analysis to reducing VMT on the regional circulation network. The proposed project would not add trips to the regional circulation network; rather, vehicle trips would be redistributed to other regional circulation network infrastructure. Therefore, consistent with the Caltrans Interim Guidance, a significant impact would occur if the project would result in a substantial increase in VMT when compared to the baseline condition.

As detailed in Appendix H to this EIR, the VMT for the study area without the project under the Near-Term scenario (Year 2017) is 531,382. The region-wide total (i.e., San Diego region) without the project under this scenario is 1,523,630.

An analysis of the regional VMT was conducted with the implementation of the proposed roadway connection. The modeled VMT with the roadway connection under the Near-Term Scenario (Year 2017) within the study area is 521,826. This represents a 1.8 percent decrease of VMT within the study area. With the proposed project, the region-wide VMT total is 1,518,696, a decrease of 0.32 percent.

Therefore, as the proposed project would reduce VMT, impacts associated with freeway mainline segments would be less than significant.

5.2.4.2 Significance of Impacts

Based on the City's significance thresholds outlined in Table 5.2-9, the proposed project would result in significant direct impacts on four roadway segments and three intersections in the Near-Term scenario. Therefore, mitigation would be required to reduce potential impacts to the maximum extent feasible.

Roadway Segments

- Murray Ridge Road, from Mission Center Road to Pinecrest Avenue (**Impact TRAF-1**)
- Murray Ridge Road, from Pinecrest Avenue to Sandrock Road (**Impact TRAF-2**)
- Phyllis Place, from Franklin Ridge Road to I-805 SB ramps (**Impact TRAF-3**)
- Phyllis Place, from I-805 SB ramps to I-805 NB ramps (**Impact TRAF-4**)

Intersections

- Murray Ridge Road and I-805 NB ramps (**Impact TRAF-5**)
- Murray Ridge Road and I-805 SB ramps (**Impact TRAF-6**)
- Qualcomm Way and Friars Road WB (**Impact TRAF-7**)

5.2.4.3 Mitigation Measures

The following section summarizes the direct impacts identified for the Near-Term scenario in the previous sections under each of the impact assessment analyses and provides mitigation measures for these identified impacts.

Roadway Segments

1. **Impact TRAF-1:** Murray Ridge Road, from Mission Center Road to Pinecrest Avenue

MM-TRAF-1: Prior to the commencement of any grading activities or, if a grading permit is required, prior to issuance of a grading permit, Murray Ridge Road shall be restriped from Mission Center Road to Pinecrest Avenue to accommodate two lanes in each direction and a center left-turn lane. The new classification for this segment of Murray Ridge Road will be a four-lane Collector.

Implementation of this measure would reduce the impact to a level below significance; however, the City's ability to implement this measure may be limited. This roadway provides Class II bike lanes that would likely be removed under this mitigation. The proposed mitigation would cause

a substantial conflict with applicable City land use and mobility policies (e.g., the City's General Plan, Bicycle Master Plan, Pedestrian Master Plan, and Serra Mesa Community Plan). Due to the uncertainty of being able to implement this measure in light of countervailing considerations, this analysis does not assume it will occur. In the event it does not, the impact would remain significant and unavoidable.

2. **Impact TRAF-2:** Murray Ridge Road, from Pinecrest Avenue to Sandrock Road

MM-TRAF-2: Prior to the commencement of any grading activities or, if a grading permit is required, prior to issuance of a grading permit, Murray Ridge Road shall be restriped from Pinecrest Avenue to Sandrock Road to accommodate two lanes in each direction and a center left-turn lane. The new classification for this segment of Murray Ridge Road will be a four-lane Collector.

Implementation of this measure would reduce the impact to a level below significance; however, the City's ability to implement this measure may be limited. This roadway provides Class II bike lanes that would likely be removed under this mitigation. The proposed mitigation would cause a substantial conflict with applicable City land use and mobility policies (e.g., the City's General Plan, Bicycle Master Plan, Pedestrian Master Plan, and Serra Mesa Community Plan). Due to the uncertainty of being able to implement this measure in light of countervailing considerations, this analysis does not assume it will occur. In the event it does not, the impact would remain significant and unavoidable.

3. **Impact TRAF-3:** Phyllis Place, from Franklin Ridge Road to I-805 SB ramps

MM-TRAF-3: Prior to the commencement of any grading activities or, if a grading permit is required, prior to issuance of a grading permit, Phyllis Place shall be widened from Franklin Ridge Road to I-805 SB ramps to accommodate five total lanes (three EB and two WB), including a median. The new classification for this segment of Phyllis Place will be a five-lane Major Arterial.

4. **Impact TRAF-4:** Phyllis Place, from I-805 SB ramps to I-805 NB ramps

MM-TRAF-4: Prior to the commencement of any grading activities or, if a grading permit is required, prior to issuance of a grading permit, Phyllis Place shall be restriped from I-805 SB ramps to I-805 NB ramps to accommodate a total of five lanes. The new classification for this segment of Phyllis Place will be a four-lane Collector.

Intersections

5. **Impact TRAF-5:** Murray Ridge Road/I-805 NB ramps

MM-TRAF-5: Prior to the commencement of any grading activities or, if a grading permit is required, prior to issuance of a grading permit, at the intersection, the NB off-ramp approach shall be restriped, the EB approach shall be restriped, the WB approach shall be reconfigured, and the NB on-ramp approach shall be widened.

6. **Impact TRAF-6:** Murray Ridge Road/I-805 SB ramps

MM-TRAF-6: Prior to the commencement of any grading activities or, if a grading permit is required, prior to issuance of a grading permit, at the intersection, the EB approach shall be

widened to accommodate two through lanes and an exclusive right-turn lane, the SB on-ramp shall be widened, and the SB off-ramp shall be widened to accommodate one share-through-left lane and two exclusive right-turn lanes.

7. **Impact TRAF-7: Qualcomm Way/Friars Road WB ramps**

MM-TRAF-7: Prior to the commencement of any grading activities or, if a grading permit is required, prior to issuance of a grading permit, the Qualcomm Way and Friars Road WB ramps intersection shall be reconfigured with the following improvements: the SB approach shall be widened to accommodate two through lanes and one exclusive right-turn lane; the NB approach shall be restriped to accommodate two through lanes and two left-turn lanes; and the WB on-ramp shall be widened to accommodate two receiving lanes.

5.2.4.4 Significance after Mitigation

Roadway Segments

As shown in Table 5.2-15, if mitigation were fully implemented, there would be less-than-significant impacts at the following roadway segments. However, this analysis assumes that the mitigation measures would not be implemented (for the reasons detailed in Section 5.2.4.3) at the following segments:

- Murray Ridge Road, from Mission Center Road to Pinecrest Avenue (**Impact TRAF-1**)
- Murray Ridge Road, from Pinecrest Avenue to Sandrock Road (**Impact TRAF-2**)

Therefore, impacts at these segments under the Near-Term scenario would be significant and unavoidable.

Table 5.2-14 shows the post-mitigation measure LOS where mitigation will be implemented. As shown, mitigation would improve LOS at the following impacted segments to an acceptable level.

- Phyllis Place, from Franklin Ridge Road to I-805 SB ramps (**Impact TRAF-3**)
- Phyllis Place, from I-805 SB ramps to I-805 NB ramps (**Impact TRAF-4**)

Therefore, impacts at these segments under the Near-Term scenario would be less than significant after mitigation.

Intersections

Table 5.2-15 shows the post-mitigation measure LOS for impacted intersections. As shown in Table 5.2-15, mitigation would improve LOS at the following intersections to an acceptable level:

- Murray Ridge Road/I-805 NB ramps(**Impact TRAF-5**)
- Murray Ridge Road/I-805 SB ramps (**Impact TRAF-6**)
- Qualcomm Way/Friars Road WB ramp (**Impact TRAF-7**)

Therefore, intersection impacts under the Near-Term scenario would be less than significant after mitigation.

Table 5.2-14. Roadway Segments: Near-Term Baseline Plus Project Condition (Unmitigated vs. Mitigated)

Location	2017 with Project			2017 with Project with Mitigation				Comparison	
	ADT	V/C	LOS	Mitigated Classification	LOS E Capacity	V/C	LOS	V/C	MI?
Murray Ridge Rd									
Mission Center Rd to Pinecrest Ave	18,111	1.207	F	4C	30,000	0.604	C	-0.603	Yes*
Pinecrest Ave to Sandrock Rd	13,476	0.898	E	4C	30,000	0.449	B	-0.449	Yes*
Phyllis Pl									
Franklin Ridge Rd to I-805 SB ramp	23,355	2.336	F	5M	45,000	0.519	B	-1.817	Yes
I-805 SB ramp to I-805 NB ramp	17,599	1.173	F	4C	30,000	0.587	C	-0.586	Yes

Source: Appendix C

Bold letter indicates substandard LOS E or F.

MI? = Mitigated Below Significant?

* Due to the uncertainty of being able to implement this measure in light of countervailing considerations, this analysis does not assume this mitigation will occur. In the event it does not, the impact would remain significant and unavoidable.

Table 5.2-15. Intersections: Near-Term Baseline Plus Project Condition (Unmitigated vs. Mitigated)

Location	Traffic Control	Peak Hour	2017 with Project		2017 with Project with Mitigation		Comparison	
			Avg. Delay (sec.)	LOS	Avg. Delay (sec.)	LOS	Δ Avg. Delay (sec.)	MI?
Murray Ridge Rd & I-805 NB ramp	Signal	AM	24.0	C	16.5	B	-7.5	Yes
		PM	59.4	E	30.4	C	-29.0	Yes
Murray Ridge Rd & I-805 SB ramp	Signal	AM	34.8	C	13.4	B	-21.4	Yes
		PM	141.4	F	27.0	C	-114.4	Yes
Qualcomm Wy & Friars Rd WB ramp	Signal	AM	26.1	C	24.2	C	-1.9	Yes
		PM	58.2	E	32.4	C	-25.8	Yes

Source: Appendix C

Bold letter indicates substandard LOS E or F.

MI? = Mitigated Below Significant?

5.2.5 Impact Analysis

Issue 3: Planned Transportation Systems

Would the proposed project result in a substantial impact upon existing or planned transportation systems?

5.2.5.1 Impact Discussion

The project's potential impact on near-term conditions is addressed under Section 5.2.4. Therefore, this analysis focuses on the Long-Term (Year 2035) traffic scenario and evaluates the proposed project's potential contribution to cumulative impacts on the planned transportation system by comparing the Year 2035 study area roadway, intersection, and freeway facility conditions without the project (Serra Mesa Community Plan buildout) to the forecasted condition with the project.

Roadway Segments

As previously shown in Table 5.2-9, a project is considered to have a significant impact if it degrades the operations from an acceptable LOS (D or better) to an unacceptable LOS (E or F), or if it adds additional delay to a facility already operating at an unacceptable level. Table 5.2-16 compares the performance of study area roadway segments under the Long-Term scenario with and without the project and displays the changes in V/C ratio and LOS, which are the basis for identification of significant cumulative impacts on roadway segments associated with the proposed project.

As shown in Table 5.2-16, the proposed project would have a significant long-term cumulative impact on the following six roadway segments.

- Franklin Ridge Road, from Via Alta to Civita Boulevard (**Impact TRAF-8**)
- Murray Ridge Road, from Mission Center Road to Pinecrest Avenue (**Impact TRAF-9**)
- Murray Ridge Road, from Pinecrest Avenue to Sandrock Road (**Impact TRAF-10**)
- Phyllis Place, from Franklin Ridge Road to I-805 SB ramps (**Impact TRAF-11**)
- Phyllis Place, from I-805 SB ramps to I-805 NB ramps (**Impact TRAF-12**)
- Rio San Diego Drive, from Qualcomm Way to Rio Bonito Way (**Impact TRAF-13**)

Table 5.2-16. Roadway Segments: Long-Term Baseline Cumulative Condition vs. Long-Term Cumulative Condition with Project

Roadway Segment	Lanes/ Class	LOS E Capacity	2035 without Project			2035 with Project			Comparison	
			ADT	V/C	LOS	ADT	V/C	LOS	Δ V/C	SI?
Civita Blvd										
Mission Center Rd to Via Alta	4M	40,000	19,181	0.480	B	11,368	0.284	A	-0.196	No
Via Alta to Russell Pkwy	4M	40,000	17,523	0.438	B	12,672	0.317	A	-0.121	No
Russell Pkwy to Qualcomm Wy	4M	40,000	24,859	0.621	C	20,008	0.5	B	-0.121	No
Qualcomm Wy to Franklin Ridge Rd	4M	40,000	11,913	0.298	A	21,375	0.534	C	0.236	No
Franklin Ridge Rd										
Via Alta to Civita Blvd	2M	16,667	10,457	0.627	C	20,919	1.255	F	0.628	Yes
Phyllis Pl to Via Alta	4M	40,000	0	0.000	0	34,117	0.853	D	0.853	No
Friars Rd										
Mission Center Rd to Qualcomm Wy	6E	80,000	50,157	0.627	C	44,022	0.55	C	-0.077	No
Qualcomm Wy to Fenton Pkwy	6E	80,000	46,207	0.578	C	48,331	0.604	C	0.026	No
Fenton Pkwy to Northside Dr	6P	60,000	42,555	0.709	C	44,303	0.738	C	0.029	No
Mission Center Rd										
Hazard Center Dr to Friars Rd	4M	40,000	33,908	0.848	D	32,591	0.815	D	-0.033	No
Friars Road to Mission Center Drwy (Creekside Park Ln)	5M	45,000	34,552	0.768	C	29,393	0.653	C	-0.115	No
Mission Center Drwy (Creekside Park Ln) to Mission Valley Rd	5M	45,000	24,087	0.535	B	18,936	0.421	B	-0.114	No
Mission Valley Rd to Aquatera Drwy	4M	40,000	23,850	0.596	C	13,064	0.327	A	-0.269	No
Aquatera Drwy to Murray Ridge Rd	2C NF	10,000	23,850	2.385	F	13,064	1.306	F	-1.079	No
Murray Ridge Rd										
I-805 NB ramp to Mission Center Rd	2C CL	15,000	31,178	2.079	F	23,070	1.538	F	-0.541	No
Mission Center Rd to Pinecrest Ave	2C CL	15,000	23,150	1.543	F	24,345	1.623	F	0.080	Yes
Pinecrest Ave to Sandroek Rd	2C CL	15,000	17,554	1.170	F	18,345	1.223	F	0.053	Yes
Phyllis Pl										
Abbotshill Rd to Franklin Ridge Rd	2C NF	10,000	2,420	0.242	A	2,420	0.242	A	0.000	No
Franklin Ridge Rd to I-805 SB ramp	2C NF	10,000	2,420	0.242	A	34,540	3.454	F	3.212	Yes

Roadway Segment	Lanes/ Class	LOS E Capacity	2035 without Project			2035 with Project			Comparison	
			ADT	V/C	LOS	ADT	V/C	LOS	Δ V/C	SI?
I-805 SB ramp to I-805 NB ramp	2C CL	15,000	14,570	0.971	E	24,037	1.602	F	0.631	Yes
Qualcomm Wy										
Civita Blvd to Friars Rd WB ramp	6M	50,000	27,003	0.540	B	28,955	0.579	C	0.039	No
Friars Rd WB ramp to Friars Rd EB ramp	6M	50,000	22,089	0.442	B	24,696	0.494	B	0.052	No
Friars Rd EB ramp to Rio San Diego Dr	6M	50,000	20,437	0.409	B	23,274	0.465	B	0.056	No
Rio San Diego Dr										
Qualcomm Wy to Rio Bonito Wy	4C	30,000	27,082	0.903	E	28,033	0.934	E	0.031	Yes
Russell Pkwy										
Civita Blvd to Friars Rd	2M	16,667	11,900	0.714	C	11,400	0.684	C	-0.030	No
Sandrock Rd										
Murray Ridge Rd to Aero Dr	2C CL	15,000	12,054	0.804	D	12,572	0.838	D	0.034	No
Westside Dr										
Mission Center Rd to Via Alta	2C CL	15,000	8,334	0.556	C	10,628	0.709	D	0.153	No
Via Alta										
Franklin Ridge Rd to Civita Blvd	2M	16,667	3,647	0.219	A	11,686	0.701	C	0.482	No
Civita Blvd to Westside Dr	2M	16,667	3,356	0.201	A	5,650	0.339	A	0.138	No

Source: Appendix C

Bold letter indicates substandard LOS E or F.

2C CL = 2-lane Collector with a continuous left-turn lane

2C NF = 2-lane collector with no fronting property

4C = 4-lane Collector

4M = 4-lane Major Street

5M = 5-lane Major Street

6E = 6-lane Expressway

6M = 6-lane Major

6P = 6-lane Prime Arterial

SI? = Significant Impact

Intersections

Figure 5.2-4 shows the intersection configurations for the Long-Term scenario. Table 5.2-17 compares the performance of study area intersections under Long-Term Year 2035 conditions with and without the project and displays the change in average delay and LOS, which are the basis for identification of significant long-term cumulative impacts on intersections associated with the proposed project.

As shown in Table 5.2-17, the proposed project would cause a significant long-term cumulative impact on the following four study area intersections.

- Murray Ridge Road and Sandrock Road (LOS E, PM peak hour) (**Impact TRAF-14**)
- Murray Ridge Road and I-805 NB ramps (LOS F, PM peak hour) (**Impact TRAF-15**)
- Murray Ridge Road and I-805 SB ramps (LOS E and F, AM and PM peak hour, respectively) (**Impact TRAF-16**)
- Via Alta and Franklin Ridge Road (PM peak hour) (**Impact TRAF-17**)

Table 5.2-17. Intersections: Long-Term Baseline Cumulative Condition vs. Long-Term Cumulative Condition with Project

Intersection	Traffic Control	Peak Hour	2035 w/o Project		2035 w/ Project		Comparison	
			Avg. Delay (sec.)	LOS	Avg. Delay (sec.)	LOS	Δ Avg. Delay (sec.)	SI?
1. Friars Rd & River Run Rd	Signal	AM	13.0	B	13.6	B	0.6	No
		PM	20.1	C	22.6	C	2.5	No
2. Friars Rd & Fenton Pkwy	Signal	AM	21.5	C	21.9	C	0.4	No
		PM	32.5	C	33.7	C	1.2	No
3. Friars Rd & Northside Dr	Signal	AM	18.0	B	18.0	B	0.0	No
		PM	59.4	E	59.4	E	0.0	No
4. Mission Center Rd & Murray Ridge Rd/Phyllis Pl	Signal	AM	57.2	E	34.2	C	-23.0	No
		PM	171.4	F	42.3	D	-129.1	No
5. Mission Center Rd & Aquatera Drwy	Signal	AM	15.8	B	17.0	B	1.2	No
		PM	15.0	B	15.4	B	0.4	No
6. Mission Center Rd & Mission Valley Rd (Civita Blvd)	Signal	AM	27.2	C	23.2	C	-4.0	No
		PM	54.8	D	28.1	C	-26.7	No
7. Mission Center Rd & Westside Dr (Mission Center Drwy)	Signal	AM	16.2	B	17.9	B	1.7	No
		PM	25.9	C	20.5	C	-5.4	No
8. Mission Center Rd & Friars Rd/EB ramps	Signal	AM	13.8	B	11.9	B	-1.9	No
		PM	22.1	C	18.9	B	-3.2	No
9. Mission Center Rd & Friars Rd/WB ramps	Signal	AM	12.8	B	10.6	B	-2.2	No
		PM	30.4	C	23.2	C	-7.2	No
10. Mission Center Rd & Mission Center Ct	Signal	AM	20.6	C	20.4	C	-0.2	No
		PM	46.3	D	45.9	D	-0.4	No

Intersection	Traffic Control	Peak Hour	2035 w/o Project		2035 w/ Project		Comparison	
			Avg. Delay (sec.)	LOS	Avg. Delay (sec.)	LOS	Δ Avg. Delay (sec.)	SI?
11. Aero Dr & Sandrock Rd	Signal	AM	12.6	B	12.6	B	0.0	No
		PM	27.7	C	31.9	C	4.2	No
12. Murray Ridge Rd and Sandrock Rd	Signal	AM	19.2	B	19.7	B	0.5	No
		PM	48.7	D	58.4	E	9.7	Yes
13. Murray Ridge Rd and Pinecrest Ave	Signal	AM	14.0	B	14.0	B	0.0	No
		PM	13.5	B	13.2	B	-0.3	No
14. Murray Ridge Rd & I-805 NB ramp	Signal	AM	13.1	B	33.6	C	20.5	No
		PM	37.0	D	148.8	F	111.8	Yes
15. Murray Ridge Rd & I-805 SB ramp	Signal	AM	26.8	C	79.9	E	53.1	Yes
		PM	74.4	E	404.0	F	329.6	Yes
16. Qualcomm Wy & Friars Rd EB ramp	Signal	AM	24.6	C	22.0	C	-2.6	No
		PM	68.5	E	60.8	E	-7.7	No
17. Qualcomm Wy & Friars Rd WB ramp	Signal	AM	26.5	C	27.4	C	0.9	No
		PM	90.3	F	77.1	E	-13.2	No
18. Qualcomm Wy & Rio San Diego Dr	Signal	AM	20.5	C	21.6	C	1.1	No
		PM	38.9	D	44.6	D	5.7	No
19. Rio San Diego Dr & Rio Bonito Wy	Signal	AM	14.6	B	15.5	B	0.9	No
		PM	16.1	B	17.1	B	1.0	No
20. Phyllis Pl & Franklin Ridge Rd	Signal	AM	0.0	-	10.0	A	10.0	No
		PM	0.0	-	18.9	B	18.9	No
21. Via Alta & Franklin Ridge Rd	Signal	AM	37.6	D	44.3	D	6.7	No
		PM	19.3	B	96.2	F	76.9	Yes
22. Via Alta & Civita Blvd	Signal	AM	17.0	B	18.4	B	1.4	No
		PM	18.3	B	25.9	C	7.6	No
23. Civita Blvd & Russell Pkwy/Gill Village Dr	Signal	AM	9.4	A	11.2	B	1.8	No
		PM	28.8	C	21.3	C	-7.5	No
24. Qualcomm Wy & Civita Blvd	Signal	AM	19.1	B	16.4	B	-2.7	No
		PM	23.1	C	21.3	C	-1.8	No

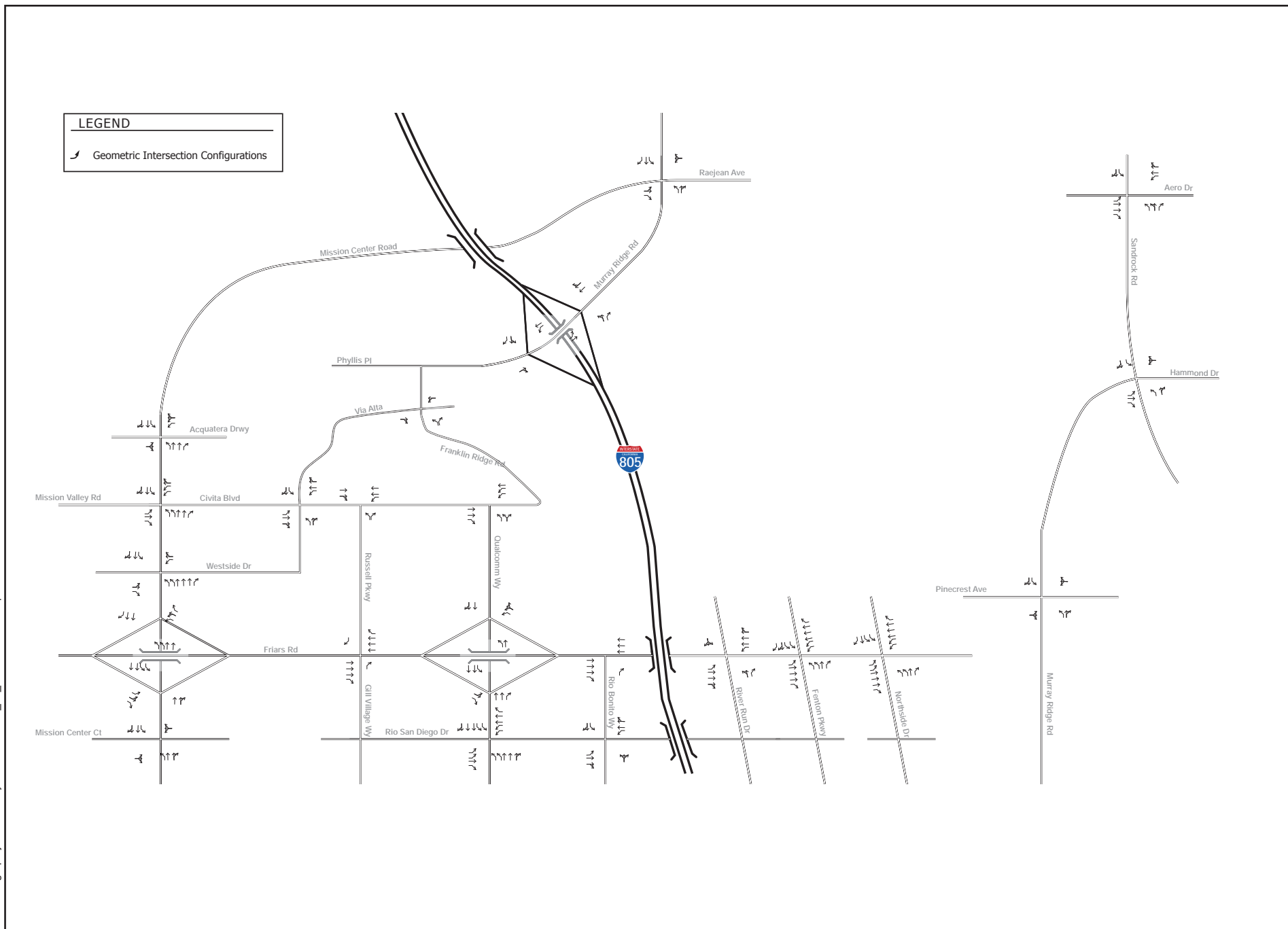
Source: Appendix C

Bold letter indicates substandard LOS E or F.

SI? = Significant Impact

Freeway Ramp Meters

As previously shown in Table 5.2-9, a project is considered to have a significant impact if it degrades the operations of a roadway segment from an acceptable LOS (D or better) to an unacceptable LOS (E or F), or if it adds additional delay to a facility already operating at an unacceptable level.



Source: KOA Corporation, 2015.

Figure 5.2-4
Long-Term Scenario (2035) Intersection Configurations

Table 5.2-18 compares the study area ramp meter performance under Long-Term Year 2035 baseline cumulative conditions and adds the project's contribution. The table displays the change in queue length and delay, which are the basis for identification of significant direct impacts on freeway ramp meters.

As shown in Table 5.2-18, all metered on-ramps within the project study area are projected to operate with fewer than 15 minutes of delay with the exception of the following during the PM peak hour.

- I-805 SB on-ramp at Murray Ridge Road (31 minutes of delay) (**Impact TRAF-18**)

Based on the criteria outlined in Table 5.2-9, the proposed project would cause a significant direct impact on this metered freeway on-ramp.

Table 5.2-18. Ramp Metering: Long-Term Baseline Cumulative Condition vs. Long-Term Cumulative Condition with Project

Location	Meter Rate	2035 without Project				2035 with Project				Comparison	
		Demand (veh/hr)	Excess Demand (veh/hr)	Delay (min)	Queue (ft)	Demand (veh/hr)	Excess Demand (veh/hr)	Delay (min)	Queue (ft)	Δ Delay	SI?
AM Peak Hour											
Murray Ridge Rd – I-805 NB on-ramp	851	410	0	0	0	985	134	9	3,886	9	No
PM Peak Hour											
Murray Ridge Rd – I-805 SB on-ramp	691	774	83	7	2,407	1,049	358	31	10,368	31	Yes
Murray Ridge Rd – I-805 SB on-ramp (HOV)	691	86	0	0	0	117	0	0	0	0	No
Source: Appendix C											
SI? = Significant Impact											

Freeway Mainline Segments

For informational purposes, Table 5.2-19 compares the performance of key study area freeway mainline segments under Long-Term Year 2035 conditions with and without the project and displays the changes in V/C ratio and LOS. As shown in Table 5.2-19, if the LOS criteria were to be utilized, the project would result in a significant impact at six freeway segments as the increase in V/C ratio would exceed the City's significance criteria (see Table 5.2-9).

Table 5.2-19. Freeway Mainline Segments: Long-Term Baseline Cumulative Condition vs. Long-Term Cumulative Condition with Project

Freeway Segment	Peak Hour	LOS E Capacity	2035 without Project			2035 with Project		
			PHV	V/C	LOS	PHV	V/C	LOS
I-805 Northbound								
I-8 to Murray Ridge Rd	AM	11,200	18,047	1.388	F	18,124	1.394	F
	PM	13,000	9,108	0.701	C	9,147	0.704	C
Murray Ridge Rd to Mesa College Dr	AM	11,200	18,019	1.386	F	18,515	1.424	F
	PM	11,200	9,094	0.700	C	9,344	0.719	C
Mesa College Dr to SR-163	AM	11,200	16,323	1.256	F	16,755	1.289	F
	PM	11,200	8,237	0.634	C	8,455	0.650	C
I-805 Southbound								
SR-163 to Mesa College Dr	AM	11,200	7,082	0.545	B	7,270	0.559	B
	PM	11,200	16,184	1.245	F	16,612	1.278	F
Mesa College Dr to Murray Ridge Rd	AM	11,200	7,818	0.601	B	8,034	0.618	B
	PM	11,200	17,866	1.374	F	18,358	1.412	F
Murray Ridge Rd to I-8	AM	11,200	7,831	0.529	B	7,864	0.531	B
	PM	13,000	17,894	1.209	F	17,971	1.214	F

Source: Appendix C

Bold letter indicates substandard LOS E or F.

As noted in Section 5.2.1.2, Caltrans' Interim Guidance and ultimately the Transportation Analysis Guide and Transportation Impact Study Guidelines are intended to set guidelines for Caltrans to transition away from using delay-based analysis, such as LOS or similar measures for freeway mainline segments, in CEQA project review to refocus the attention of analysis to reducing VMT on the regional circulation network. The proposed project would not add trips to the regional circulation network; rather, vehicle trips would be redistributed to other regional circulation network infrastructure. Therefore, consistent with the Caltrans Interim Guidance, a significant impact would occur if the project would result in a substantial increase in VMT when compared to the baseline condition.

VMT was analyzed for the Long-Term Scenario (Year 2035; see Appendix H). Under 2035 cumulative baseline conditions, the VMT within the study area would be 733,403 in Year 2035. Region-wide, the VMT prior to consideration of the project's contribution would be 1,633,653 in Year 2035.

With the proposed project, VMT within the study area would be 720,196, a 1.8 percent decrease in VMT when compared to the baseline condition in Year 2035. Region-wide, the VMT with the project would be 1,629,137, a 0.28 percent decrease compared to the baseline condition in Year 2035.

Therefore, as the proposed project would reduce VMT within the study area and the region, impacts would be less than significant. Significance of Impacts

Based on the City's significance thresholds outlined in Table 5.2-9, the proposed project would result in significant direct impacts on four roadway segments, three intersections, and one metered freeway on-ramp during the Long-Term scenario. Therefore, mitigation would be required to reduce potential cumulative impacts.

Roadway Segments

- Franklin Ridge Road, from Via Alta to Civita Boulevard (**Impact TRAF-8**)
- Murray Ridge Road, from Mission Center Road to Pinecrest Avenue (**Impact TRAF-9**)
- Murray Ridge Road, from Pinecrest Avenue to Sandrock Road (**Impact TRAF-10**)
- Phyllis Place, from Franklin Ridge Road to I-805 SB ramps (**Impact TRAF-11**)
- Phyllis Place, from I-805 SB ramps to I-805 NB ramps (**Impact TRAF-12**)
- Rio San Diego Drive, from Qualcomm Way to Rio Bonito Way (**Impact TRAF-13**)

Intersections

- Murray Ridge Road and Sandrock Road (**Impact TRAF-14**)
- Murray Ridge Road and I-805 NB ramps (**Impact TRAF-15**)
- Murray Ridge Road and I-805 SB ramps (**Impact TRAF-16**)
- Via Alta and Franklin Ridge Road (**Impact TRAF-17**)

Freeway Ramp Meters

- I-805 SB on-ramp at Murray Ridge Road (**Impact TRAF-18**)

5.2.5.2 Mitigation Measures

The following section summarizes the cumulative impacts identified for the Long-Term scenario (Year 2035) in the previous sections under each of the impact assessment analyses and provides the recommended mitigation measures for these identified impacts.

Roadway Segments

1. **Impact TRAF-8:** Franklin Ridge Road from Via Alta to Civita Boulevard

MM-TRAF-8: Prior to the commencement of any grading activities or, if a grading permit is required, prior to issuance of a grading permit, Franklin Ridge Road shall be widened to accommodate two lanes in each direction and a center left-turn lane. The new classification for this segment of Franklin Ridge Road would be a four-lane Collector.

Implementation of this measure would reduce the impact to a level below significance; however, the City's ability to implement this measure may be limited. This roadway would provide Class II bikeways and a 6-foot-wide sidewalk, separated from the street by an 8-foot-wide parkway; some of these amenities would likely be removed under this mitigation. The proposed mitigation would cause a substantial conflict with applicable City land use and mobility policies (e.g., the City's General Plan, Bicycle Master Plan, Pedestrian Master Plan, Serra Mesa Community Plan, and Quarry Falls Specific Plan). Due to the uncertainty of being able to implement this measure in light of countervailing considerations, this analysis does not assume it will occur. In the event it does not, the impact would remain significant and unavoidable.

2. **MM-TRAF-9:** Murray Ridge Road from Mission Center Road to Pinecrest Avenue

MM-TRAF-9: Prior to the commencement of any grading activities or, if a grading permit is required, prior to issuance of a grading permit, Murray Ridge Road from Mission Center Road to Pinecrest Avenue shall be restriped to accommodate two lanes in each direction and a center left-turn lane. The new classification for this segment of Murray Ridge Road will be a four-lane Collector.

Implementation of this measure would reduce the impact to a level below significance; however, the City's ability to implement this measure may be limited. This roadway provides Class II bike lanes that would likely be removed under this mitigation. The proposed mitigation would cause a substantial conflict with applicable City land use and mobility policies (e.g., the City's General Plan, Bicycle Master Plan, Pedestrian Master Plan, and Serra Mesa Community Plan). Due to the uncertainty of being able to implement this measure in light of countervailing considerations, this analysis does not assume it will occur. In the event it does not, the impact would remain significant and unavoidable.

3. **Impact TRAF-10:** Murray Ridge Road, from Pinecrest Avenue to Sandrock Road

MM- TRAF-10: Prior to the commencement of any grading activities or, if a grading permit is required, prior to issuance of a grading permit, Murray Ridge Road shall be restriped to accommodate two lanes in each direction and a center left-turn lane. The new classification for this segment of Murray Ridge Road will be a four-lane Collector.

Implementation of this measure would reduce the impact to a level below significance; however, the City's ability to implement this measure may be limited. This roadway provides Class II bike lanes that would likely be removed under this mitigation. The proposed mitigation would cause a substantial conflict with applicable City land use and mobility policies (e.g., the City's General Plan, Bicycle Master Plan, Pedestrian Master Plan, and Serra Mesa Community Plan). Due to the uncertainty of being able to implement this measure in light of countervailing considerations, this analysis does not assume it will occur. In the event it does not, the impact would remain significant and unavoidable.

4. **Impact TRAF-11:** Phyllis Place, from Franklin Ridge Road to I-805 SB ramps

MM-TRAF-11: Prior to the commencement of any grading activities or, if a grading permit is required, prior to issuance of a grading permit, Phyllis Place from Franklin Ridge Road to I-805 SB ramp shall be reconfigured to accommodate five total lanes (three EB and two WB), including a median. The new classification for this segment of Phyllis Place will be a five-lane Major Arterial.

5. **Impact TRAF-12:** Phyllis Place, from I-805 SB ramps to I-805 NB ramps

MM-TRAF-12: Prior to the commencement of any grading activities or, if a grading permit is required, prior to issuance of a grading permit, Phyllis Place from I-805 SB ramp to I-805 NB ramp shall be restriped to accommodate five total lanes. The new classification for this segment of Phyllis Place will be a four-lane Collector.

6. **Impact TRAF-13:** Rio San Diego Drive from Qualcomm Way to Rio Bonito Way

MM-TRAF-13: Prior to the commencement of any grading activities or, if a grading permit is required, prior to issuance of a grading permit, the segment of Rio San Diego Drive from Qualcomm Way to Rio Bonito Way shall be reconfigured to include the necessary median commensurate with a four-lane Major Arterial.

Implementation of this measure would reduce the impact to a level below significance; however, the City's ability to implement this measure may be limited. This segment of the roadway is likely to be reclassified as a four-lane Major Arterial as part of the forthcoming update to the Mission Valley Community Plan, which in turn may require a median or other reconfiguration in order to meet that classification. Due to the uncertainty of being able to implement this measure in light of countervailing considerations, this analysis does not assume it will occur. In the event it does not, the impact would remain significant and unavoidable.

Intersections

7. **Impact TRAF-14:** Murray Ridge Road and Sandrock Road

MM-TRAF-14: Prior to the commencement of any grading activities or, if a grading permit is required, prior to issuance of a grading permit, this intersection shall be reconfigured such that the left-turn lanes in both the NB and SB directions will allow both through movements and left turns.

Implementation of this measure would reduce the impact to a level below significance; however, the City's ability to implement this measure may be limited. Currently the intersection geometry provides for bike lanes that would likely be removed under this mitigation. The proposed mitigation would cause a substantial conflict with applicable City land use and mobility policies (e.g., the City's General Plan, Bicycle Master Plan, Pedestrian Master Plan, Serra Mesa Community Plan, and Quarry Falls Specific Plan). Due to the uncertainty of being able to implement this measure in light of countervailing considerations, this analysis does not assume it will occur. In the event it does not, the impact would remain significant and unavoidable.

8. **Impact TRAF-15:** Murray Ridge Road and I-805 NB ramps

MM-TRAF-15: Prior to the commencement of any grading activities or, if a grading permit is required, prior to issuance of a grading permit, at the intersection, the NB off-ramp approach shall be restriped, the EB approach shall be restriped, the WB approach shall be reconfigured, and the NB on-ramp approach shall be widened.

9. **Impact TRAF-16:** Murray Ridge Road and I-805 SB ramps

MM-TRAF-16: Prior to the commencement of any grading activities or, if a grading permit is required, prior to issuance of a grading permit, at the intersection, the EB approach shall be

widened to accommodate two through lanes and an exclusive right-turn lane, the SB on-ramp shall be widened, and the SB off-ramp shall be widened to accommodate one share-through-left lane and two exclusive right-turn lanes.

10. **Impact TRAF-17:** Via Alta and Franklin Ridge Road

MM-TRAF-17: Prior to the commencement of any grading activities or, if a grading permit is required, prior to issuance of a grading permit, this intersection shall be reconfigured such that the EB through/right-turn lane will be converted to a left/through/right-turn lane to account for additional EB to NB traffic.

Freeway Ramp Meters

11. **Impact TRAF-18:** I-805 SB on-ramp at Murray Ridge Road

MM- TRAF-18: Prior to the commencement of any grading activities or, if a grading permit is required, prior to issuance of a grading permit, the applicant shall contribute a fair share contribution, in coordination with Caltrans, which would be applied toward an additional regular traffic ramp lane on the I-805 SB on-ramp from Murray Ridge Road.

5.2.5.3 Significance after Mitigation

Roadway Segments

As shown in Table 5.2-20, if mitigation were fully implemented, there would be less-than-significant impacts at the following roadway segments. However, this analysis assumes that the mitigation measures would not be implemented (for the reasons detailed in Section 5.2.5.3) at the following segments:

- Franklin Ridge Road, from Via Alta to Civita Boulevard (**Impact TRAF-8**)
- Murray Ridge Road, from Mission Center Road to Pinecrest Avenue (**Impact TRAF-9**)
- Murray Ridge Road, from Pinecrest Avenue to Sandrocks Road (**Impact TRAF-10**)
- Rio San Diego Drive, from Qualcomm Way to Rio Bonito Way (**Impact TRAF-13**)

Therefore, impacts at these segments under the Long-Term scenario would be cumulatively significant and unavoidable.

As shown in Table 5.2-20, mitigation would improve LOS at the following segments to an acceptable level:

- Phyllis Place, from Franklin Ridge Road to I-805 SB ramps (**Impact TRAF-11**)
- Phyllis Place, from I-805 SB ramps to I-805 NB ramps (**Impact TRAF-12**)

Therefore, impacts at these segments under the Long-Term scenario would be less than significant after mitigation.

Intersections

As shown in Table 5.2-22, if mitigation were fully implemented, there would be less-than-significant impacts at the following intersection. However, this analysis assumes that the mitigation measure would not be implemented (for the reasons detailed in Section 5.2.5.3) at the following intersection:

- Murray Ridge Road and Sandrock Road (**Impact TRAF-14**)

Therefore, impacts at this intersection under the Long-Term scenario would be cumulatively significant and unavoidable.

As shown in Table 5.2-21, mitigation would improve LOS to an acceptable level in the AM peak hour at the following intersections; however, mitigation would not improve LOS to an acceptable level at the following intersections in the PM peak hour.

- Murray Ridge Road/I-805 NB ramps; PM peak hour (**Impact TRAF-15**)
- Murray Ridge Road/I-805 SB ramps; PM peak hour (**Impact TRAF-16**)

Therefore, impacts at these intersections in the PM peak hour under the Long-Term scenario would be cumulatively significant and unavoidable.

As shown in Table 5.2-21, mitigation would improve LOS at the following intersection to an acceptable level.

- Via Alta/Franklin Ridge Road; PM peak hour (**Impact TRAF-17**)

Therefore, impacts at these intersections in the respective peak hours under the Long-Term scenario would be less than significant.

Freeway Ramp Meters

Table 5.2-22 shows the post-mitigation measure LOS for impacted freeway ramp meters. As shown, mitigation would improve delay at the following ramp meter to an acceptable level.

- I-805 SB on-ramp at Murray Ridge Road (**Impact TRAF-18**)

Therefore, impacts at this ramp meter under the Long-Term scenario would be less than significant.

Table 5.2-20. Roadway Segments: Long-Term Cumulative Baseline Condition Plus Project (Unmitigated Vs. Mitigated)

Location	2035 with Project					2035 with Project with Mitigation					Comparison	
	Classification	LOS E Capacity	ADT	V/C	LOS	Mitigated Classification	LOS E Capacity	V/C	LOS	V/C	MI?	
Franklin Ridge Rd												
Via Alta to Civita Blvd	2C CL*	15,000	20,919	1.395	F	4C	30,000	0.697	D	-0.698	Yes*	
Murray Ridge Rd												
Mission Center Rd to Pinecrest Ave	2C CL	15,000	24,345	1.623	F	4C	30,000	0.812	D	-0.811	Yes*	
Pinecrest Ave to Sandrock Rd	2C CL	15,000	18,345	1.223	F	4C	30,000	0.612	C	-0.611	Yes*	
Phyllis Pl												
Franklin Ridge Rd to I-805 SB ramp	2C NF	10,000	34,540	3.454	F	5M	45,000	0.768	C	-2.686	Yes	
I-805 SB ramp to I-805 NB ramp	2C CL	15,000	24,037	1.602	F	4C	30,000	0.801	D	-0.801	Yes	
Rio San Diego Dr												
Qualcomm Wy to Rio Bonito Wy	4C	30,000	28,033	0.934	E	4M	40,000	0.701	C	-0.233	Yes*	

Source: Appendix C; Bold letter indicates substandard LOS E or F. MI? = Mitigated?

* Due to the uncertainty of being able to implement this measure in light of countervailing considerations, this analysis does not assume this mitigation will occur. In the event it does not, the impact would remain significant and unavoidable.

Table 5.2-21. Intersections: Long-Term Cumulative Baseline Condition Plus Project (Unmitigated Vs. Mitigated)

Location	Traffic Control	Peak Hour	2035 with Project		2035 with Project with Mitigation		Comparison	
			Avg. Delay (sec.)	LOS	Avg. Delay (sec.)	LOS	Δ Avg. Delay (sec.)	MI?
Murray Ridge Rd and Sandrock Rd	Signal	AM	19.7	B	22.8	C	3.1	n/a
		PM	58.4	E	24.5	C	-33.9	Yes*
Murray Ridge Rd & I-805 NB ramp	Signal	AM	33.6	C	20.5	C	-13.1	n/a
		PM	148.8	F	56.0	E	-92.8	No
Murray Ridge Rd & I-805 SB ramp	Signal	AM	79.9	E	21.0	C	-58.9	Yes
		PM	404.0	F	112.5	F	-291.5	Yes
Via Alta & Franklin Ridge Rd	Signal	AM	44.3	D	39.8	D	-4.5	n/a
		PM	96.2	F	54.6	D	-41.6	Yes

Source: Appendix C.

Bold letter indicates substandard LOS E or F.

MI? = Mitigated?

n/a = Not applicable

* Due to the uncertainty of being able to implement this measure in light of countervailing considerations, this analysis does not assume this mitigation will occur. In the event it does not, the impact would remain significant and unavoidable.

Table 5.2-22. Ramp Metering: Long-Term Cumulative Baseline Condition Plus Project (Unmitigated Vs. Mitigated)

Location	Meter Rate	2035 with Project				2035 with Project with Mitigation				Comparison	
		Demand (veh/hr)	Excess Demand (veh/hr)	Delay (min)	Queue (ft)	Demand (veh/hr)	Excess Demand (veh/hr)	Delay (min)	Queue (ft)	Δ Delay	MI?
PM Peak Hour											
Murray Ridge Rd – I-805 SB on-ramp (Lane #1)	691	1,049	358	31	10,368	525	0	0	0	-31	Yes
Murray Ridge Rd – I-805 SB on-ramp (Lane #2 – new lane)	691	Does not exist under this scenario				525	0	0	0	0	Yes
Murray Ridge Rd – I-805 SB on-ramp (Lane #3 – HOV lane)	691	117	0	0	0	117	0	0	0	0	Yes
Source: Appendix C. Bold letter indicates substandard LOS E or F. n/a = Not applicable											

5.2.6 Impact Analysis

Issue 4: Traffic Hazards

Would the proposed project result in an increase in traffic hazards for motor vehicles, bicycles, or pedestrians due to a proposed, non-standard design feature (e.g., poor sight distance or driveway onto an access-restricted roadway)?

5.2.6.1 Impact Discussion

The proposed roadway and access points have been conceptually designed to be consistent with the City's *Street Design Manual* and would not create a hazard for vehicles, bicycles, or pedestrians using the proposed roadway connection. The City's *Street Design Manual* (2002) contains guidelines for the physical design of streets that consider the needs of all users of the public right-of-way. The manual includes provisions for street trees, traffic calming, and pedestrian design guidelines, and addresses how to create streets that are important public places. The road connection would include bicycle lanes and a sidewalk for pedestrians, which would be consistent with the City's *Street Design Manual* (2002).

The proposed roadway would be approximately 460 feet long and classified as a four-lane Major street with an approximately 120-foot right-of-way and would include a design speed of 55 mph. The posted speed for the roadway may be different from the design speed. However, the posted speed cannot be determined before the facility is in operation. After the project is completed, the City would resurvey the roadway traffic and set the posted speed limits based on the factors determined by that survey, including but not limited to the 85th percentile speed. The posted speed would not exceed the design speed and safety would be a primary consideration for the limit set.

As previously detailed in Chapter 3, *Project Description*, City View Church, located on the north side of Phyllis Place, has a 50-foot-wide driveway that provides access to the Church's parking lot. The proposed roadway connection would not align with the City View Church driveway, as it would be located approximately 150 feet west of the driveway. This is because the roadway connection is required to be farther west in order to provide adequate sight distance due to the slight curve along Phyllis Place from the I-805 ramps. Therefore, the intersection at Phyllis Place and the proposed roadway would not directly align with the City View Church driveway.

As the roadway alignment cannot be shifted east to align with the driveway due to sight distance requirements, the driveway itself would need to be moved approximately 150 feet to the west, thus creating a four-way intersection at Phyllis Place. However, as City View Church is privately owned, it is assumed for purposes of this analysis that the driveway would not be realigned as part of the proposed project. Therefore, the proposed project would have the potential to result in a safety hazard for vehicles entering or exiting the City View Church, as sight distance from the driveway to the intersection would likely not be sufficient. Impacts related to traffic hazards would therefore be potentially significant (**Impact TRAF-19**), and mitigation is required.

5.2.6.2 Significance of Impact

The proposed project would require a signalized intersection along Phyllis Place, which would in turn result in possibly unsafe conditions for motorists entering or exiting the City View Church

parking lot, as the driveway would be approximately 150 feet east of the signalized intersection. Therefore, impacts would be potentially significant and mitigation is required.

5.2.6.3 Mitigation Measures

MM-TRAF-19: Prior to the commencement of any grading activities or, if a grading permit is required, prior to issuance of a grading permit, the City View Church driveway shall be relocated as part of the four-way intersection design with the proposed roadway connection and Phyllis Place.

Implementation of this measure would reduce the impact to a level below significance; however, the City's ability to implement this measure may be limited. The City View Church is a privately owned property. The relocation of the driveway may in turn require the removal of trees and the reconfiguration of other internal access considerations within the Church property, such as the drop-off area in front of the church that is connected to the existing driveway. Due to the uncertainty of being able to implement this measure in light of countervailing considerations, this analysis does not assume it will occur. In the event it does not, the impact would remain significant and unavoidable.

5.2.6.4 Significance after Mitigation

If mitigation were fully implemented, traffic hazard impacts would be reduced to less-than-significant levels. However, this analysis assumes that the mitigation measure would not be implemented. Therefore, impacts would be significant and unavoidable (**Impact TRAF-19**).

5.2.7 Impact Analysis

Issue 5: Public Access

Would the project substantially alter present circulation movements including effects on existing public access to beaches, parks, or other open space areas?

5.2.7.2 Impact Discussion

The traffic study (Appendix C) evaluated effects that the potential road connection would have on emergency access, evacuation access to social, educational resources, and commercial shopping as well as the service needs of the affected communities on either side of the potential connection. To understand community access, two reference points were measured to and from which the relative access times could be measured both with and without the road connection. The analysis looked at access to hospitals, fire and emergency medical services, educational facilities, parks, libraries, community centers, and other recreational facilities. The times to each facility were averaged for the two reference points and are presented in Table 5.2-23.

Table 5.2-23. Community Access Travel Times

Facility Type	Representative Accessibility Time Traveled (min.)	
	Without Project	With Project
Hospitals	39	31
Fire departments	42	32
Schools	153	135
Libraries	40	32
Shopping centers	69	57
Parks	58	50
Source: Appendix C		

As the table demonstrates, accessibility to a variety of public facilities and amenities increases with the road connection. In addition, as previously detailed within Sections 5.2.4 and 5.2.5, VMT within the study area and region-wide would decrease with implementation of the proposed project.

Emergency evacuation and routing were also considered. Currently there is only one route of access to the more than 200 homes in Serra Mesa at the western end of Phyllis Place on the north rim of Mission Valley. This public access route is via Phyllis Place leading to I-805 or farther to the east and continuing on surface streets like Murray Ridge Road. Also, Phyllis Place is constructed as a two-lane Collector street having a nominal (i.e., policy-based rather than actual) capacity of 8,000 vehicles per day. By introducing a connection between Mission Valley and Serra Mesa via the proposed road connection, a second choice for evacuation could exist for these homes, but only in part. They would still have to get to the intersection of the newly created roadway to Mission Valley using Phyllis Place as a two-lane roadway. Consequently, there is limited additional benefit to these more than 200 homes for evacuation by having a road connection, and all of the other surrounding communities have multiple ingress or egress routes.

Additionally, the presence or absence of the road connection is not a differentiating factor relative to deliveries to residences and businesses, postal delivery, utility servicing, and trash pickup. Service is now being provided for these activities, and it would continue to be provided whether or not there is a connection between the two communities via the road connection. If a connection were to exist it might represent an opportunity to redefine some of the routing for delivery drivers and therefore create an efficiency for UPS and/or the U.S. Postal Service, for example, but the ability to continue to provide service would not be affected. Service would continue either way.

5.2.7.3 Significance of Impact

Implementation of the proposed roadway would provide a link between the two planning area boundaries, where one does not exist today, creating a new connection between Serra Mesa and Mission Valley, while also reducing VMT within the study area and the region. Construction of the roadway would provide additional ingress and egress off Phyllis Place and provide for a more efficient, integrated circulation network for Serra Mesa and Mission Valley that would improve access in the area. Furthermore, the project would provide an additional link for pedestrians and cyclists. It would also link those using vehicles within Serra Mesa to the Quarry Falls site and the greater Mission Valley community, providing access to community parks and making transit services more readily available. Impacts would be less than significant.

5.2.7.4 Mitigation Measures

No mitigation would be required.

5.2.8 Impact Analysis

Issue 6: Alternative Transportation

Would the proposal result in a conflict with adopted policies, plans, or programs supporting alternative transportation models (e.g., bus turnouts, bicycle racks)?

5.2.8.2 Impact Discussion

Bicycle Facilities

The City's Bicycle Master Plan Update proposes Class II (Bike Lane) facilities along Phyllis Place, Via Alta, Franklin Ridge Road, and Civita Boulevard. The Class II Bike Lane is shown connecting north toward Phyllis Place and across I-805 to Murray Ridge Road. It is also shown connecting to Friars Road from two points on the south from Civita Boulevard. The proposed project would provide bicycle connectivity from Phyllis Place southward to Via Alta and Franklin Ridge Road. The proposed project would therefore increase bicycle network connectivity between the Serra Mesa and Mission Valley communities and thus would not conflict with overarching goals and policies of transit plans to provide balanced and safe bicycle networks within and between communities. In addition, one of the goals of the Bicycle Master Plan Update is to increase the number of bicycle-to-transit trips by providing safe routes to transit stops and stations. The proposed project would "complete" a Class II facility that would allow a dedicated bicycle connection from Phyllis Place southward past Friars Road to the Rio Vista trolley stop, approximately 4,000 feet away from the proposed roadway. This connection would allow cyclists north of the project site to utilize a dedicated bike lane to access the trolley stop. Therefore, the project would not be in conflict with planned bicycle network improvements as envisioned in local alternative transportation planning documents and impacts would be less than significant.

Pedestrian Facilities

The proposed project would include sidewalks along both sides of the roadway, thus allowing a dedicated pedestrian connection between the Mission Valley and Serra Mesa communities in the vicinity of Phyllis Place. The proposed project would therefore increase pedestrian connectivity between communities. The City's Pedestrian Master Plan (City of San Diego 2006) and subsequent updates have identified planning efforts for several communities within the City, although there are currently no plans for the Mission Valley and Serra Mesa communities. The Pedestrian Master Plan does state that "pedestrian attractors" are typically schools, transit stations, parks facilities, neighborhood retail, and community-serving destinations (e.g., libraries, post offices). The proposed roadway is approximately 4,000 feet northeast of the Rio Vista trolley stop. The proposed roadway will also be adjacent to commercial uses, parks, and potentially a school use within the Quarry Falls development. Therefore, the project would generally increase pedestrian connectivity in an area that is adjacent to transit and other "pedestrian attractors" such as commercial uses and parks. Overall, the project would not conflict with the Pedestrian Master Plan and impacts would be less than significant.

Alternative Transit Modes

Transit opportunities in the vicinity of the project site include bus service and the trolley, both of which are operated by MTS. As previously detailed in Chapter 2, *Environmental Setting*, there are numerous bus routes that serve both the Mission Valley and Serra Mesa communities but also provide access to the Fashion Valley Transit Center, where commuters can then board the trolley.

Although several bus routes traverse the Mission Valley and Serra Mesa communities, the most pertinent to the vicinity of the project site include MTS bus routes 25 and 928. MTS route 25 runs from the Fashion Valley Transit Center northeast through Linda Vista, Mesa College, along Aero Drive in Serra Mesa, east to Tierrasanta, then back west ending at Kearny Mesa Transit Center. MTS route 928 also begins at the Fashion Valley Transit Center and runs northeast toward the vicinity of the project site via Mission Center Road, through Serra Mesa via Murray Ridge Road, then eventually north to the Kearny Mesa Transit Center via Ruffin Road. The proposed project would generally increase connectivity between Serra Mesa and Mission Valley, and would not interfere with any existing MTS bus routes. The proposed roadway could provide for a bus route connection from Serra Mesa to the existing trolley stops at Rio Vista or Mission Valley Center; however, the bus routes are planned, owned, and operated by MTS and any new route would need to be implemented by MTS.

There are two trolley stations in the vicinity of the project site (see Figure 2-5): the Rio Vista Station and the Mission Valley Center Station. The Rio Vista Station is not currently served by any MTS bus routes and does not have any dedicated parking for transit users. The Mission Valley Center Station is served by MTS bus route 6, which runs from Fashion Valley to North Park via Camino de la Reina, Texas Street, and El Cajon Boulevard. There is no dedicated parking for transit users at the Mission Valley Center Station. Therefore, there are currently no bus routes that provide access to Mission Valley Center or Rio Vista Station, nor are there parking opportunities at either of these trolley stations in the vicinity of the project site. Although the project would not directly provide for a bus route to the Rio Vista or Mission Valley Center trolley stops, the project would provide a connection for pedestrians and cyclists in the vicinity of the project site to access the trolley stations. Overall, the project would not conflict with existing or planned modes of alternative transportation and impacts would be less than significant.

5.2.8.3 Significance of Impact

The proposed project would provide a connection for pedestrians and cyclists in the vicinity of the project site. It would implement the planned Class II Bike Lane facility that is included within the City's Bicycle Master Plan update. The proposed project would also complete the pedestrian and bicycle network northward to Phyllis Place, which would provide a connection for pedestrians and cyclists to travel southward to trolley stations, and vice versa. The project would not conflict with any existing bus routes and may provide the opportunity for an additional bus route in the future, which would ultimately be up to the discretion of MTS. Impacts would be less than significant.

5.2.8.4 Mitigation Measures

No mitigation would be required.

5.3 Air Quality

This section discusses existing air quality conditions within the vicinity of project site and evaluates impacts on air quality that could occur as a result of the project. Impacts associated with implementation of the proposed project are assessed using the City of San Diego's Significance Determination Thresholds (2016), which is based on the San Diego Air Pollution Control District (SDAPCD) regulatory thresholds.

5.3.1 Existing Conditions

5.3.1.1 Climate and Topography

The weather in the San Diego Air Basin (SDAB), as in most of Southern California, is influenced by the Pacific Ocean and its semipermanent high-pressure systems that result in dry, warm summers and mild, occasionally wet winters. The average temperature ranges (in degrees Fahrenheit [°F]) from the mid-40s to the high 90s. Most of the region's precipitation occurs between November and April, with infrequent (approximately 10%) precipitation during the summer. The average seasonal precipitation along the coast is approximately 10 inches; this average increases with elevation as moist air is lifted over the mountains.

The topography in the San Diego region varies greatly, from beaches on the west to mountains and desert on the east; along with local meteorology, topography influences the dispersal and movement of pollutants in the basin. The mountains to the east prohibit dispersal of pollutants in that direction and help trap them in inversion layers.

The interaction of ocean, land, and the Pacific High Pressure Zone maintains clear skies for much of the year and influences the direction of prevailing winds (westerly to northwesterly). Local terrain is often the dominant factor inland, and winds in inland mountainous areas tend to blow through the valleys during the day and down the hills and valleys at night.

The SDAB experiences frequent temperature inversions. Subsidence inversions occur during the warmer months as descending air associated with the Pacific High Pressure Zone meets cool marine air. The boundary between the two layers of air creates a temperature inversion that traps pollutants. The other type of inversion, a radiation inversion, develops on winter nights when air near the ground cools by heat radiation and air aloft remains warm. The shallow inversion layer formed between these two air masses can also trap pollutants. As the pollutants become more concentrated in the atmosphere, photochemical reactions occur that produce ozone (O₃), commonly known as smog.

Light daytime winds, predominantly from the west, further aggravate the condition by driving air pollutants inland, toward the mountains. During the fall and winter, air quality problems are created due to carbon monoxide (CO) and nitrogen oxides (NO_x) emissions. CO concentrations are generally higher in the morning and late evening. In the morning, CO levels are elevated due to cold temperatures and the large number of motor vehicles traveling. Higher CO levels during the late evenings are a result of stagnant atmospheric conditions trapping CO in the area. Because CO is produced almost entirely from emissions generated by gasoline- and diesel-fueled automobiles, the

highest CO concentrations in the basin are associated with heavy traffic. Nitrogen dioxide (NO₂) levels are also generally higher during fall and winter days.

Under certain conditions, atmospheric oscillation results in the offshore transport of air from the Los Angeles region to San Diego County. This transport often produces high O₃ concentrations, as measured at air pollutant monitoring stations within the county. The transport of air pollutants from Los Angeles to San Diego has also occurred within the stable layer of the elevated subsidence inversion, where high levels of O₃ are transported.

5.3.1.2 Pollutants and Effects

Criteria Air Pollutants

Criteria air pollutants are defined as pollutants for which the federal and state governments have established ambient air quality standards, or criteria, for outdoor concentrations to protect public health. The federal and state standards have been set, with an adequate margin of safety, at levels above which concentrations could be harmful to human health and welfare. These standards are designed to protect the most sensitive persons from illness or discomfort. Pollutants of concern include O₃, NO₂, CO, sulfur dioxide (SO₂), PM₁₀ (particulate matter [PM] 10 micrometers or less in diameter), PM_{2.5} (particulate matter 2.5 micrometers or less in diameter), and lead (Pb) (see Table 5.3-1). These pollutants are discussed in the following paragraphs.¹ As discussed in Section 5.3.2, sulfates, vinyl chloride, hydrogen sulfide, and visibility-reducing particles are also regulated as criteria air pollutants in California.

Ozone. O₃ is a colorless gas that is formed in the atmosphere when reactive organic gases (ROGs), sometimes referred to as volatile organic compounds, and NO_x react in the presence of ultraviolet sunlight. O₃ is not a primary pollutant; it is a secondary pollutant formed by complex interactions of two pollutants directly emitted into the atmosphere. The primary sources of ROG and NO_x, the precursors of O₃, are emissions resulting from automobile exhaust and industrial sources. Meteorology and terrain play major roles in O₃ formation, and ideal conditions occur during summer and early autumn, on days with low wind speeds or stagnant air, warm temperatures, and cloudless skies. Short-term exposures (lasting for a few hours) to O₃ at levels typically observed in Southern California can result in breathing pattern changes, reduction of breathing capacity, increased susceptibility to infections, inflammation of the lung tissue, and some immunological changes.

Nitrogen Dioxide. Most NO₂, like O₃, is not directly emitted into the atmosphere but is formed by an atmospheric chemical reaction between nitric oxide (NO) and atmospheric oxygen. NO and NO₂ are collectively referred to as NO_x and are major contributors to O₃ formation. High concentrations of NO₂ can cause breathing difficulties and result in a brownish-red cast to the atmosphere with reduced visibility. There is some indication of a relationship between NO₂ and chronic pulmonary fibrosis and some increase in bronchitis in children (2 and 3 years old) has also been observed at concentrations below 0.3 parts per million by volume (ppm).

Carbon Monoxide. CO is a colorless and odorless gas formed by the incomplete combustion of fossil fuels. CO is emitted almost exclusively from motor vehicles, power plants, refineries, industrial boilers, ships, aircraft, and trains. In urban areas, such as where the project site is located,

¹ The following descriptions of health effects for each of the criteria air pollutants associated with project construction and operations are based on the U.S. Environmental Protection Agency's *Six Common Air Pollutants* (2014) and the California Air Resources Board's *Glossary of Air Pollutant Terms* (2015).

automobile exhaust accounts for the majority of CO emissions. CO is a non-reactive air pollutant that dissipates relatively quickly; therefore, ambient CO concentrations generally follow the spatial and temporal distributions of vehicular traffic. CO concentrations are influenced by local meteorological conditions, primarily wind speed, topography, and atmospheric stability. CO from motor vehicle exhaust can become locally concentrated when surface-based temperature inversions are combined with calm atmospheric conditions, a typical situation at dusk in urban areas between November and February. The highest levels of CO typically occur during the colder months of the year when inversion conditions are more frequent. In terms of health, CO competes with oxygen, often replacing it in the blood, thus reducing the blood's ability to transport oxygen to vital organs. The results of excess CO exposure can be dizziness, fatigue, and impairment of central nervous system functions.

Sulfur Dioxide. SO₂ is a colorless, pungent gas formed primarily by the combustion of sulfur-containing fossil fuels. The main sources of SO₂ are coal and oil used in power plants and industries; as such, the highest levels of SO₂ are generally found near large industrial complexes. In recent years, SO₂ concentrations have been reduced by the increasingly stringent controls placed on stationary source emissions of SO₂ and limits on the sulfur content of fuels. SO₂ is an irritant gas that attacks the throat and lungs and can cause acute respiratory symptoms and diminished ventilator function in children. SO₂ can also yellow plant leaves and erode iron and steel.

Particulate Matter. PM pollution consists of very small liquid and solid particles floating in the air, which can include smoke, soot, dust, salts, acids, and metals. PM can form when gases emitted from industries and motor vehicles undergo chemical reactions in the atmosphere. PM_{2.5} and PM₁₀ represent fractions of PM. Fine PM (PM_{2.5}) is roughly 1/28 the diameter of a human hair. PM_{2.5} results from fuel combustion (e.g., motor vehicles, power generation, and industrial facilities), residential fireplaces, and wood stoves. In addition, PM_{2.5} can be formed in the atmosphere from gases such as SO_x, NO_x, and VOC. Inhalable or coarse PM (PM₁₀) is about 1/7 the thickness of a human hair. Major sources of PM₁₀ include crushing or grinding operations; dust stirred up by vehicles traveling on roads; wood-burning stoves and fireplaces; dust from construction, landfills, and agriculture; wildfires and brush/waste burning; industrial sources; windblown dust from open lands; and atmospheric chemical and photochemical reactions.

PM_{2.5} and PM₁₀ pose a greater health risk than larger-size particles. When inhaled, these tiny particles can penetrate the human respiratory system's natural defenses and damage the respiratory tract. PM_{2.5} and PM₁₀ can increase the number and severity of asthma attacks, cause or aggravate bronchitis and other lung diseases, and reduce the body's ability to fight infections. Very small particles of substances, such as lead, sulfates, and nitrates, can cause lung damage directly or be absorbed into the blood stream, causing damage elsewhere in the body. Additionally, these substances can transport absorbed gases, such as chlorides or ammonium, into the lungs, also causing injury. Whereas PM₁₀ particles tend to collect in the upper portion of the respiratory system, PM_{2.5} is so tiny that it can penetrate deeper into the lungs and damage lung tissues. Suspended particulates also damage and discolor surfaces on which they settle, as well as produce haze and reduce regional visibility.

Lead. Pb in the atmosphere occurs as PM. Sources of Pb include leaded gasoline; the manufacturing of batteries, paint, ink, ceramics, and ammunition; and secondary Pb smelters. Before 1978, mobile emissions were the primary source of atmospheric Pb. Between 1978 and 1987, the phase-out of leaded gasoline reduced the overall inventory of airborne Pb by nearly 95%. With the phase-out of

leaded gasoline, secondary Pb smelters, battery recycling, and manufacturing facilities are becoming Pb-emission sources of greater concern.

Prolonged exposure to atmospheric Pb poses a serious threat to human health. Health effects associated with exposure to Pb include gastrointestinal disturbances, anemia, kidney disease, and, in severe cases, neuromuscular and neurological dysfunction. Of particular concern are low-level Pb exposures during infancy and childhood. Such exposures are associated with decrements in neurobehavioral performance including intelligence quotient performance, psychomotor performance, reaction time, and growth.

Toxic Air Contaminants

A substance is considered toxic if it has the potential to cause adverse health effects in humans, including increasing the risk of cancer upon exposure, or acute and/or chronic noncancer health effects. A toxic substance released into the air is considered a toxic air contaminant (TAC). Examples include certain aromatic and chlorinated hydrocarbons, certain metals, and asbestos. TACs are generated by a number of sources, including stationary sources such as dry cleaners, gas stations, combustion sources, and laboratories; mobile sources such as automobiles; and area sources such as landfills. Adverse health effects associated with exposure to TACs may include carcinogenic (i.e., cancer-causing) and noncarcinogenic effects. Noncarcinogenic effects typically affect one or more target organ systems and may be experienced either on short-term (acute) or long-term (chronic) exposure to a given TAC. Unlike criteria pollutants, there are currently no ambient air quality standards for TACs.

5.3.1.3 Local Air Quality

Air Quality Monitoring Data

SDAPCD operates a network of ambient air monitoring stations throughout San Diego County that measure ambient concentrations of pollutants and determine whether the ambient air quality meets the California Ambient Air Quality Standards (CAAQS) and the National Ambient Air Quality Standards (NAAQS). SDAPCD monitors air quality conditions at 10 locations throughout the basin. The closest monitoring station to the proposed project is the Kearny Villa Road station, approximately 4.2 miles north of the project site. Due to its proximity to the project site, the Kearny Villa monitoring station concentrations for all pollutants, except CO and SO₂, are considered most representative of the project site. CO data were taken from the Beardsley Street station, approximately 6 miles south of the project site. Currently, no California Air Resources Board (CARB) monitoring stations in San Diego County monitor for SO₂.

Table 5.3-1 summarizes available air quality monitoring data obtained from CARB for the Kearny Villa Road and Beardsley Street monitoring stations. These data represent air quality monitoring data for the years 2013–2015. Monitoring data concentrations are expressed in terms of ppm or micrograms per cubic meter (µg/m³). As indicated in Table 5.3-1, the monitoring stations have only experienced violations of the state and federal O₃ standards.

Table 5.3-1. Ambient Air Quality Data

Pollutant Standard	2013	2014	2015
Ozone (O₃)			
Maximum 1-hour concentration (ppm)	0.081	0.099	0.077
Maximum 8-hour concentration (ppm)	0.070	0.081	0.070
<i>Number of days standard exceeded^a</i>			
CAAQS 1-hour (>0.09 ppm)	0	1	0
NAAQS 8-hour (>0.075 ppm)	0	1	0
CAAQS 8-hour (>0.07 ppm)	1	4	0
Carbon Monoxide (CO)			
Maximum 8-hour concentration (ppm)	2.1	1.9	1.9
Maximum 1-hour concentration (ppm)	3.0	2.7	2.6
<i>Number of days standard exceeded^a</i>			
NAAQS 8-hour (>9 ppm)	0	0	0
CAAQS 8-hour (>9.0 ppm)	0	0	0
NAAQS 1-hour (>35 ppm)	0	0	0
CAAQS 1-hour (>20 ppm)	0	0	0
Nitrogen Dioxide (NO₂)			
Maximum 1-hour concentration (ppm)	67	51	51
State second-highest 1-hour concentration (ppm)	57	51	49
Annual average concentration (ppm)	11	10	9
<i>Number of days standard exceeded^a</i>			
CAAQS 1-hour standard (0.18 ppm)	0	0	0
PM10^b			
National maximum 24-hour concentration (µg/m ³) ^c	39.0	39.0	39.0
State maximum 24-hour concentration (µg/m ³) ^d	38.0	34.0	29.0
National annual average concentration (µg/m ³)	38.0	39.0	37.0
State annual average concentration (µg/m ³) ^e	37.0	34.0	29.0
<i>Number of days standard exceeded^a</i>			
NAAQS 24-hour (>150 µg/m ³) ^f	0	0	0
CAAQS 24-hour (>50 µg/m ³) ^f	0	0	0

Pollutant Standard	2013	2014	2015
PM2.5 ^b			
National maximum 24-hour concentration ($\mu\text{g}/\text{m}^3$) ^c	22.0	20.2	25.7
State maximum 24-hour concentration ($\mu\text{g}/\text{m}^3$) ^d	22.0	20.2	25.7
National annual average concentration ($\mu\text{g}/\text{m}^3$)	8.3	8.1	7.2
State annual average concentration ($\mu\text{g}/\text{m}^3$) ^e	8.3	8.2	-
<i>Number of days standard exceeded^a</i>			
NAAQS 24-hour ($>35 \mu\text{g}/\text{m}^3$) ^f	0	0	0

Sources: California Air Resources Board 2016b; U.S. Environmental Protection Agency 2016a

- = Insufficient data available to determine the value

^a An exceedance is not necessarily a violation.

^b Measurements usually are collected every 6 days.

^c National statistics are based on standard conditions data. In addition, national statistics are based on samplers using federal reference or equivalent methods.

^d State statistics are based on local conditions data, except in the South Coast Air Basin, for which statistics are based on standard conditions data. In addition, state statistics are based on California-approved samplers.

^e State criteria for ensuring that data are sufficiently complete for calculating valid annual averages are more stringent than the national criteria.

^f Mathematical estimate of how many days concentrations would have been measured as higher than the level of the standard had each day been monitored.

SDAB Attainment Designation

Areas are classified as in *attainment* or *nonattainment* with respect to the NAAQS and CAAQS. These classifications are made by comparing actual monitored air pollutant concentrations to state and federal standards. If a pollutant concentration is lower than the state or federal standard, the area is considered to be in attainment of the standard for that pollutant. If pollutant levels exceed a standard, the area is considered a nonattainment area. If data are insufficient to determine whether a pollutant is violating the standard, the area is designated as unclassified. This classification typically occurs in nonurbanized areas, where pollutant levels may be less closely monitored.

Table 5.3-2 summarizes SDAB's federal and state attainment designations for each of the criteria pollutants.

Table 5.3-2. San Diego Air Basin Attainment Classification

Pollutant	Federal Designation	State Designation
O ₃ (1-hour)	Attainment (maintenance) ¹	Nonattainment
O ₃ (8-hour – 1997) (8-hour – 2008)	Attainment (maintenance) Nonattainment (marginal)	Nonattainment
CO	Attainment (maintenance) ²	Attainment
PM10	Unclassifiable/attainment ³	Nonattainment
PM2.5	Unclassifiable/attainment ⁴	Nonattainment
NO ₂	Unclassifiable/attainment	Attainment
SO ₂	Attainment	Attainment

Pollutant	Federal Designation	State Designation
Lead	Attainment	Attainment
Sulfates	(No federal standard)	Attainment
Hydrogen Sulfide	(No federal standard)	Unclassified
Visibility-Reducing Particles	(No federal standard)	Unclassified

Sources: U.S. Environmental Protection Agency 2016b (Federal Designation); California Air Resources Board 2016c (State Designation).

¹ The federal 1-hour standard of 0.12 ppm was in effect from 1979 through June 15, 2005. The revoked standard is referenced here because it was employed for such a long period and because this benchmark is addressed in State Implementation Plans. The San Diego area of the SDAB is designated as attainment/maintenance, while the Imperial County area is designated as nonattainment/Sec.185A area.

² The western and central portions of the SDAB are designated attainment (maintenance), while the eastern portion is designated unclassifiable/attainment.

³ The Imperial Valley planning area of the SDAB is designated as nonattainment/serious, while the western portion of the SDAB is designated as unclassifiable/attainment.

⁴ A portion of Imperial County is designated as nonattainment, while all other portions of the SDAB are designated as unclassifiable/attainment.

5.3.1.4 Sensitive Receptors

Air quality varies as a direct function of the amount of pollutants emitted into the atmosphere, the size and topography of the air basin, and the prevailing meteorological conditions. Air quality problems arise when the rate of pollutant emissions exceeds the rate of dispersion. Reduced visibility, eye irritation, and adverse health impacts upon those persons termed “sensitive receptors” are the most serious hazards of existing air quality conditions in the area. Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. People most likely to be affected by air pollution, as identified by CARB, include children, the elderly, athletes, and people with cardiovascular and chronic respiratory diseases. Sensitive receptors include residences, schools, playgrounds, child care centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes.

The closest sensitive receptors are City View Church and the single-family residential development to the north of Phyllis Place approximately 330 feet from the project site, residential units associated with the Quarry Falls project approximately 300 feet from the project site, and single-family residential development to the west approximately 760 feet from the project site. It should be noted that planned residential development within Quarry Falls would be located approximately 100 feet west of the roadway once constructed.

5.3.2 Regulatory Framework

5.3.2.1 Federal

Clean Air Act

The federal Clean Air Act (CAA), passed in 1970 and last amended in 1990, forms the basis for the national air pollution control effort. The U.S. Environmental Protection Agency (EPA) is responsible for implementing most aspects of the CAA, including setting the NAAQS for major air pollutants, hazardous air pollutant standards, approval of state attainment plans, motor vehicle emission

standards, stationary source emission standards and permits, acid rain control measures, stratospheric O₃ protection, and enforcement provisions.

NAAQS are established for “criteria pollutants” under the CAA, which are O₃, CO, NO₂, SO₂, PM₁₀, PM_{2.5}, and Pb. The NAAQS describe acceptable air quality conditions designed to protect the health and welfare of the citizens of the nation. The NAAQS (other than for O₃, NO₂, SO₂, PM₁₀, PM_{2.5}, and those based on annual averages or arithmetic mean) are not to be exceeded more than once per year. NAAQS for O₃, NO₂, SO₂, PM₁₀, and PM_{2.5} are based on statistical calculations over 1- to 3-year periods, depending on the pollutant. The CAA requires EPA to reassess the NAAQS at least every 5 years to determine whether adopted standards are adequate to protect public health based on current scientific evidence. States with areas that exceed the NAAQS must prepare a State Implementation Plan that demonstrates how those areas will attain the standards within mandated timeframes.

5.3.2.2 State

California Clean Air Act

The federal CAA delegates the regulation of air pollution control and the enforcement of the NAAQS to the states. In California, the task of air quality management and regulation has been legislatively granted to CARB, with subsidiary responsibilities assigned to air quality management districts and air pollution control districts at the regional and county levels. CARB, which is part of the California Environmental Protection Agency, is responsible for ensuring implementation of the California Clean Air Act of 1988, responding to the federal CAA, and regulating emissions from motor vehicles and consumer products. CARB has established the CAAQS, which are more restrictive than NAAQS. The CAAQS describe adverse conditions; that is, pollution levels must be below these standards before a basin can attain the standard. The CAAQS for O₃, CO, SO₂ (1-hour and 24-hour), NO₂, PM₁₀, PM_{2.5}, and visibility-reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded. Table 5.3-3 presents the NAAQS and CAAQS.

Table 5.3-3. Ambient Air Quality Standards

Pollutant	Average Time	California Standards ¹	National Standards ²	
		Concentration ³	Primary ^{3,4}	Secondary ^{3,5}
O ₃	1 hour	0.09 ppm (180 µg/m ³)	—	Same as Primary Standard
	8 hour	0.070 ppm (137 µg/m ³)	0.070 ppm (137 µg/m ³)	
CO	1 hour	20 ppm (23 mg/m ³)	35 ppm (40 mg/m ³)	None
	8 hours	9.0 ppm (10 mg/m ³)	9 ppm (10 mg/m ³)	
NO ₂ ⁶	1 hour	0.18 ppm (339 µg/m ³)	0.100 ppm (188 µg/m ³)	Same as Primary Standard
	Annual Arithmetic Mean	0.030 ppm (57 µg/m ³)	0.053 ppm (100 µg/m ³)	
SO ₂ ⁷	1 hour	0.25 ppm (655 µg/m ³)	0.75 ppm (196 µg/m ³)	—
	3 hours	—	—	0.5 ppm (1300 µg/m ³)
	24 hours	0.04 ppm (105 µg/m ³)	0.14 ppm (for certain areas)	—

Pollutant	Average Time	California Standards ¹	National Standards ²	
		Concentration ³	Primary ^{3,4}	Secondary ^{3,5}
	Annual Arithmetic Mean	—	0.030 ppm (for certain areas)	—
PM10 ⁸	24 hours	50 µg/m ³	150 µg/m ³	Same as Primary Standard
	Annual Arithmetic Mean	20 µg/m ³	—	
PM2.5 ⁸	24 hours	—	35 µg/m ³	Same as Primary Standard
	Annual Arithmetic Mean	12 µg/m ³	12.0 µg/m ³	15.0 µg/m ³
Pb ^{9,10}	30-day Average	1.5 µg/m ³	—	—
	Calendar Quarter	—	1.5 µg/m ³ (for certain areas)	Same as Primary Standard
	Rolling 3-Month Average	—	0.15 µg/m ³	Same as Primary Standard
Hydrogen sulfide	1 hour	0.03 ppm (42 µg/m ³)	—	—
Vinyl chloride ⁹	24 hour	0.01 ppm (26 µg/m ³)	—	—
Sulfates	24 hour	25 µg/m ³	—	—
Visibility reducing particles ¹	8 hour (10:00 a.m. to 6:00 p.m. PST)	See footnote 11	—	—

Source: California Air Resources Board 2016a

¹ California standards for O₃, CO, SO₂ (1-hour and 24-hour), NO₂, suspended particulate matter (PM10, PM2.5), and visibility-reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded. The CAAQS are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

² National standards (other than O₃, NO₂, SO₂, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. The O₃ standard is attained when the fourth highest 8-hour concentration in a year, averaged over 3 years, is equal to or less than the standard. For NO₂ and SO₂, the standard is attained when the 3-year average of the 98th and 99th percentile, respectively, of the daily maximum 1-hour average at each monitor within an area does not exceed the standard. For PM10, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m³ is equal to or less than one. For PM2.5, the 24-hour standard is attained when 98% of the daily concentrations, averaged over 3 years, are equal to or less than the standard.

³ Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25 degrees Celsius (°C) and a reference pressure of 760 torr.

Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

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

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

⁶ To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 parts per billion (ppb). Note that the national 1-hour standard is in units of ppb. California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.

⁷ On June 2, 2010, a new 1-hour SO₂ standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO₂ national standards (24-hour and

		California Standards ¹	National Standards ²	
Pollutant	Average Time	Concentration ³	Primary ^{3,4}	Secondary ^{3,5}
annual) remain in effect until 1 year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.				
⁸ On December 14, 2012, the national annual PM2.5 primary standard was lowered from 15 µg/m ³ to 12 µg/m ³ . The existing national 24-hour PM2.5 standards (primary and secondary) were retained at 35 µg/m ³ , as was the annual secondary standard of 15 µg/m ³ . The existing 24-hour PM10 standards (primary and secondary) of 150 µg/m ³ were also retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.				
⁹ CARB has identified lead and vinyl chloride as TACs with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.				
¹⁰ The national standard for lead was revised on October 15, 2008, to a rolling 3-month average. The 1978 lead standard (1.5 µg/m ³ as a quarterly average) remains in effect until 1 year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.				
¹¹ In 1989, CARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are “extinction of 0.23 per kilometer” and “extinction of 0.07 per kilometer” for the statewide and Lake Tahoe Air Basin standards, respectively.				

Toxic Air Contaminants

California regulates TACs primarily through the Tanner Air Toxics Act (Assembly Bill 1807) and the Air Toxics Hot Spots Information and Assessment Act of 1987 (Assembly Bill 2588). The Tanner Act sets forth a formal procedure for CARB to designate substances as TACs. This includes research, public participation, and scientific peer review before CARB can designate a substance as a TAC. To date, CARB has identified more than 21 TACs and has adopted EPA’s list of hazardous air pollutants as TACs. Once a TAC is identified, CARB then adopts an airborne toxics control measure for sources that emit that particular TAC. If there is a safe threshold for a substance at which there is no toxic effect, the control measure must reduce exposure below that threshold. If there is no safe threshold, the measure must incorporate best available control technology for toxics to minimize emissions. None of the TACs identified by CARB have a safe threshold.

Under the Air Toxics “Hot Spots” Act, existing facilities that emit air pollutants above specified level were required to (1) prepare a TAC emission inventory plan and report, (2) prepare a risk assessment if TAC emissions were significant, (3) notify the public of significant risk levels, and (4) prepare and implement risk reduction measures if health impacts were above specified levels.

California Health and Safety Code, Section 41700

This section of the California Health and Safety Code states that a person shall not discharge from any source whatsoever quantities of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or that endanger the comfort, repose, health, or safety of any of those persons or the public, or that cause, or have a natural tendency to cause, injury or damage to business or property. This section also applies to sources of objectionable odors.

5.3.2.3 Local

San Diego Air Pollution Control District

While CARB is responsible for the regulation of mobile emission sources within the state, local air quality management districts and air pollution control districts are responsible for enforcing standards and regulating stationary sources. The proposed project is located within the SDAB and is subject to SDAPCD guidelines and regulations. In San Diego County, O₃ and PM are the pollutants of main concern, as exceedances of CAAQS for those pollutants are experienced here in most years.

SDAPCD and the San Diego Association of Governments (SANDAG) are responsible for developing and implementing the various clean air plans for attainment and maintenance of the ambient air quality standards in the SDAB. The *Regional Air Quality Strategy* (RAQS) for the SDAB was initially adopted in 1991 and is updated on a triennial basis, most recently with the 2016 RAQS Revision. The RAQS outlines SDAPCD's plans and control measures designed to attain the state air quality standards for O₃. The RAQS relies on information from CARB and SANDAG, including mobile and area source emissions, as well as information regarding projected growth in San Diego County and the cities in the county, to project future emissions and then determine from that the strategies necessary for the reduction of emissions through regulatory controls. CARB mobile source emission projections and SANDAG growth projections are based on population, vehicle trends, and land use plans developed by San Diego County and the cities in the county as part of the development of their general plans. Note that while the SDAB is designated as nonattainment for the state PM₁₀ and PM_{2.5} air quality standards, the RAQS does not currently address PM₁₀ or PM_{2.5}.

The *Final 2016 O₃ Attainment Plan and the Reasonably Available Control Technology (RACT) Demonstration* is SDAPCD's plan to attain the federal 8-hour O₃ standard (San Diego Air Pollution Control District 2016). In this plan, SDAPCD relies on the RAQS to demonstrate how the region will comply with the federal O₃ standard. The RAQS details how the region will manage and reduce O₃ precursors (NO_x and ROG) by identifying measures and regulations intended to reduce these contaminants. The control measures identified in the RAQS generally focus on stationary sources; however, the emissions inventories and projections in the RAQS address all potential sources, including those under the authority of CARB and EPA. Incentive programs for reduction of emissions from heavy-duty diesel vehicles, off-road equipment, and school buses are also established in the RAQS. In addition, the *Measures to Reduce Particulate Matter in San Diego County* report addresses implementation of Senate Bill 656 in San Diego County (Senate Bill 656 required additional controls to reduce ambient concentrations of PM₁₀ and PM_{2.5}). In the report, SDAPCD evaluates sources of PM and potential source-control measures, focusing on the implementation of additional measures that would reduce PM emissions associated with residential wood combustion and fugitive dust from construction sites and unpaved areas.

The following SDAPCD rules and regulations would apply to the proposed project.

- Regulation IV: Prohibitions; Rule 51: Nuisance. Prohibits the discharge, from any source, of such quantities of air contaminants or other materials that cause or have a tendency to cause injury, detriment, nuisance, annoyance to people and/or the public, or damage to any business or property.
- Regulation IV: Prohibitions; Rule 55: Fugitive Dust. Regulates fugitive dust emissions from any commercial construction or demolition activity capable of generating fugitive dust emissions,

including active operations, open storage piles, and inactive disturbed areas, as well as track-out and carry-out onto paved roads beyond a project site.

5.3.3 Significance Determination Thresholds

5.3.3.1 Issue Questions

The City's Significance Determination Thresholds (2016) state that a project would have a significant environmental impact if it would:

1. Conflict with or obstruct implementation of the applicable air quality plan;
2. Cause a violation of any air quality standard or contribute substantially to an existing or projected air quality violation;
3. Expose sensitive receptors (including, but not limited to, residences, schools, hospitals, resident care facilities, or day-care centers) to substantial pollutant concentrations;
4. Exceed 100 pounds per day of PM₁₀ dust;
5. Create objectionable odors affecting a substantial number of people; or
6. Substantially alter air movement in the area of the project.

5.3.3.2 Methodology and Assumptions

The State CEQA Guidelines state that the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the significance determination of whether a project would violate or impede attainment of air quality standards. As part of its air quality permitting process, SDAPCD has established air quality impact analysis Trigger Levels in Rule 20.2 requiring the preparation of air quality impact assessments for permitted stationary sources. The City has established numerical screening criteria for analyzing the significance of regional pollutant emissions based on these air quality impact analysis Trigger Levels. Project-related air quality impacts estimated in this environmental analysis would be considered significant if any of the applicable City of San Diego screening criteria and SDAPCD air quality significance thresholds presented in Table 5.3-4 are exceeded.

For purposes of CEQA, these screening criteria can be used as numeric methods to demonstrate whether a project's total emissions would result in a significant impact on air quality.

Table 5.3-4. San Diego Air Pollution Control District Air Quality Significance Thresholds

Construction Emissions			
Pollutant	Total Emissions (Pounds per Day)		
PM10	100		
PM2.5	55		
NO _x	250		
SO _x	250		
CO	550		
ROG	75 ¹		
Operational Emissions			
Pollutant	Total Emissions		
	Pounds per Hour	Pounds per Day	Tons per Year
PM10	—	100	15
PM2.5	—	55	10
NO _x	25	250	40
SO _x	25	250	40
CO	100	550	100
Lead and Lead Compounds	—	3.2	0.6
ROG	—	75 ¹	13.7 ²

Sources: City of San Diego 2016; San Diego Air Pollution Control District 1995, 1998

¹ SDAPCD air quality impact analysis does not include Trigger Levels for VOCs/ROGs. The County recommends using thresholds established by the South Coast Air Quality Management District (SCAQMD) while the City's recommendation is to use thresholds recommended by SCAQMD and Monterey Bay Unified Air Pollution Control District, which has similar federal and state attainment status as San Diego. Note that the recommended 137 pounds per day threshold is based on SCAQMD's recommendation in 2001, which has since changed. Therefore, because the County's recommended threshold of 75 pounds per day is lower than the City's recommended threshold of 137 pounds per day, the County's recommendation is used herein.

² 13.7 tons per year threshold is based on 75 pounds per day multiplied by 365 days per year and divided by 2,000 pounds per ton.

The thresholds listed in Table 5.3-4 represent screening-level thresholds that can be used to evaluate whether project-related emissions could cause a significant impact on air quality. Emissions below the screening-level thresholds would not cause a significant impact. In the event that emissions exceed these thresholds, modeling would be required to demonstrate that the proposed project's total air quality impacts result in ground-level concentrations that are below the CAAQS and NAAQS, including appropriate background levels.

SDAPCD Rule 51 (Public Nuisance) prohibits emission of any material that causes nuisance to a considerable number of persons or endangers the comfort, health, or safety of any person. A project that proposes a use that would produce objectionable odors would be deemed to have a significant odor impact if it would affect a considerable number of off-site receptors.

City of San Diego

To determine the significance of the proposed project's emissions, the City's Significance Determination Thresholds (2016) were utilized. With respect to air quality, this guidance recommends the use of the thresholds shown in Table 5.3-4 to determine significance.

The air quality section of the Significance Determination Thresholds guidance recognizes attainment status designations for the SDAB and its nonattainment status for both O₃ and PM. As such, the document recognizes that all new projects should include measures, pursuant to CEQA, to reduce project-related O₃ and PM emissions to ensure new development does not contribute to San Diego's nonattainment status for these pollutants.

In addition to threshold determination protocol for air quality (and protocol for all environmental resource areas analyzed under CEQA), the determination guidance includes a discussion of CO "hotspot" screening for consideration of CO during environmental review of proposed projects.

5.3.4 Impact Analysis

Issue 1: Air Quality Plan Conformance

Would the proposed project conflict with or obstruct the implementation of an applicable air quality plan?

5.3.4.1 Impact Discussion

SDAPCD and SANDAG are responsible for developing and implementing the clean air plan for attainment and maintenance of the ambient air quality standards in the SDAB. The RAQS was initially adopted in 1991 and is updated on a triennial basis (most recently in 2009). The RAQS outlines SDAPCD's plans and control measures designed to attain the state air quality standards for O₃. The RAQS relies on information from CARB and SANDAG, including mobile and area source emissions and information regarding projected growth in San Diego County and the cities in the county, to project future emissions and determine from that the strategies necessary for the reduction of emissions through regulatory controls. CARB mobile source emission projections and SANDAG growth projections are based on population, vehicle trends, and land use plans developed by San Diego County and the cities in the county as part of the development of their general plans.

If a project proposes development that is greater than that anticipated in the local plan and SANDAG's growth projections, the project could conflict with the RAQS and may contribute to a potentially significant cumulative impact on air quality. There are four zoning designations that apply to the project site, as currently zoned by the City's Municipal Code: RS-1-7, which is for single-family residential use (minimum of 5,000-square-foot lots); RM-2-4, which is for medium-density multiple dwelling units (one dwelling unit for each 1,750 square feet of lot area); RM-3-8, which is for medium-density multiple dwelling units (maximum of one dwelling unit for each 1,000 square feet of lot area); and OP-2-1, which is for open space park uses including passive and some active uses (San Diego Municipal Code, Chapter 13). The proposed project would not conflict with these zoning designations, as it would establish right-of-way for the roadway within these designations, and would not preclude any land from being developed consistent with these designations.

In addition, the proposed project would consist of a Community Plan Amendment to include a street connection. The proposed project would not include trip-generating uses (e.g., residential or commercial units) and its future implementation would reduce vehicle miles traveled (VMT), as compared to existing traffic conditions (Appendix H). Therefore, it is reasonable to assume vehicle trip generation and roadway construction for the site has been anticipated in the RAQS.

5.3.4.2 Significance of Impact

The proposed project would be consistent with the local general plan and SANDAG's growth projections. As such, the proposed project would be consistent with the underlying growth forecasts in the RAQS. Impacts would be less than significant.

5.3.4.3 Mitigation Measures

Impacts would be less than significant; therefore, no mitigation is required.

5.3.5 Impact Analysis

Issue 2: Air Quality Standards

Would the proposed project violate any air quality standard or contribute substantially to an existing or projected air quality violation?

5.3.5.1 Impact Discussion

Construction

The construction activities associated with the future road would be a source of dust and exhaust emissions that could temporarily affect local air quality. Such emissions would result from earthmoving and use of heavy equipment, as well as land clearing, ground excavation, cut-and-fill operations, and roadway construction. Emissions can vary substantially from day to day, depending on the level of activity, the specific operations, and the prevailing weather.

Construction emissions of ROG, NO_x, CO, PM₁₀, PM_{2.5}, and SO_x were estimated using the Sacramento Metropolitan Air Quality Management District's Road Construction Emissions Model (RCEM) (Version 8.1.0, 2016).² The RCEM is a public-domain spreadsheet model formatted as a series of individual worksheets available to estimate construction-related emissions for roadway projects. The model enables users to estimate emissions using a minimum amount of project-specific information. The model estimates emissions for load hauling (on-road, heavy-duty vehicle trips), worker commute trips, construction site fugitive dust (PM₁₀ and PM_{2.5}), and off-road construction vehicles.

The following project-specific assumptions were used for the construction calculations.

- A 2017 start date
- A 9-month construction period
- A 0.09-mile corridor length
- A 2.05-acre project area
- A maximum of 0.51 acre of land disturbed per day
- A total of 43,500 cubic yards of fill material
- Water trucks used as control measure for fugitive dust

² The Sacramento Metropolitan Air Quality Management District develops and maintains the RCEM, but the emission factors and analysis procedures are applicable to projects throughout the state.

The above assumptions were used as input parameters to the RCEM, which estimates construction equipment based on project size, duration of construction activities, and level of daily construction activities. While exhaust emissions are estimated for each activity, fugitive dust estimates are currently limited to major dust-generating activities, which include grubbing/land clearing and grading.

Table 5.3-5 summarizes the estimated daily emissions levels for each phase of construction, which are (1) grubbing/land clearing; (2) grading; (3) drainage/utilities/sub-grade; and (4) paving. Although unlikely, construction activities during each phase may occur concurrently. Accordingly, maximum daily emissions were estimated assuming all equipment would operate concurrently.

Table 5.3-5. Estimated Construction Emissions (pounds per day)

Phase	ROG	NO _x	CO	PM10	PM2.5	SO _x
Grubbing/land clearing	1	24	9	6	2	<1
Grading	7	52	52	9	5	<1
Drainage/utilities/sub-grade	6	45	45	9	4	<1
Paving	2	18	18	2	1	<1
<i>Maximum daily¹</i>	<i>16</i>	<i>139</i>	<i>124</i>	<i>26</i>	<i>12</i>	<i><1</i>
Threshold	75	250	550	100	55	250

Source: Sacramento Metropolitan Air Quality Management District 2016

¹ Worst-case, conservative scenario that assumes construction of all four phases would occur concurrently.

As shown in Table 5.3-5, construction emissions under a worst-case maximum daily emissions that conservatively assumes concurrent construction of all phases would not exceed the City's thresholds of significance. Impacts associated with construction emissions would be less than significant.

Operation

The operational emissions associated with the proposed project would result from the redistribution of traffic, which has the potential to change regional and study area VMT and associated emissions from vehicles due to the implementation of the proposed project. In order to determine significance of the impacts associated with implementation of the proposed project, emissions were modeled based on a VMT analysis as modeled by SANDAG (Appendix H) and emission factors from CARB's on-road mobile source emission factors (EMFAC) model (Appendix D). The magnitude of operational criteria air pollutant emissions from mobile sources is directly correlated to net change in local and regional VMT. Emissions of ROG, NO_x, CO, PM10, PM2.5, and SO_x were modeled for three scenarios: Existing (2013), Near-Term Baseline (2017), and Long-Term Baseline (2035) year conditions.

Table 5.3-6 summarizes the modeled emissions by scenario and presents a comparison of project emissions to the existing, near-term, and future baseline conditions. The differences in emissions between the project and the baseline conditions represent emissions generated directly as a result of implementation of the project. The Near-Term (2017) and Long-Term (2035) year analyses account for reductions in vehicular emission rates as a result of continuing improvements in engine technology and the retirement of older, higher-emitting vehicles. It should also be noted that the existing condition is provided for informational purposes only. However, as the project would not be implemented until at least the Near-Term scenario (Year 2017), the impacts of the project are

derived by comparing the project scenarios with future year conditions. Please refer to Appendix H for a detailed methodology on how the VMT model was developed, including how the scenarios were selected and VMT was calculated.

Table 5.3-6. Estimated Operational Emissions (pounds per day)

Condition	ROG	NO _x	CO	PM ₁₀	PM _{2.5}	SO _x
2013 Existing	1.22	7.74	23.56	10.60	2.80	0.06
2017 Near-Term Baseline	0.80	5.29	16.86	11.68	3.02	0.06
2017 Near-Term Baseline with Project	0.80	5.25	16.74	11.60	3.00	0.06
2035 Long-Term Baseline	0.43	1.81	8.56	13.40	3.42	0.04
2035 Long-Term Baseline with Project	0.43	1.79	8.50	13.30	3.39	0.04
Comparison to Baseline Conditions						
2017 Near-Term	-0.01	-0.04	-0.12	-0.08	-0.02	<-0.01
2035 Long-Term	<-0.01	-0.01	-0.06	-0.10	-0.03	<-0.01
Threshold	75	250	550	100	55	250

Source: California Air Resources Board EMFAC model. Totals may not add exactly due to rounding.

The emissions analysis presented in Table 5.3-6 indicates that implementation of the project would reduce criteria pollutant emissions relative to baseline conditions. This result is primarily because of changes in local and regional VMT that would occur with construction of the street connection. The proposed project would offer a more direct route and would divert traffic from other arterials in the vicinity. In addition, the roadway connection would not be substantially longer than other arterials in the area. Therefore, the proposed project would not result in an increase in VMT and corresponding emissions, and impacts would be less than significant.

5.3.5.2 Significance of Impact

Neither construction nor operation of the proposed project would exceed the City's significance thresholds for any criteria pollutant (refer to Tables 5.3-5 and 5.3-6). Therefore, impacts during future construction and operation would be less than significant.

5.3.5.3 Mitigation Measures

Impacts would be less than significant; therefore, no mitigation is required.

5.3.6 Impact Analysis

Issue 3: Sensitive Receptors

Would the proposed project expose sensitive receptors to substantial pollutant concentrations including air toxics such as diesel particulates?

5.3.6.1 Impact Discussion

As adopted by the South Coast Air Quality Management District in its CEQA Air Quality handbook (Chapter 4), a sensitive receptor is a person in the population who is particularly susceptible to health effects due to exposure to an air contaminant compared to the population at large. Sensitive receptors (and the facilities that house them) in proximity to localized CO sources or TACs are of particular concern. Examples include:

- Long-term health care facilities
- Rehabilitation centers
- Convalescent centers
- Retirement homes
- Residences, such as medical patients in homes
- Schools
- Playgrounds
- Child care centers
- Athletic facilities

Toxic Air Contaminants

In addition to impacts from criteria pollutants, proposed project impacts may include emissions of pollutants identified by the state and federal government as TACs or hazardous air pollutants. The greatest potential for TAC emissions would be during construction and would result from diesel particulate emissions from heavy equipment operations and heavy-duty trucks and the associated health impacts on sensitive receptors. The closest sensitive receptors are City View Church and the single-family residential development to the north of Phyllis Place approximately 330 feet from the project site, residential units associated with the Quarry Falls project approximately 300 feet from the project site, and single-family residential development to the west approximately 760 feet from the project site. It should be noted that planned residential development within Quarry Falls would be located approximately 125 feet west of the roadway once constructed.

Health effects from carcinogenic air toxics are usually described in terms of cancer risk. SDAPCD Rule 1210 (San Diego Air Pollution Control District 1996) indicates that an incremental cancer risk threshold of 10 in 1 million or greater warrants public notification. "Incremental cancer risk" is the likelihood that a person continuously exposed to concentrations of TACs resulting from a project over a 70-year lifetime will contract cancer quantified using standard risk-assessment methodology. Implementation of the project would result in the building of the roadway segment. Future construction would total approximately 9 months. Off-road diesel construction equipment and heavy-duty diesel trucks (e.g., concrete trucks and delivery trucks), which are sources of diesel exhaust PM, are regulated under three Airborne Toxic Control Measures (ATCMs) adopted by CARB. The ATCM for diesel construction equipment specifies PM emission standards for equipment fleets, which become increasingly stringent over time.

Furthermore, most newly purchased construction equipment introduced into construction fleets after 2013, depending on the engine horsepower rating, is equipped with high-efficiency diesel particulate filters. One of the ATCMs for heavy-duty diesel trucks specifies that commercial trucks

with a gross vehicle weight rating over 10,000 pounds are prohibited from idling for more than 5 minutes unless the engines are idling while queuing or involved in operational activities. In addition, starting in model year 2008, new heavy-duty trucks must be equipped with an automatic shutoff device to prevent excessive idling or meet stringent NO_x requirements. Lastly, fleets of diesel trucks with a gross vehicle weight rating greater than 14,000 pounds are subject to another ATCM. This ATCM requires truck fleet operators to replace older vehicles and/or equip them with diesel particulate filters, depending on the age of the truck. Thus, the diesel exhaust PM emissions from off-road construction equipment and trucks would be controlled substantially. Accordingly, future construction in implementing the project is not anticipated to result in a long-term exposure of sensitive receptors to substantial concentration of TACs.

Future operation of a road would not result in TACs because no stationary sources are proposed and the proposed project would not result in a significant net increase in VMT. While the redistribution of vehicle trips may move traffic closer to receptors adjacent to the road connection, the diverted traffic would predominantly be passenger vehicles, which is not a significant source of diesel emissions. Therefore, impacts associated with TACs would be less than significant.

Carbon Monoxide Hotspots

Projects contributing to significant traffic impacts may result in the formation of CO hotspots. Specifically, if traffic occurs during periods of poor atmospheric ventilation, consists of a large number of vehicles “cold-started” and operating at pollution-inefficient speeds, and operates on roadways already crowded with non-project traffic, there is a potential for the formation of microscale CO “hotspots” in the area immediately around points of congested traffic. Because of continued improvement in mobile-source CO emissions at a rate faster than the rate of vehicle growth and/or congestion, the potential for CO hotspots in the basin is steadily decreasing (California Air Resources Board 2004).

To verify that the future implementation of the project would not cause or contribute to a violation of the CO standard, a screening evaluation of the potential for CO hotspots was conducted. The proposed project’s traffic report (Appendix C) evaluated the level of service (LOS) (i.e., increased congestion) impacts at the intersections affected by the proposed project. The potential for CO hotspots was evaluated based on the results of the traffic report. The California Department of Transportation (Caltrans) Institute of Transportation Studies *Transportation Project-Level Carbon Monoxide Protocol* (Caltrans CO Protocol) (1997) was followed.

The City recommends that a quantitative analysis of CO hotspots be performed where roadways deteriorate to LOS D or worse and if a proposed development is within 400 feet of a sensitive receptor. The proposed project’s traffic report (Appendix C) evaluated 24 key intersections, 29 roadway segments, and 3 freeway mainline segments in the vicinity of the project site to assess existing and long-term conditions. Based on the traffic study, implementation of the project would worsen LOS to D or worse at four intersections under Near-Term (2017) conditions and five intersections under Long-Term (2035) conditions (see Appendix C). Of these, all but two are within 400 feet of receptors and therefore require a quantitative CO hotspot analysis, per the Caltrans CO Protocol and City guidelines. The affected intersections are listed below.

1. Murray Ridge Road and Sandrock Avenue
2. Murray Ridge Road and Interstate 805 northbound ramp
3. Qualcomm Way and Rio San Diego Drive (Long-Term only)

4. Via Alta and Franklin Ridge Road (Long-Term only)

In accordance with the City's Significance Determination Thresholds (City of San Diego 2016), a site-specific CO hotspot analysis was performed for these intersections. The potential impact of the implementation of the project on local CO levels was assessed at these intersections using Caltrans' California LINE Source Dispersion Model (CALINE4), which allows microscale CO concentrations to be estimated along each roadway corridor or near intersections (Caltrans 1998).

The modeling analysis was performed for the worst-case wind angle, in which the model selects the wind angles that produce the highest CO concentrations at each of the receptors. The suburban land classification of 40 inches (100 centimeters) was used for the aerodynamic roughness coefficient, which determines the amount of local air turbulence that affects plume spreading. The at-grade option was used in the analysis; for at-grade sections, CALINE4 does not permit the plume to mix below ground level. The mixing zone, which is defined as the width of the roadway plus 10 feet (3 meters) on either side, was estimated for each roadway. The calculations assume a mixing height of 3,280 feet (1,000 meters), a flat topographical condition between the source and the receptor (link height of 0 meters), and a meteorological condition of little to almost no wind (3.3 feet [1 meter] per second), consistent with EPA guidance.

The emission factor represents the weighted average emission rate of the local San Diego County vehicle fleet expressed in grams per mile per vehicle. Emission factors for 2017 and 2035 were based on a 5-mile-per-hour (mph) average speed for all of the intersections, a temperature of 47°F,³ and an average humidity of 55%. The hourly traffic volume anticipated to travel on each link, in units of vehicles per hour, was based on the traffic report. Because future construction of the roadway-generated traffic would have a direct impact for all of the intersections in the PM peak hours, vehicle counts for the PM hours were used.

Four receptor locations at each intersection were modeled to determine CO ambient concentrations. A receptor was assumed on the sidewalk at each corner of the modeled intersections, for a total of four receptors adjacent to the intersection, to represent the possibility of extended outdoor exposure. CO concentrations were modeled at these locations to assess the maximum potential CO exposure that could occur in the long term. Impacts on additional nearby sensitive receptors, such as residences or schools, were modeled. A receptor height of 5.9 feet (1.8 meters) was used in accordance with EPA recommendations for all receptor locations.

Average 8-hour and 1-hour CO background concentrations of 2.0 and 2.7 ppm, respectively, as measured between 2013 and 2015, was assumed in the CALINE4 model. The model provides predicted concentrations in ppm at each of the receptor locations. To estimate an 8-hour average CO concentration, a persistence factor of 0.7, as is recommended for urban locations, was applied to the output values.

³ Historically, January is the coldest month of the year in San Diego, with an average minimum temperature of 49.7°F (National Oceanic Atmospheric Administration 2017). The Caltrans CO Protocol guidance is to use the smallest mean minimum temperature observed in January over the past 3 years plus the temperature adjustment for the geographic location and time period. The smallest mean minimum at the San Diego WSO airport station was 47°F in January 2013 (Western Regional Climate Center 2017). Assuming a 5°F correction factor for p.m. traffic conditions, average evening temperature would be approximately 52°F (Caltrans 1997). However, because these meteorological readings are for Lindbergh Field in San Diego, and as CO concentrations generally increase with a decrease in temperature, a temperature of 47°F (8.3°C) was conservatively used to determine the emission factors in EMFAC and CO concentrations in CALINE4.

The results of the model are shown in Table 5.3-7. Model input and output data are provided in Appendix D.

Table 5.3-7. CALINE4 Predicted Carbon Monoxide Concentrations

Intersection	Maximum Modeled Impact with Roadway Connection Conditions (ppm)*			
	Near-Term (2017)		Long-Term (2035)	
	1-hour	8-hour**	1-hour	8-hour**
Murray Ridge Road and Sandrock Road	3.7	2.7	3.1	2.2
Murray Ridge Road and I-805 Northbound Ramp	4.2	3.0	3.2	2.3
Qualcomm Way and Rio San Diego Drive	NM	NM	3.2	2.3
Via Alta and Franklin Ridge Road	NM	NM	3.3	2.4

Source: Caltrans 1998 (CALINE4).
Notes: NM = not modeled (analysis only required under Long-Term conditions).
 Modeled concentrations reflect background 1-hour concentration of 2.7 ppm and an 8-hour concentration of 2.0 ppm.
 8-hour concentrations were obtained by multiplying the 1-hour concentration by a factor of 0.7, as referenced in Caltrans 1997, Table B.15.

As shown in Table 5.3-7, the maximum CO concentration predicted for the 1-hour averaging period would be 4.2 ppm, which is below the state 1-hour CO standard of 20 ppm (see Table 5.3-3 for state standards). The maximum predicted 8-hour CO concentration of 3.0 ppm would be below the state CO standard of 9 ppm. Neither the 1-hour nor 8-hour state standard would be equaled or exceeded at any of the intersections studied.

5.3.6.2 Significance of Impact

The proposed project would not expose sensitive receptors to substantial pollutant concentrations; therefore, impacts would be less than significant.

5.3.6.3 Mitigation Measures

Impacts would be less than significant; therefore, no mitigation is required.

5.3.7 Impact Analysis

Issue 4: Dust

Would the proposed project exceed 100 pounds per day of PM10 dust?

5.3.7.1 Impact Discussion

As previously shown in Table 5.3-5, the proposed project would emit a maximum of 26 pounds per day of PM10 during the construction phase, which is below the established threshold of 100 pounds per day. As previously shown in Table 5.3-6, the proposed project would reduce PM10 emissions during the operation phase when compared to Near-Term without project conditions (11.60 pounds

per day in the Year 2017 Near-Term with project condition) due to the reductions in regional and study area VMT. Therefore, impacts would be less than significant.

5.3.7.2 Significance of Impact

The proposed project would not exceed the PM10 daily threshold of 100 pounds per day during either the construction or operation phases; therefore, impacts would be less than significant.

5.3.7.3 Mitigation Measures

Impacts would be less than significant; therefore, no mitigation is required.

5.3.8 Impact Analysis

Issue 5: Odors

Would the proposed project create objectionable odors affecting a substantial number of people?

5.3.8.1 Impact Discussion

Minor sources of odors would be present during construction of the proposed project. Diesel engines are the predominant source of power for construction equipment. Exhaust odors from diesel engines, as well as emissions associated with asphalt paving, may be considered offensive to some individuals. As discussed under Section 5.3.6, the closest sensitive receptors are City View Church and the single-family residential development to the north of Phyllis Place approximately 330 feet from the project site. Additional residential receptors within 1,000 feet of the project are located to the west and associated with the Quarry Falls project. While these receptors may be able to detect construction-related odors such as emissions from paving and related equipment intermittently, these odors would be temporary and would disperse rapidly with distance from the source. All potential construction-related odors would cease when equipment is not in operation, and would end once construction is complete (approximately 9 months). Consequently, the occasional noticeability of construction odors would not be considered a significant impact on the environment.

Land uses and industrial operations that are associated with odor complaints include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The proposed project would result in a roadway connection and would not result in uses that are associated with odors.

5.3.8.2 Significance of Impact

While construction of the project would result in minor odors from engine exhaust and asphalt paving, these odors would be temporary and dissipate as a function of distance. Operation of the project would not result in uses that are associated with odors. Accordingly, odor impacts would be less than significant.

5.3.8.3 Mitigation Measures

Impacts would be less than significant; therefore, no mitigation is required.

5.3.9 Impact Analysis

Issue 6: Stationary Sources

Would the proposed project release substantial quantities of air contaminants beyond the boundaries of the premises upon which the stationary source emitting the contaminants is located?

This threshold requires CEQA to analyze whether a project would “release substantial quantities of air contaminants beyond the boundaries of the premises upon which the stationary source emitting the contaminants is located.”

This threshold is based on San Diego Municipal Code, Chapter 14, Article 2, Division 7, Off-Site Development Impact Regulations, paragraph 142.0710, Air Contaminant Regulations, which states:

Air contaminants including smoke, charred paper, dust, soot, grime, carbon, noxious acids, toxic fumes, gases, odors, and PM, or any emissions that endanger human health, cause damage to vegetation or property, or cause soiling shall not be permitted to emanate beyond the boundaries of the premises upon which the use emitting the contaminants is located.

5.3.9.2 Impact Discussion

Stationary sources that emit air contaminants typically include uses such as dry cleaners, gas stations, combustion sources, and laboratories. The proposed project consists of the construction and operation of a roadway and an amendment to the Serra Mesa Community Plan. No stationary sources are proposed or would be in operation as a result of the proposed project.

5.3.9.3 Significance of Impact

The proposed project would not release substantial quantities of air contaminants beyond the boundaries of the project site because of the operation of a stationary source; therefore, impacts would be less than significant.

5.3.9.4 Mitigation Measures

Impacts would be less than significant; therefore, no mitigation is required.

5.4 Noise

This section describes the existing conditions and applicable laws and regulations for noise and vibration, and analyzes the potential construction and operational noise impacts associated with the future implementation of the proposed project. The analysis in this section is based largely on the *Noise Technical Report* prepared by Dudek in April 2015 for the proposed project. The full report is included as Appendix E of this DEIR. Additional construction noise and vibration analyses have also been conducted as part of this DEIR. Noise impacts are determined based on the City's Significance Determination Thresholds (2016). Potential impacts for which the City does not have specific significance thresholds (such as groundborne vibration) are assessed based on commonly accepted thresholds developed by other agencies.

5.4.1 Existing Conditions

5.4.1.1 Noise Fundamentals and Terminology

Noise is commonly defined as unwanted sound. Sound can be described as the mechanical energy of a vibrating object transmitted by pressure waves through a liquid or gaseous medium (e.g., air) to a hearing organ, such as a human ear. Noise is often defined as sound that is objectionable because it is disturbing or annoying.

In the science of acoustics, the fundamental model consists of a sound (or noise) source, a receptor, and the propagation path between the two. The loudness of the noise source and the obstructions or atmospheric factors, which affect the propagation path to the receptor, determine the sound level and the characteristics of the noise perceived by the receptor.

The following provides an explanation of key concepts and acoustical terms used in the analysis of environmental and community noise.

Frequency, Amplitude, and Decibels

Continuous sound can be described by *frequency* (pitch) and *amplitude* (loudness). A low-frequency sound is perceived as low in pitch. Frequency is expressed in terms of cycles per second, or Hertz (Hz) (e.g., a frequency of 250 cycles per second is referred to as 250 Hz). High frequencies are sometimes more conveniently expressed in kilohertz (kHz), or thousands of Hz. The audible frequency range for humans is generally between 20 and 20,000 Hz.

The amplitude of pressure waves generated by a sound source determines the loudness of that source. The amplitude of a sound is typically described in terms of *sound pressure level* (SPL), which refers to the root-mean-square (rms) pressure of a sound wave and can be measured in units called microPascals (μPa). One μPa is approximately one hundred-billionth (0.0000000001) of normal atmospheric pressure. Sound pressure levels for different kinds of noise environments can range from less than 100 to over 100,000,000 μPa . Because of this large range of values, sound is rarely expressed in terms of μPa . Instead, a logarithmic scale is used to describe the sound pressure level (also referred to simply as the sound level) in terms of decibels, abbreviated dB.

Specifically, the decibel describes the ratio of the actual sound pressure to a reference pressure and is calculated as follows.

$$SPL = 20 \times \log_{10} \left(\frac{X}{20 \mu Pa} \right)$$

where X is the actual sound pressure and $20 \mu Pa$ is the standard reference pressure level for acoustical measurements in air.

The threshold of hearing for young people is about 0 dB, which corresponds to $20 \mu Pa$.

Decibel Addition

Because decibels are logarithmic units, sound pressure levels cannot be added or subtracted through ordinary arithmetic. On the dB scale, a doubling of sound energy corresponds to a 3-dB increase. In other words, when two identical sources are each producing sound of the same loudness, their combined sound level at a given distance would be 3 dB higher than one source under the same conditions. For example, if one excavator produces a sound pressure level of 80 dB, two excavators would not produce 160 dB. Rather, they would combine to produce 83 dB. The cumulative sound level of any number of sources, such as excavators, can be determined using decibel addition. The same decibel addition is used for A-weighted decibels described below.

Perception of Noise and A-Weighting

The dB scale alone does not adequately characterize how humans perceive noise. The dominant frequencies of a sound have a substantial effect on the human response to that sound. Although the intensity (energy per unit area) of the sound is a purely physical quantity, the loudness or human response is determined by characteristics of the human ear.

Human hearing is limited in the range of audible frequencies as well as in the way it perceives the sound pressure level in that range. In general, people are most sensitive to the frequency range of 1,000 to 8,000 Hz and perceive sounds within that range better than sounds of the same amplitude in higher or lower frequencies. To approximate the response of the human ear, sound levels in various frequency bands are adjusted (or “weighted”), depending on human sensitivity to those frequencies. The resulting sound pressure level is expressed in A-weighted decibels, abbreviated dBA. When people make judgments regarding the relative loudness or annoyance of a sound, their judgments correlate well with the A-weighted sound levels of those sounds. Table 5.4-1 describes typical A-weighted sound levels for various noise sources.

Human Response to Noise

Noise-sensitive receptors (also called “receivers”) are locations where people reside or where the presence of unwanted sound may adversely affect the use of the land. Noise-sensitive receptors typically include residences, hospitals, schools, guest lodging, libraries, and certain types of passive recreational uses.

The effects of noise on people can be listed in three general categories.

- Subjective effects of annoyance, nuisance, dissatisfaction.
- Interference with activities such as speech, sleep, learning, or working.

- Physiological effects such as startling and hearing loss.

Table 5.4-1. Typical Noise Levels in the Environment

Common Outdoor Noise Source	Sound Level (dBA)	Common Indoor Noise Source
	— 110 —	Rock band
Jet flying at 1,000 feet		
	— 100 —	
Gas lawn mower at 3 feet		
	— 90 —	
Diesel truck at 50 feet at 50 mph		Food blender at 3 feet
	— 80 —	Garbage disposal at 3 feet
Noisy urban area, daytime		
Gas lawn mower at 100 feet	— 70 —	Vacuum cleaner at 10 feet
Commercial area		Normal speech at 3 feet
Heavy traffic at 300 feet	— 60 —	
		Large business office
Quiet urban daytime	— 50 —	Dishwasher in next room
Quiet urban nighttime	— 40 —	Theater, large conference room (background)
Quiet suburban nighttime		
	— 30 —	Library
Quiet rural nighttime		Bedroom at night
	— 20 —	
		Broadcast/recording studio
	— 10 —	
Lowest threshold of human hearing	— 0 —	Lowest threshold of human hearing
Source: California Department of Transportation 2013a		

In most cases, effects from sounds typically found in the natural environment (compared to an industrial or an occupational setting) would be limited to the first two categories: creating an annoyance or interference with activities. No completely satisfactory method exists to measure the subjective effects of sound or the corresponding reactions of annoyance and dissatisfaction. This lack of a common standard arises primarily from the wide variation in individual thresholds of annoyance and habituation to sound. Therefore, an important way of determining a person's subjective reaction to a new sound is by comparing it to the existing baseline or "ambient" environment to which that person has adapted. In general, the more the level or tonal (frequency) variations of a sound exceed the previously existing ambient sound level or tonal quality, the less acceptable the new sound will be, as judged by the exposed individual.

Studies have shown that under controlled conditions in an acoustics laboratory, a healthy human ear is able to discern changes in sound levels of one dBA. In the normal environment, the healthy

human ear can detect changes of about two dBA; however, it is widely accepted that changes of three dBA in the normal environment are considered just noticeable to most people. A change of 5 dBA is readily perceptible, and a change of 10 dBA is perceived as being twice as loud. Accordingly, a doubling of sound energy (e.g., doubling the volume of traffic on a highway) resulting in a 3-dB increase in sound would generally be barely detectable.

Equipment and vehicle operation during nighttime hours can potentially result in noise events that disturb the sleep of people living in nearby residential areas. Interior noise levels between 50 and 55 dBA L_{\max} (maximum sound level) during nighttime hours (10 p.m. to 7 a.m.) were found to result in sleep disturbance and annoyance (Nelson 1987).

5.4.1.2 Noise Descriptors

Because sound levels can vary markedly over a short period of time, various descriptors or noise “metrics” have been developed to quantify environmental and community noise. These metrics generally describe either the average character of the noise or the statistical behavior of the variations in the noise level. The most common of these metrics are described below.

Equivalent Sound Level

The equivalent sound level (L_{eq}) is the most common metric used to describe short-term average noise levels. Many noise sources produce levels that fluctuate over time; examples include mechanical equipment that cycles on and off, or construction work, which can vary sporadically. The L_{eq} describes the average acoustical energy content of noise for an identified period of time, commonly 1 hour. Thus, the L_{eq} of a time-varying noise and that of a steady noise are the same if they deliver the same acoustical energy over the duration of the exposure. For many noise sources, the L_{eq} will vary depending on the time of day—a prime example is traffic noise, which rises and falls depending on the amount of traffic on a given street or freeway.

Maximum Sound Level and Minimum Sound Level

L_{\max} and L_{\min} refer to the maximum and minimum sound levels, respectively, that occur during the noise measurement period. More specifically, they describe the rms sound levels that correspond to the loudest and quietest 1-second intervals that occur during the measurement.

Community Noise Equivalent Level

A given level of noise may be more or less tolerable depending on the duration of the exposure experienced by an individual, as well as the time of day during which the noise occurs. The community noise equivalent level (CNEL) is a measure of the cumulative 24-hour noise exposure that considers not only the variation of the A-weighted noise level but also the duration and the time of day of the disturbance. The CNEL is derived from the 24 A-weighted 1-hour L_{eq} s that occur in a day, with “penalties” applied to the L_{eq} s occurring during the evening hours (7 p.m. to 10 p.m.) and nighttime hours (10 p.m. to 7 a.m.) to account for increased noise sensitivity during these hours. Specifically, the CNEL is calculated by adding 5 dBA to each of the evening L_{eq} s, adding 10 dBA to each of the nighttime L_{eq} s, and then taking the average value for all 24 hours.

Day-Night Sound Level

Much like CNEL, above, the day-night sound level (L_{dn}) is also a measure of the cumulative 24-hour noise exposure that considers not only the variation of the A-weighted noise level but also the duration and the time of day of the disturbance. The L_{dn} is derived in exactly the same way as CNEL, except that no penalty is applied to the evening hours of 7 p.m. to 10 p.m. Specifically, the L_{dn} is calculated from the 24 A-weighted 1-hour L_{eqs} that occur in a day by adding 10 dBA to each of the nighttime (10 p.m. to 7 a.m.) L_{eqs} and then taking the average value for all 24 hours.

Various federal, state, and local agencies have adopted CNEL or L_{dn} as the measure of community noise. While not identical, CNEL and L_{dn} are normally within 1 dBA of each other when measured in typical community environments, and many noise standards/regulations use the two interchangeably.

5.4.1.3 Sound Propagation

When sound propagates over a distance, it changes in both level and frequency content. The manner in which noise is reduced with distance depends on the following important factors.

Geometric Spreading. Sound from a single source (i.e., a “point” source) radiates uniformly outward as it travels away from the source in a spherical pattern. The sound level attenuates (or drops off) at a rate of 6 dBA for each doubling of distance. Highway noise is not a single stationary point source of sound. The movement of vehicles on a highway makes the source of the sound appear to emanate from a line (i.e., a “line” source) rather than from a point. This results in cylindrical spreading rather than the spherical spreading resulting from a point source. The change in sound level (i.e., “attenuation”) from a line source is 3 dBA per doubling of distance.

Ground Absorption. Usually the noise path between the source and the observer is very close to the ground. The excess noise attenuation from ground absorption occurs due to acoustic energy losses on sound wave reflection. Traditionally, the excess attenuation has also been expressed in terms of attenuation per doubling of distance. This approximation is done for simplification only; for distances of less than 200 feet, prediction results based on this scheme are sufficiently accurate. For acoustically “hard” sites (i.e., sites with a reflective surface, such as a parking lot or a smooth body of water, between the source and the receptor), no excess ground attenuation is assumed because the sound wave is reflected without energy losses. For acoustically absorptive or “soft” sites (i.e., sites with an absorptive ground surface, such as soft dirt, grass, or scattered bushes and trees), an excess ground attenuation value of 1.5 dBA per doubling of distance is normally assumed. When added to the geometric spreading, the excess ground attenuation results in an overall drop-off rate of 4.5 dBA per doubling of distance for a line source and 7.5 dBA per doubling of distance for a point source.

Atmospheric Effects. Research by the California Department of Transportation (Caltrans) and others has shown that atmospheric conditions can have a major effect on noise levels. Wind has been shown to be the single most important meteorological factor within approximately 500 feet, whereas vertical air temperature gradients are more important over longer distances. Other factors, such as air temperature, humidity, and turbulence, also have major effects. Receptors located downwind from a source can be exposed to increased noise levels relative to calm conditions, whereas locations upwind can have lower noise levels. Increased sound levels can also occur because of temperature inversion conditions (i.e., increasing temperature with elevation, with

cooler air near the surface, where the sound source tends to be and the warmer air above which acts as a cap, causing a reflection of ground level-generated sound).

Shielding. A large object or barrier in the path between a noise source and a receptor can substantially attenuate noise levels at the receptor. The amount of attenuation provided by this shielding depends on the size of the object, proximity to the noise source and receptor, surface weight, solidity, and the frequency content of the noise source. Natural terrain features (such as hills and dense woods) and human-made features (such as buildings and walls) can substantially reduce noise levels. Walls are often constructed between a source and a receptor with the specific purpose of reducing noise. A barrier that breaks the line of sight between a source and a receptor will typically result in at least 5 dB of noise reduction. A higher barrier may provide as much as 20 dB of noise reduction.

5.4.1.4 Groundborne Vibration Fundamentals and Terminology

Groundborne vibration is an oscillatory motion of the ground with respect to the equilibrium position. Most perceptible indoor vibration is caused by sources within buildings, such as the operation of mechanical equipment, movement of people, or the slamming of doors. However, when vibration occurs as a result of groundborne transmission from exterior sources it can be a nuisance for residents and tenants. Typical outdoor sources of perceptible groundborne vibration are heavy construction equipment (such as earthmoving, blasting, and pile driving), steel-wheeled trains, and heavy trucks on rough roads. If a roadway is smooth, the groundborne vibration from traffic is rarely perceptible.

The following sections provide an explanation of key concepts and terms used in the analysis of groundborne vibration.

Displacement, Velocity, and Acceleration

Groundborne vibration can be described in terms of displacement, velocity, or acceleration. Displacement is the easiest descriptor to understand; it is simply the distance that a vibrating point moves from its static position (i.e., its resting position when the vibration is not present). The velocity describes the instantaneous speed of the movement and acceleration is the instantaneous rate of change of the speed. Although displacement is fundamentally easier to understand than velocity or acceleration, it is rarely used for describing groundborne vibration, for the following reasons: (1) human response to groundborne vibration correlates more accurately with velocity or acceleration, (2) the effect on buildings and sensitive equipment is more accurately described using velocity or acceleration, and (3) most transducers used in the measurement of groundborne vibration actually measure either velocity or acceleration. For evaluating the potential environmental impacts of groundborne vibration, velocity is the fundamental measure that is typically used.

The frequency of vibration is expressed in the same unit, Hz, as described above for noise. One Hz is equal to one cycle per second, and one kHz is equal to one thousand cycles per second. The description of the vibration amplitude depends on the metric being used, as described below under *Groundborne Vibration Descriptors*. If a person is engaged in any type of physical activity, vibration tolerance increases considerably.

Perception of Groundborne Vibration

There are three primary types of receivers that can be adversely affected by ground vibration: people, structures, and equipment.

People may perceive both primary and secondary effects of groundborne vibration. Primary effects occur when groundborne vibration is felt directly through the ground or the building structure. Secondary effects include phenomena such as the rattling of fixtures or the movement of hanging objects. Any effect (primary perceptible vibration, secondary effects, or a combination of the two) can lead to annoyance. The degree to which a person is annoyed depends on the activity in which they are participating at the time of the disturbance. For example, someone sleeping or reading will be more sensitive than someone who is engaged in any type of physical activity. Reoccurring primary and secondary vibration effects often lead people to believe that the vibration is damaging their home, although vibration levels are well below minimum thresholds for damage potential.

Vibration generated by construction activity has the potential to damage structures. This damage could be structural damage, such as cracking of floor slabs, foundations, columns, beams, or walls, or cosmetic architectural damage, such as cracked plaster, stucco, or tile.

Groundborne Vibration Descriptors

The peak particle velocity (PPV) is defined as the maximum instantaneous positive or negative peak amplitude of the vibration velocity. The unit of measurement is inches per second (in/s). PPV can be used to assess both human response to groundborne vibration and the potential for building damage. PPV is related to the stresses that are experienced by buildings subjected to groundborne vibration.

The vibration velocity level (L_v) describes the rms velocity amplitude of the vibration and is typically calculated over a 1-second period. The maximum L_v describes the maximum rms velocity amplitude that occurs during a vibration measurement and is analogous to the L_{max} metric used to describe noise. L_v can be measured in inches per second but is more typically described in terms of vibration velocity level decibels (VdB). The VdB uses a logarithmic scale to describe the ratio of the actual rms velocity amplitude to a reference velocity amplitude (1×10^{-6} in/s is the accepted reference velocity amplitude in the United States). Specifically, an L_v in decibels (VdB), is calculated as follows.

$$L_v = 20 \times \log_{10} \left(\frac{V}{1 \times 10^{-6} \text{ in/s}} \right),$$

where V is the actual rms velocity amplitude and 1×10^{-6} in/s is the reference velocity amplitude.

5.4.1.5 Environmental Setting

Ambient noise within the vicinity of the project site is primarily generated by vehicle traffic along Interstate (I-) 805 and nearby arterial roadways. Section 2.0 of the proposed project's Traffic Impact Study (Appendix C) details the existing conditions of the traffic impact study area, including the average daily traffic (ADT) of roadways, intersections, and freeway segments.

Existing ambient noise levels in the vicinity of the project site were characterized by conducting measurements at five locations between 2:50 p.m. and 4:10 p.m. on February 20, 2015, as depicted

in Figure 5.4-1. As shown in Table 5.4-2, the measured average noise levels (L_{eq}) ranged from 52 dBA L_{eq} at Site M2 to 62 dBA L_{eq} at Site M3. These noise levels were also used to estimate the CNEL at each location, as shown in the table.

Table 5.4-2. Measured Noise Levels and Community Noise Equivalent Level

Site	Description	L_{eq}^a (dBA)	CNEL ^b (dBA)
M1	City View Church, north of the project site	55	58
M2	Residential area on Via Alta, southwest of the project site	52	52
M3	Residential area on Civita Boulevard, southwest of the project site	62	62
M4	Future residential area adjacent to Phillis Place, west of the project site	61	63
M5	Residential area on Mission Center Road, west of the project site	56	58

^a Equivalent continuous sound level (time-average sound level).
^b CNEL based on diurnal noise patterns for roadways with greater than 10,000 average daily traffic.

5.4.1.6 Noise-Sensitive Land Uses

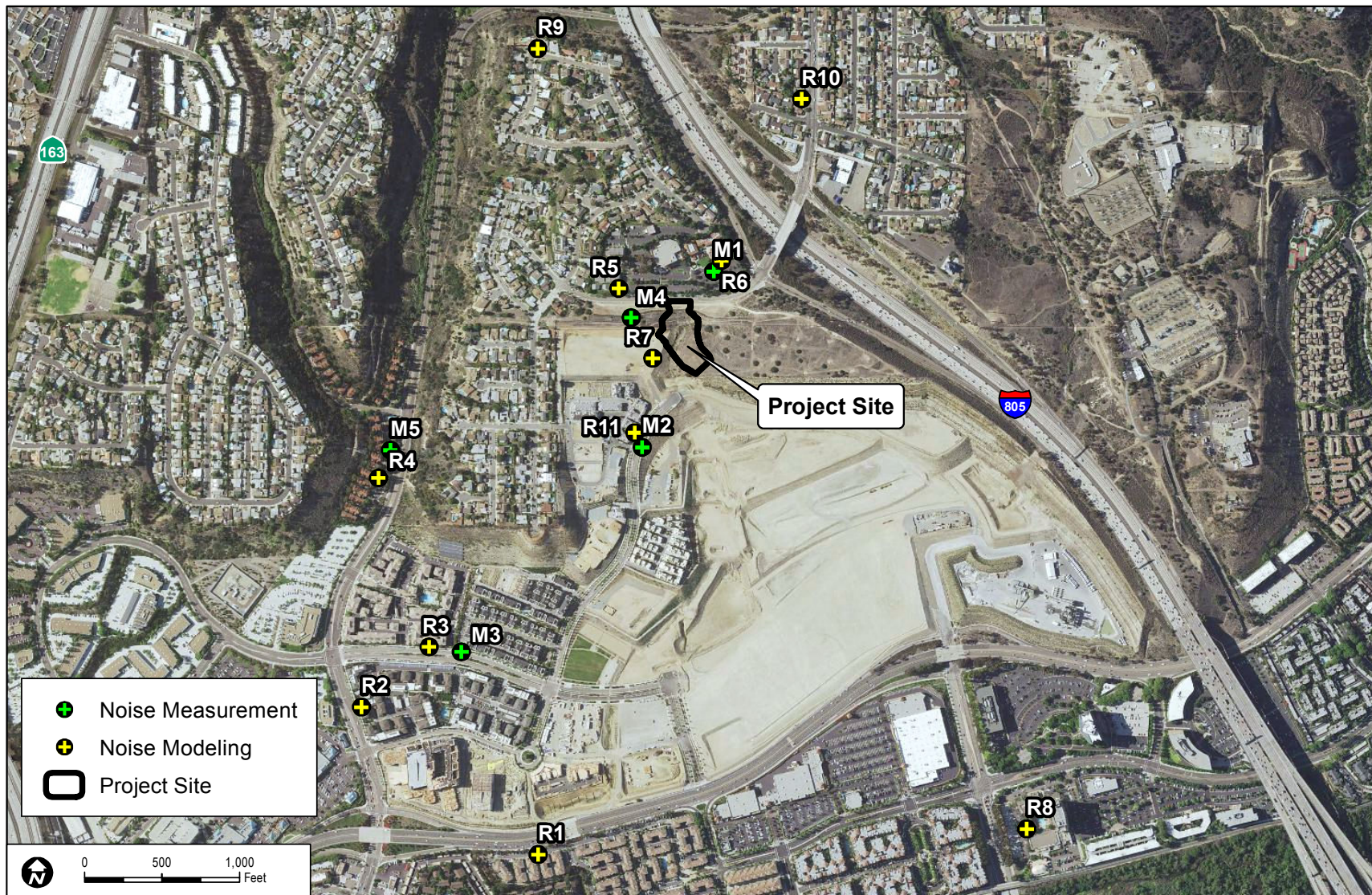
The City's Significance Determination Thresholds (2016) define noise-sensitive land uses to include, but not necessarily be limited to, residential uses, hospitals, nursing facilities, intermediate care facilities, child educational facilities, libraries, parks and recreation facilities, museums, and child care facilities. However, the construction noise limits in the City's municipal code only strictly apply to property zoned residential.

Noise-sensitive land uses in the vicinity of the project include existing homes to the west and southwest, and City View Church on the north side of Phyllis Place. New homes will also be constructed nearby to the east and south at some point in the future as part of the approved Quarry Falls Specific Plan. There are no schools in the immediate vicinity. The closest existing school is Elevate Elementary School, approximately 1,400 feet to the northeast, across I-805. There is also the possibility that a new school may be constructed as part of the Quarry Falls Specific Plan; the site for this school is more than 1,700 feet south of the project site.

5.4.2 Regulatory Framework

5.4.2.1 Federal

The federal government advocates that local jurisdictions use their land use regulatory authority to arrange new development in such a way that "noise-sensitive" uses are prohibited from being sited adjacent to a highway or, alternately, that the developments are planned and constructed in such a manner that potential noise impacts are minimized. Federal noise and vibration policies, programs, and/or guidelines developed by the Federal Transit Administration and the Federal Highway Administration (FHWA) are used for federal projects to calculate construction noise and vibration levels and perform impact analyses.



Source: Dudek, 2015.

Figure 5.4-1
Noise Measurement and Modeling Locations

5.4.2.2 State

Title 24, California Code of Regulations

Title 24, Part 2 of the California Code of Regulations (The California Building Code) governs the interior environment of new buildings. Section 1207 provides standards for noise affecting “dwelling units and sleeping units.” The code states “Interior noise levels attributable to exterior sources shall not exceed 45 dB in any habitable room. The noise metric shall be either L_{dn} or CNEL, consistent with the noise element of the local general plan.”

Caltrans’ *Transportation and Construction Vibration Guidance Manual*

Caltrans provides widely referenced vibration guidelines in its publication, *Transportation and Construction Vibration Guidance Manual* (Caltrans 2013b). Although these guidelines do not represent strict standards that apply to the proposed project, they are useful in establishing appropriate thresholds of impact, particularly because the City of San Diego does not provide any quantitative standards for groundborne vibration levels.

The potential effects of groundborne vibration fall into two categories: building damage and annoyance of people. The potential for vibration from project construction to damage buildings represents a physical impact on the environment and such damage would be considered by the City of San Diego to be a significant impact. However, annoyance potential, while a source of possible short-term nuisance, would not be considered a physical impact on the environment. With regard to the potential for building damage from groundborne vibration, Caltrans suggests the threshold criteria shown in Table 5.4-3.

Table 5.4-3. Caltrans Vibration Damage Potential Threshold Criteria

Structure and Condition	Maximum PPV (in/sec)	
	Transient Sources	Continuous/Frequent Intermittent Sources
Extremely fragile historic buildings, ruins, ancient monuments	0.12	0.08
Fragile buildings	0.2	0.1
Historic and some old buildings	0.5	0.25
Older residential structures	0.5	0.3
New residential structures	1.0	0.5
Modern industrial/commercial buildings	2.0	0.5
Notes: Transient sources create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment. PPV = peak particle velocity—the maximum instantaneous positive or negative peak amplitude of the vibration velocity, measured in inches per second (in/sec).		

5.4.2.3 Local

City of San Diego General Plan

California requires each local government entity to perform noise studies and implement a noise element as part of its general plan. The City of San Diego General Plan, Noise Element, provides

information, goals, and policies related to the noise environment within the City. General Plan Table NE-3 presents *Land Use – Noise Compatibility Guidelines* detailing the compatibility of various land uses with different noise exposures, defined using the CNEL. There are three different tiers of compatibility: (1) Compatible, (2) Conditionally Compatible, and (3) Incompatible. The purpose of these guidelines is to direct the placement of noise-sensitive developments (e.g., homes, parks, schools) and avoid locating projects in areas that have incompatible (i.e., excessive) noise levels for the project type. Because the proposed project comprises a roadway, which is not a noise-sensitive land use, these guidelines do not apply to the project. The City’s Traffic Noise Significance Thresholds (see Table 5.4-5 below) apply to the proposed project.

City of San Diego Municipal Code

Section 59.5.0401 (*Noise Ordinance*) of the City of San Diego municipal code provides quantitative noise standards to control excessive noise generated in the City. The noise ordinance limits are expressed in terms of a 1-hour L_{eq} . The allowable noise limits depend on the land use and time of day, as depicted in Table 5.4-4. It is noted that the noise ordinance applies only to stationary (non-transportation) noise sources and traffic noise levels are not subject to these noise limits.

Table 5.4-4. City of San Diego Sound Level Limits

Land Use	Time of Day	1-Hour Average Sound Level (dB)
Single-Family Residential	7 a.m. to 7 p.m.	50
	7 p.m. to 10 p.m.	45
	10 p.m. to 7 a.m.	40
Multifamily Residential (up to maximum density of 1/2000)	7 a.m. to 7 p.m.	55
	7 p.m. to 10 p.m.	50
	10 p.m. to 7 a.m.	45
All other residential	7 a.m. to 7 p.m.	60
	7 p.m. to 10 p.m.	55
	10 p.m. to 7 a.m.	50
Commercial	7 a.m. to 7 p.m.	65
	7 p.m. to 10 p.m.	60
	10 p.m. to 7 a.m.	60
Industrial or Agricultural	Anytime	75
Source: City of San Diego Municipal Code, Section 59.5.0401–59.5.0404		
Note: The sound level limit at a location on a boundary between two zones is the arithmetic mean of the respective limits for the two districts.		

Section 59.5.0404 of the code regulates noise associated with construction activities. Construction is permitted between the hours of 7 a.m. and 7 p.m., Monday through Saturday, with the exception of legal holidays. Construction equipment cannot be operated so as not to cause, at or beyond the property lines of any property zoned residential, an average sound level greater than 75 dB during the 12-hour period from 7 a.m. to 7 p.m.

Mission Valley Community Plan

The Conservation Element of the Mission Valley Community Plan (1985) discusses noise within the community. It states that the freeways crossing and extending the length of the valley contribute significantly to the noise levels there. It also states that events held in Qualcomm Stadium contribute to noise levels in the eastern section of the community. The plan states that noise impacts should be minimized and avoided by planning for the appropriate placement and intensity of land uses relative to noise sources.

Serra Mesa Community Plan

The Serra Mesa Community Plan (1977) discusses aircraft noise attributable to Montgomery Field operations, stating that aircraft frequently fly over residential areas. It intends to mitigate adverse environmental impacts of noise, crash hazards, and visual appearance affecting adjacent areas. The plan states that noise effects on nearby residential areas have been minimized through enforcement of noise regulations.

City of San Diego Significance Determination Thresholds

The City's *CEQA Significance Determination Thresholds* (also known as *Guidelines*) outline the criteria and thresholds used to determine whether project impacts are significant (City of San Diego 2016). Thresholds applicable to the project include traffic noise and construction noise. Traffic noise significance thresholds are reproduced below as Table 5.4-5. As shown, the noise level at exterior usable open space for single- and multi-family residences should not exceed 65 dBA CNEL, for churches should not exceed 70 dBA CNEL, and for commercial or retail space should not exceed 75 dBA CNEL. Table 5.4-5 further specifies that outdoor usable areas would generally indicate a significant noise impact if located closer than 50 feet from the centerline of the closest traffic lane of a street with existing or future daily traffic volumes greater than 20,000 ADT.

Table 5.4-5. Traffic Noise Significance Thresholds

Structure or Proposed Use that Would Be Affected by Traffic Noise	Interior Space (CNEL)	Exterior Usable Space^a (CNEL)	General Indication of Potential Significance
Single-Family Detached	45 dB	65 dB	Structure or outdoor usable area ^b is <50 feet from the center of the closest (outside) lane on a street with existing or future ADT >7,500
Multi-Family, Schools, Libraries, Hospitals, Day Care, Hotels, Motels, Parks, Convalescent Homes	Development Services Department ensures 45 dB pursuant to Title 24	65 dB	
Offices, Churches, Business, Professional Uses	N/A	70 dB	Structure or outdoor usable area is <50 feet from the center of the closest lane on a street with existing or future ADT of >20,000
Commercial, Retail, Industrial, Outdoor Spectator Sports Uses	N/A	75 dB	Structure or outdoor usable area is <50 feet from the center of the closest lane on a street with existing or future ADT of >40,000

Source: City of San Diego 2016, Table K-2.

^a If a project is currently at or exceeds the significance thresholds for traffic noise described above, and noise levels would result in less than a 3 dB increase, then the impact is not considered significant.

^b Exterior usable areas do not include residential front yards or balconies, unless the areas such as balconies are part of the required usable open space calculation for multi-family units.

Thresholds for temporary construction noise are based on the related requirements of the municipal code as discussed above. Construction activity is prohibited between the hours of 7 p.m. of any day and 7 a.m. of the following day, and on Sundays and legal holidays, except in the case of an emergency. Construction noise levels measured at or beyond the property lines of any property zoned residential cannot exceed an average sound level greater than 75 dB during the 12-hour period from 7 a.m. to 7 p.m. Additionally, where temporary construction noise would substantially interfere with normal business communication, or affect sensitive receptors such as day care facilities, a significant noise impact may be identified.

5.4.3 Significance Determination Thresholds

5.4.3.1 Issue Questions

Based on the City's Significance Determination Thresholds (Issues 1–4, 6) and guidance from Caltrans (Issue 5) as described under Section 5.4.2, *Regulatory Framework*, the following issues provide the basis to assess the significance of potential noise and vibration impacts resulting from the proposed project. A significant impact related to noise would occur if implementation of the project would:

1. Result in a significant increase in the existing ambient noise levels from construction that exceed the City's adopted noise ordinance;
2. Result in a significant increase in the existing ambient noise levels due to operation;
3. Expose people to current transportation noise levels that exceed standards established in the City's Significance Determination Thresholds;

4. Expose people to future transportation noise levels that exceed standards established in the City's Significance Determination Thresholds;
5. Expose people to or generate excessive groundborne vibration or groundborne noise levels; or
6. Result in a land use that is not compatible with aircraft noise levels as defined by an adopted Airport Land Use Compatibility Plan.

5.4.3.2 Methodology and Assumptions

For this project, the only operational noise source of concern is traffic, and because the project is a road, which is not considered noise-sensitive, noise levels affecting the project site itself are not analyzed.

Operational (traffic) noise was analyzed as described in Appendix E (Noise Technical Report) using FHWA's Traffic Noise Model 2.5 (FHWA 2004). Existing and future traffic noise was calculated based on the number and types of vehicles on the roadway, vehicle speeds, receiver locations, and other data, including noise attenuation from structures such as existing or future buildings or walls.

Construction noise was analyzed using data and modeling methodologies from FHWA's Roadway Construction Noise Model (FHWA 2006, 2008), which predicts average noise levels at nearby receptors by analyzing the type of equipment, the distance from source to receptor, usage factor, and the presence or absence of intervening shielding between source and receptor. This methodology calculates the composite average noise levels for multiple equipment items scheduled during each construction phase. The phasing and construction equipment schedule used in the analysis was based on the same construction assumptions used throughout this DEIR (see Chapter 3, *Project Description*). The noise levels for each phase were based on the three loudest pieces of equipment expected to be used during that phase.

Because the City has not established specific groundborne noise and vibration standards, construction-related vibration was analyzed using data and modeling methodologies provided by Caltrans' *Transportation and Construction Vibration Guidance Manual* (Caltrans 2013b). This manual provides typical vibration source levels for various types of construction equipment, as well as methods for estimating the propagation of groundborne vibration over distance.

5.4.4 Impact Analysis

Issue 1: Construction Noise Levels

Would the proposed project result in a significant increase in the existing ambient noise levels from construction that exceed the City's adopted noise ordinance?

5.4.4.1 Impact Discussion

Impacts are assessed based on the City's Significance Determination Thresholds (2016). Referring to these thresholds, temporary construction noise that exceeds 75 dBA L_{eq} during the 12-hour period from 7:00 a.m. to 7:00 p.m. at a sensitive receptor would be considered significant. Consistent with the City's noise ordinance, construction activity is prohibited between the hours of 7:00 p.m. of any day and 7:00 a.m. of the following day, or on legal holidays as specified in Section 21.04 of the San Diego Municipal Code, with the exception of Columbus Day and Washington's Birthday, or on Sundays, that would create disturbing, excessive, or offensive noise unless a permit has been applied

for and granted beforehand by the Noise Abatement and Control Administrator, in conformance with San Diego Municipal Code Section 59.5.0404.

Implementation of the proposed project would result in the construction of a roadway, which is expected to occur during the City's permitted daytime hours. However, if nighttime construction were to occur, it could result in potentially significant impacts. Significant impacts would also occur if the 12-hour average noise level (L_{eq}) between the hours of 7 a.m. and 7 p.m. Monday through Saturday was to exceed 75 dBA. The noise contour distances for the 75 dBA threshold were estimated for each phase of construction and are summarized in Table 5.4-6. The table presents noise levels for each phase at a standard reference distance of 50 feet as well as the distance required in order to reduce noise levels to 75 dBA or less.

Table 5.4-6. Estimated Construction Noise Impact Distances by Phase

Phase/Description	12-Hour L_{eq} at 50 feet (dBA)	Distance Required to Reduce 12-Hour L_{eq} to 75 dBA (feet)
Phase 1 – Grubbing/Land Clearing	80	85
Phase 2 – Grading/Excavation	83	125
Phase 3 – Drainage/Utilities/Subgrade	83	120
Phase 4 – Paving	77	65

Based on the calculated impact distances, noise levels may exceed 75 dBA at the parking lot of City View Church, but would be less than 75 dBA at church buildings and outdoor noise-sensitive locations (seating areas, playgrounds, etc.); therefore, the impact would be less than significant. There are no existing schools within 125 feet of the project site, and the potential school site that is indicated in the Quarry Falls Specific Plan is more than 1,700 feet south of the project site; therefore, impacts at schools would also be less than significant.

Development of residential land uses surrounding the project site is currently underway in accordance with the Quarry Falls Specific Plan. This includes homes located within 125 feet of the project. Assuming these homes will be completed and occupied by the time the project is under construction then noise impacts would be potentially significant (**Impact NOI-1**).

5.4.4.2 Significance of Impacts

Noise from project construction activities would be temporary and would cease at the completion of construction. However, significant impacts could result if construction occurs outside of the hours permitted by the City's Noise Ordinance or at any time within 65 to 125 feet (depending on the phase of construction) of occupied residences. Therefore, impacts associated with construction noise on future occupied residences would be potentially significant and mitigation is required (**Impact NOI-1**).

5.4.4.3 Mitigation Measures

MM NOI-1

- All construction and general maintenance activities, except in an emergency, shall be limited to the days and hours permitted in Section 59.5.0404 of the City of San Diego Municipal Code. Outside of these hours, construction personnel shall not be permitted on the job site,

and material or equipment deliveries and collections shall not be permitted. The construction contractor shall develop and implement a noise control plan that demonstrates to the City's satisfaction that the Noise Ordinance standard would not be exceeded. The plan may include the following.

- All construction equipment and vehicles using internal combustion engines shall be equipped with mufflers, air-inlet silencers where appropriate, and any other shrouds, shields, or other noise-reducing features in good operating condition that meet or exceed original factory specification.
- All mobile or fixed construction equipment used on the project that is regulated for noise output by a local, state, or federal agency shall comply with such regulation while in the course of project activity.
- All construction equipment shall be properly maintained.
- All construction equipment shall be operated only when necessary and shall be switched off when not in use.
- Construction employees shall be trained in the proper operation and use of the equipment.
- Electrical power from the local power grid (as opposed to onsite generators) shall be used to the maximum extent feasible to run compressors, power tools, and similar equipment.
- Stationary equipment, such as generators or compressors, shall be located as far as feasible from noise-sensitive receptors.
- Material stockpiles and mobile equipment staging, parking, and maintenance areas shall be located as far as practicable from noise-sensitive receptors.
- Construction site speed limits shall be established and enforced during the construction period.
- The use of noise-producing signals, including horns, whistles, alarms, and bells, shall be for safety warning purposes only.
- Temporary construction noise barriers shall be installed as necessary to adequately control noise levels. Barriers may be constructed around specific equipment items or larger work areas as required. Barriers shall be constructed of materials with a minimum sound transmission class (STC) rating of 25 (sound absorptive acoustical panels, acoustical blankets, etc.).
- The project developer and/or its contractor shall prominently post signage at the north and south ends of the project site in a highly visible location, not less than 72 hours prior to the start of any construction activity using heavy construction equipment (e.g., graders, dozer, backhoes). These two signs shall provide the project name, indicate the anticipated dates of construction, and advise that there will be loud noise associated with some construction activities. The signage shall provide a telephone contact number for affected parties to ask questions and/or relay concerns. This signage shall either consist of stand-alone signs or be combined with any other project-related signage at the project boundary, but shall be clearly visible from outside the project site. The project developer shall include this measure in the construction specification

documents for the project. Prior to the commencement of heavy construction activities, the project developer and/or its contractor shall submit documentation (including photographs) to the City demonstrating compliance with this measure.

5.4.4.4 Significance after Mitigation

Noise from project construction activities would be temporary and would cease at the completion of the project. With implementation of mitigation measure **MM NOI-1**, impacts associated with construction noise at future occupied residences (**Impact NOI-1**) would be less than significant.

5.4.5 Impact Analysis

Issues 2 and 3: Operational (Traffic) Noise Levels

Would the project (2) result in a significant increase in the existing ambient noise levels due to operation or (3) expose people to current transportation noise levels that exceed standards established in the City's Significance Determination Thresholds?

5.4.5.1 Impact Discussion

Vehicles using the roadway would create operational noise. Noise from motor vehicle traffic associated with the project was analyzed using FWA Traffic Noise Model 2.5 (as discussed under Section 5.4.3.1, *Methods and Assumptions*) and data from the project traffic study (Appendix C). As previously detailed in Chapter 2, *Environmental Setting*, traffic counts were collected in 2011 and verified in 2013 to represent the existing conditions. However, consistent with the *Neighbors for Smart Rail v. Exposition Metro Line Construction Authority* (2013) 5 Cal. 4th 439 (Neighbors) decision, the existing conditions are provided for informational purposes and are not used to determine project-related impacts. Rather, the impact analysis uses the reasonably foreseeable near-term traffic conditions modeled for the Near-Term Scenario (Year 2017) as the baseline. This is a more conservative and more accurate approach than using the existing conditions because the Near-Term Scenario takes into account projects that have been implemented since 2013. In addition, it is possible the project would not be built for some time and by using near-term conditions rather than existing conditions, the analysis better predicts what the conditions would be like into the future at a point when the project may be implemented. If the existing conditions were used in place of the future near-term conditions, projects that are under construction, planned for construction, or otherwise recently operational would not be factored into the project impact analysis. Accordingly, consistent with the Neighbors decision, traffic conditions for the Near-Term Scenario are considered the near-term baseline conditions for CEQA purposes and are used as a basis for comparison of project-related traffic impacts.

Referring to the City's Significance Determination Thresholds, the noise level at exterior usable open space for single- and multi-family residences should not exceed 65 dBA CNEL, for churches should not exceed 70 dBA CNEL, and for commercial or retail space should not exceed 75 dBA CNEL. If a project is currently at or exceeds the significance thresholds for traffic noise described above, and noise levels would result in less than a 3 dB increase, then the impact is not considered significant (refer to Table 5.4-5 for additional details). Table 5.4-7 summarizes predicted traffic noise levels along roadways in the project vicinity under the Near-Term scenario.

As shown in the table, traffic noise levels for the Near-Term scenario (2017) are estimated to range from 56 to 70 dB CNEL under the baseline condition, and from 58 to 69 dB CNEL with the addition of the project. The change in noise levels due to the project would range from -3 dB (a 3 dB decrease) to +3 dB (a 3 dB increase). For all receivers except R11, noise levels would increase by less than 3 dB. At R11 (representing residential land uses adjacent to Via Alta), the estimated traffic noise level would increase 3 dB from 57 dB CNEL to 60 dB CNEL in the near term as a result of the project. Because the resulting noise level would be less than the exterior residential threshold of 65 dB CNEL, the impact at R11 would be less than significant.

As shown in Table 5.4-7, the project, if implemented, is estimated to result in one exceedance of the City of San Diego's 65 dB CNEL exterior noise standard (at R8, adjacent to Qualcomm Way south of Friars Road, where noise levels would increase from 65 to 66 dB CNEL as a result of the project), but the associated increase would be less than 3 dB. The project would not result in an exceedance of the City of San Diego's exterior noise standards of 70 dB CNEL for churches. Therefore, project-generated traffic noise impacts would be less than significant.

Table 5.4-7. Near-Term (Year 2017) Traffic Noise Model Results (dBA CNEL)

Receiver # – Location	Existing	Near-Term Baseline	Near-Term with Project	Near-Term Change due to Project
R1 – Residential adjacent to Friars Road	63	65	64	-1
R2 – Residential adjacent to Mission Center Road north of Friars Road	69	70	69	-1
R3 – Residential adjacent to Civita Boulevard	58	61	59	-2
R4 – Residential adjacent to Mission Center Road north of Civita Boulevard	61	64	61	-3
R5 – Residential adjacent to Phyllis Place	59	59	60	+1
R6 – Church adjacent to Phyllis Place	62	62	62	0
R7 – Future residential west of Franklin Ridge Road Extension	54	56	58	+2
R8 – Residential adjacent to Qualcomm Way	64	65	66	+1
R9 – Residential adjacent to Mission Center Road north of project	69	69	69	0
R10 – Residential adjacent to Phyllis Place east of Interstate 805	68	69	68	-1
R11 – Residential adjacent to Via Alta	60	57	60	+3

5.4.5.2 Significance of Impacts

Operational (traffic-related) noise impacts would be less than significant.

5.4.5.3 Mitigation Measures

Impacts would be less than significant. Therefore, no mitigation measures would be required.

5.4.6 Impact Analysis

Issue 4: Future Traffic Noise Levels

Would the proposed project expose people to future transportation noise levels that exceed standards established in the City's Significance Determination Thresholds?

5.4.6.2 Impact Discussion

As previously detailed, the project traffic study (Appendix C) analyzed the change in traffic patterns for the Long-Term scenario (Year 2035), which were used in the project noise study (Appendix E) to derive future traffic noise levels. Estimated long-term traffic noise levels include the cumulative effects of the proposed project and any other related projects in the vicinity.

As shown in Table 5.4-8, long-term traffic noise levels are estimated to range from 58 to 70 dB CNEL under long-term baseline conditions and 59 to 71 dB CNEL with the project. For all receivers except R7 and R11, noise levels would increase by less than 3 dB relative to existing conditions. At R7, representing future residential land uses west of the proposed roadway extension, the estimated cumulative traffic noise increase would be 3 dB (increasing from 56 to 59 dB CNEL); and at R11, representing residential land uses adjacent to Via Alta, the estimated cumulative traffic noise increase would be 6 dB (increasing from 57 to 63 dB CNEL). Cumulative traffic noise with the proposed project is estimated to result in one exceedance of the City of San Diego's 65 dBA CNEL exterior noise standard (at R8, adjacent to Qualcomm Way and south of Friars Road), but the associated increase would be less than 3 dB. Cumulative traffic would not result in an exceedance of the City of San Diego's exterior noise standard of 70 dB CNEL for churches. At all locations, the project contribution to the overall change in traffic noise levels would be less than 3 dB, ranging from -2 dB to +1 dB. Therefore, the proposed project would not expose people to future transportation noise levels that exceed City standards and impacts would be less than significant.

5.4.6.3 Significance of Impacts

Future transportation noise level impacts would be less than significant.

5.4.6.4 Mitigation Measures

Impacts would be less than significant. Therefore, no mitigation measures would be required.

Table 5.4-8. Long-Term (Year 2035) Traffic Noise Model Results (dBA CNEL)

Receiver # – Location	Near-Term Baseline	Long-Term Baseline	Long-Term with Project	Long-Term (Cumulative) Change with Project	Project Contribution to Long-Term Change
R1 – Residential adjacent to Friars Road	65	65	64	-1	-1
R2 – Residential adjacent to Mission Center Road north of Friars Road	70	70	71	+1	+1
R3 – Residential adjacent to Civita Boulevard	61	62	61	0	-1
R4 – Residential adjacent to Mission Center Road north of Civita Boulevard	64	65	63	-1	-2
R5 – Residential adjacent to Phyllis Place	59	59	60	+1	+1
R6 – Church adjacent to Phyllis Place	62	62	62	0	0
R7 – Future residential west of Franklin Ridge Road Extension	56	58	59	+3	+1
R8 – Residential adjacent to Qualcomm Way	65	65	66	+1	+1
R9 – Residential adjacent to Mission Center Road north of project	69	70	69	0	-1
R10 – Residential adjacent to Phyllis Place east of Interstate 805	69	69	68	-1	-1
R11 – Residential adjacent to Via Alta	57	62	63	+6	+1

5.4.7 Impact Analysis

Issue 5: Groundborne Vibration and Groundborne Noise

Would the project expose persons to or generate excessive groundborne vibration or groundborne noise levels?

5.4.7.1 Impact Discussion

Construction

Project construction would not use particularly high-intensity methods such as pile driving or blasting, but it would use heavy earthmoving equipment that could generate perceptible groundborne vibration or groundborne noise. Based on the anticipated construction equipment list for the proposed project, the worst-case vibration levels would be associated with the operation of heavy earthmoving equipment such as excavators, graders, and dozers. Data published by Caltrans

(2013b) indicate that similar heavy equipment items (large bulldozers) produce PPV vibration levels of 0.089 in/sec at a distance of 25 feet.

Vibration levels from construction equipment attenuate as they radiate from the source. The equation to determine vibration levels at a specific distance states that

$$PPV_{\text{equip}} = PPV_{\text{ref}} \times (25/D)^{1.1}$$

where PPV_{ref} is the PPV at a reference distance of 25 feet, and D is the distance from the equipment to the sensitive receptor (Caltrans 2013b). The value of 1.1 is determined based on the soil conditions at the project site, and was chosen to represent hard soil in order to provide a conservative estimate of vibration levels. Using this equation, it is possible to estimate the distances at which potential damage from groundborne vibration would occur, as summarized in Table 5.4-9.

Table 5.4-9. Estimated Distances from Construction Activities to Vibration Effects

Potential Vibration Damage ^a	PPV (in/s) ^b	Distance (feet)
New residential structures	0.5	6
Modern industrial/commercial buildings	0.5	6

^a Criteria based on new/modern buildings because there are no old or fragile buildings in the project vicinity.
^b PPV based on continuous/frequent intermittent sources.

Construction would not occur within 6 feet of any structure, so there would be no impacts related to potential building damage. If nearby homes (within approximately 200 feet) are occupied at the time of project construction, it is possible that groundborne vibration would, at times, be perceptible and may cause a short-term nuisance. However, these effects would be temporary and would cease entirely when heavy construction activities are completed. In addition, it is noted that the City's standard requirements, as well as mitigation measure **MM-NOI-1**, would ensure that groundborne vibration would not occur at nighttime, when people would generally be more susceptible to annoyance and disturbance.

Operation

Groundborne vibration or groundborne noise from traffic on streets, such as the connection proposed in the project, is rarely perceptible at nearby receptors, particularly if a roadway is smooth (as would be the case with the newly constructed roadway). Therefore, groundborne noise and vibration impacts from project operation would be less than significant.

5.4.7.2 Significance of Impacts

Any groundborne vibration or groundborne noise from construction activities would be temporary and would cease at the completion of construction. Project construction activities would not be close enough to existing or planned buildings that they would result in building damage. Although residential uses may be subject to short-term perceptible groundborne vibration during construction, construction activities would only occur during hours allowed by the City's Noise Ordinance (see **MM-NOI-1**). Therefore, impacts would be less than significant.

Operation of the project would not generate noticeable groundborne vibration or groundborne noise, and the impacts would be less than significant.

5.4.7.3 Mitigation Measures

Impacts would be less than significant; therefore, no mitigation is required.

5.4.8 Impact Analysis

Issue 6: Aircraft Noise Levels

Would the project result in land uses which are not compatible with aircraft noise levels as defined by an adopted Airport Land Use Compatibility Plan?

5.4.8.1 Impact Discussion

The proposed project is not located within 2 miles of a private airstrip, but it is located approximately 1.8 miles south of the Montgomery Field Airport. Referring to Figure 5.4-2, (*Compatibility Policy Map: Noise*) of the *Montgomery Field Airport Land Use Compatibility Plan* (San Diego County Airport Land Use Commission 2010), the project site is located well outside the airport's 60 dBA CNEL noise contour lines. In addition, the project does not include any new structures or noise-sensitive land uses. As such, the proposed project would not result in airport-related noise impacts for people residing or working in the project area, and impacts would be less than significant.

5.4.8.2 Significance of Impacts

The proposed project would not result in aircraft-related noise impacts for people residing or working in the proposed project area. Impacts would be less than significant.

5.4.8.3 Mitigation Measures

Impacts would be less than significant. Therefore, no mitigation measures would be required.

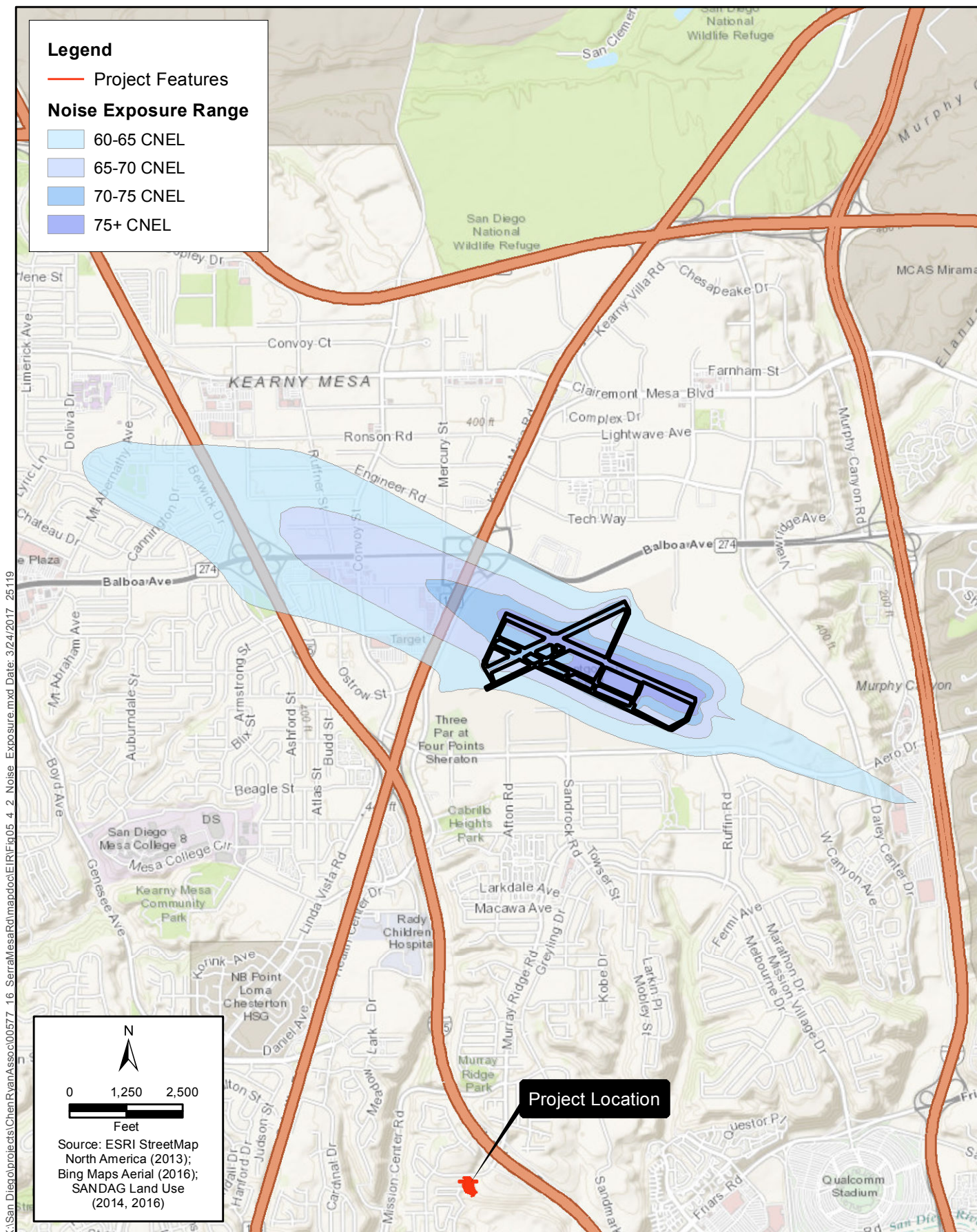


Figure 5.4-2
Montgomery Field Noise Compatibility

5.5 Biological Resources

This section describes the existing conditions and applicable laws and regulations for biological resources, and analyzes the potential effect of the proposed project on candidate, sensitive, or special-status species. Information in the following discussion is based on the Biological Resources Letter Report that was prepared for the proposed project and is included as Appendix F-1 of this EIR. ICF prepared a Supplemental Biological Resources Letter Report for the gas line work area, included as Appendix F-2. ICF conducted a biological survey within two small areas immediately east and west of the existing project site for the project in order to determine if sensitive biological resources were present. The survey was conducted when it became apparent that the raising of a gas line to a depth of 3 feet below ground level within the San Diego Gas & Electric easement could be hastened if the project was to proceed prior to the gas line work being performed. Each area where work on the gas line is to occur is approximately 6,000 square feet, for a total work area of 12,000 square feet (0.27 acre). These areas have been incorporated within to the project site.

Data regarding existing conditions for biological and jurisdictional resources present within the study area were obtained through a review of pertinent literature and field reconnaissance. The study area is defined as the approximately 2-acre project site and the surrounding 150-foot survey buffer. The literature review included investigation of the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database and the California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants. The field survey included the mapping of vegetation communities and land covers present within the study area, an evaluation of jurisdictional wetlands or waters, and an evaluation of the potential for special-status species to occur in the study area.

5.5.1 Existing Conditions

5.5.1.1 Vegetation Communities/Land Cover Types

The biological resources survey identified one native vegetation community near the center of the project site, disturbed coastal sage scrub, and two land cover types on the project site, which consist of developed land and disturbed habitat.

Coastal Sage Scrub

Coastal sage scrub is a native plant community composed of a variety of low, aromatic shrubs, characteristically dominated by drought-deciduous species such as California sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum*), and sages (*Salvia* spp.), with scattered evergreen shrubs, including lemonade berry (*Rhus integrifolia*) and laurel sumac (*Malosma laurina*). The coastal sage scrub within the project site is considered disturbed due to the low percent cover of native species.

Dominant native species present on the project site include California sagebrush, bladderpod spiderflower (*Peritoma arborea*), blue dicks (*Dichelostemma capitatum*), and lemonade berry. Nonnative annual weeds such as bromes (*Bromus diandrus*, *B. madritensis*), mustards (*Brassica* sp., *Hirschfeldia* sp., *Sisymbrium* sp.), filaree (*Erodium* sp.), and Russian-thistle (*Salsola tragus*) dominate (55% to 80% cover) this mapped vegetation community on site.

Developed Land

Developed land represents areas that have been constructed upon or otherwise physically altered to an extent that native vegetation communities are not supported. This land cover type generally consists of semipermanent structures, homes, parking lots, pavement or hardscape, and landscaped areas that require irrigation (e.g., ornamental greenbelts). Typically, this land cover type is unvegetated or supports a variety of ornamental plants. Developed land is not regulated by the environmental resource agencies and is included within the disturbed category (Tier IV) and is not considered sensitive under the City's Multiple Species Conservation Program (MSCP) Subarea Plan. Developed land is the predominant land cover within the project site (1.07 acres). This land cover includes previously graded areas associated with the Quarry Falls project.

Disturbed Habitat

Disturbed habitat is a land cover type characterized by a predominance of nonnative species, often introduced and established through human action. Disturbed habitat areas have been physically disturbed (by previous legal human activity) and are no longer recognizable as native or naturalized vegetation, but they continue to retain a soil substrate. Typically, vegetation, if present, is nearly exclusively composed of nonnative plant species such as ornamentals or exotic species (i.e., weeds). Disturbed habitat is not regulated by the environmental resource agencies and is included within the disturbed category (Tier IV) and is not considered sensitive under the City's MSCP Subarea Plan. Disturbed habitat composes 0.77 acre within the project site. It is located primarily south along Phyllis Place and dominated by sweet clover, mustards, stork's bill, and brome grasses.

5.5.1.2 Plant and Wildlife Species

A total of 49 plant species were observed during the surveys: 25 native species (51%) and 24 nonnative species (49%). The floral diversity is high relative to the amount of site disturbance. The complete list of plant species identified on site during the survey in 2015 is provided in Appendix F-1 while Appendix F-2 presents the plant species identified during the supplemental survey effort. .

Seven wildlife species were recorded in the study area during the survey (see Appendix F-1). All wildlife species observed are common, disturbance-adapted species typically found in urban and suburban settings, such as common raven (*Corvus corax*), California towhee (*Melospiza crissalis*), and Anna's hummingbird (*Calypte anna*). The habitat is limited in size and disturbed in character, which provides relatively few resources for wildlife due to the lack of cover and structural diversity.

5.5.1.3 Jurisdictional Resources

No jurisdictional wetlands or non-wetland waters were observed within the project site during the biological resource survey.

5.5.1.4 Wildlife Corridors

Regional wildlife corridors connect otherwise isolated blocks of habitat allowing movement or dispersal of plants and wildlife over a large area, and the consequent mixing of genes between populations. Local wildlife corridors allow access to resources such as food, water, and shelter within the framework of species' daily routines. Wildlife movement corridors are considered sensitive by the City and resource and conservation agencies. The project site is not adjacent to any significant areas of high-quality habitat and is not an identified corridor in the MSCP Subarea Plan.

As the project site is surrounded by existing development and a major freeway (Interstate [I-] 805), it does not currently serve as a regional or local wildlife corridor.

5.5.1.5 Sensitive Biological Resources

According to the City's Municipal Code (Chapter 11, Article 3, Division 1) and the City's Biology Guidelines (City of San Diego 2012), sensitive biological resources are defined as:

1. **Multi-habitat Planning Area (MHPA):** The MHPA encompasses those lands that have been included within the preserve for the City of San Diego's MSCP Subarea Plan for habitat conservation. These lands have been determined to provide the necessary habitat quantity, quality, and connectivity to support the future viability of San Diego's unique biodiversity and thus are considered to be sensitive.
2. **Wetlands:** The definition of wetlands is intended to differentiate uplands (terrestrial areas) from wetlands, and furthermore to differentiate naturally occurring wetland areas from those created by human activities. Except for areas created for the purposes of wetland habitat or resulting from human actions to create open waters or from the alteration of natural stream courses, it is not the intent of the City to regulate artificially created wetlands in historically non-wetland areas unless they have been delineated as wetlands by the U.S. Army Corps of Engineers (USACE) or CDFW.
3. **Vegetation Communities:** Within the MSCP study area, vegetation communities have been divided into four tiers of sensitivity (the first includes the most sensitive, the fourth the least) based on rarity and ecological importance. Those within Tier I, Tier II, Tier IIIA, or Tier IIIB are considered sensitive.
4. **Listed Species:** Habitats supporting plant or animal species that have been listed or proposed for listing by the federal or state government as rare, endangered, or threatened ("listed species") are also considered sensitive biological resources. It should be noted that some listed species are considered adequately conserved under the MSCP (Covered Species), while others are not (Listed Non-covered Species).
5. **Narrow Endemic Species:** Species adopted by the City Council as Narrow Endemic Species, identified within the City's Biology Guidelines, are considered sensitive biological resources. It should be noted that some Narrow Endemic Species are also listed species.
6. **Covered Species:** These are species included in the Incidental Take Permit (ITP) issued to the City by the federal or state government as part of the City's MSCP Subarea Plan. Exceptions to this are the MSCP Covered Species that are listed wetlands species. The term "non-covered species" is sometimes used to identify species not included in the ITP. A list of the Covered Species is provided in Appendix A of the City's Biology Guidelines.

The project site is not within or adjacent to the MHPA and is not within the Coastal Overlay Zone. In addition, as previously detailed, there are no wetlands on site. According to the City's Biology Guidelines, for parcels outside of the MHPA and the Coastal Overlay Zone, there is no limit on encroachments into sensitive biological resources, with the exception of wetlands and Listed Non-covered Species' habitat (which are regulated by federal and state agencies) and Narrow Endemic Species as described below. However, impacts on sensitive biological resources must be assessed and mitigation, where necessary, must be provided in conformance with Section III of the City's Biology Guidelines. Sensitive biological resources observed or with a moderate to high potential to

occur are detailed below. The significance of impacts on these species and mitigation are detailed thereafter in Section 5.5.3.

A search of CNPS and California Natural Diversity Database records was utilized to develop matrices of special-status plant and wildlife species that may have potential to occur on site due to the presence of suitable habitat (taking into consideration vegetation communities, soils, elevation, geographic range, life form/blooming period, and other factors). These two matrices of special-status plant and wildlife species (i.e., federally, state, or locally listed species), their favorable habitat conditions, and their potential to occur on site based on the findings of the field investigations are presented in Appendices B and C of the Biological Resources Letter Report, respectively (Appendix F-1). Species considered special-status under the MSCP Subarea Plan, including Narrow Endemic Species, are also included in Appendices B and C of the Biological Resources Letter Report.

Sensitive Vegetation Communities

One sensitive vegetation community, disturbed coastal sage scrub, was observed on site. The project site contains approximately 0.25 acre of disturbed coastal sage scrub. The coastal sage scrub within the project site is considered disturbed due to the low percent cover of native species. This vegetation community is ranked as Tier II and is considered sensitive.

Sensitive Plant Species

Two sensitive plant species were observed on site, as discussed below.

San Diego barrel cactus (*Ferocactus viridescens*) was observed at two locations (approximately five individuals) south of the transmission line within the disturbed coastal sage scrub. This plant has a California Rare Plant Rank (CRPR) of 2B.1 and is an MSCP Covered Species. The San Diego barrel cactus is not a Narrow Endemic Species. Plants in the category of CRPR 2B are rare, threatened, or endangered in California, but more common elsewhere and not eligible for consideration under the provisions of the Endangered Species Act (ESA) (California Native Plant Society 2016).

San Diego County sunflower (*Bahiopsis laciniata*; previously referred to as the San Diego viguiera) was also observed on site. This plant is listed as CRPR 4.2 and is also within the disturbed coastal sage scrub. The CRPR 4 category includes plants that are of limited distribution and is considered a "watch list" for species that could require additional protection if populations decline further. It is not listed as MSCP Covered Species or a Narrow Endemic Species.

Sensitive Wildlife Species

No sensitive wildlife species were observed on site. Three wildlife species have a moderate potential to occur on site: coastal California gnatcatcher (*Polioptila californica californica*), Dulzura pocket mouse (*Chaetodipus californicus femoralis*), and northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*). In addition, the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (CFG) Section 3503.5 protect the active nests of native migratory birds and raptors.

Coastal California gnatcatcher has moderate potential to occur on site, and is federally listed as threatened, a California Species of Special Concern, and an MSCP Covered Species. As the disturbed coastal sage scrub present on site is of marginal quality, limited in size, and substantially disturbed in character, the species may forage on site, but nesting potential is low. An historical occurrence was recorded within 1,000 feet of the project site near I-805. The MHPA is not within or adjacent to

the proposed project site; therefore, grading restrictions during the coastal California gnatcatcher breeding season do not apply to this project pursuant to the City's Biology Guidelines (2012).

Dulzura pocket mouse and northwestern San Diego pocket mouse have a moderate potential to occur on the project site. These species are both designated as California Species of Special Concern, but are not MSCP Covered Species. The site is substantially disturbed and historically graded and likely does not provide much cover from potential predators.

Although the study area supports very limited suitable vegetation for bird nesting, there is a moderate potential for raptors and other migratory native birds to nest within trees east and west of the project site, including the ornamental landscaping to the north associated with existing development.

5.5.2 Regulatory Framework

5.5.2.1 Federal

Endangered Species Act

The federal ESA of 1973, as amended (16 U.S. Code [U.S.C.] 1531 et seq.), provides for listing of endangered and threatened species of plants and animals and designation of critical habitat for listed animal species. The ESA also prohibits all persons subject to U.S. jurisdiction from "taking" endangered species, which includes any harm or harassment. Section 7 of the ESA requires that federal agencies, prior to project approval, consult the U.S. Fish and Wildlife Service (USFWS) to ensure adequate protection of listed species that may be affected by the project.

Migratory Bird Treaty Act

The MBTA was enacted in 1918 to prohibit the killing or transport of native migratory birds, or any part, nest, or egg of any such bird, unless allowed by another regulation adopted in accordance with the MBTA. A list of migratory bird species that are protected by the MBTA is maintained by USFWS, which regulates most aspects of the taking, possession, transportation, sale, purchase, barter, exportation, and importation of migratory birds. Under the MBTA, "take" means to kill, directly harm, or destroy individuals, eggs, or nests or to otherwise cause failure of an ongoing nesting effort. Permits are available under the MBTA through USFWS, and authorization for potential take under the MBTA is addressed as part of the ESA Section 7 consultation process. The proposed project must be analyzed to ensure consistency with the MBTA, including avoidance of take of nesting birds, their eggs, or activities that may cause nest failure. Any potential take must be either permitted through consultation with USFWS or avoided and minimized through mitigation measures.

Clean Water Act

The federal Water Pollution Control Act (also known as the Clean Water Act) (33 U.S.C. 1251 et seq.), as amended by the Water Quality Act of 1987 (PL 1000-4), is the major federal legislation governing water quality. The purpose of the Clean Water Act is to "restore and maintain the chemical, physical, and biological integrity of the nation's waters." Discharges into waters of the United States are regulated under Section 404. Waters of the United States include (1) all navigable waters (including all waters subject to the ebb and flow of tides); (2) all interstate waters and wetlands; (3) all other waters, such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sand

flats, wetlands, sloughs, or natural ponds; (4) all impoundments of waters mentioned above; (5) all tributaries to waters mentioned above; (6) the territorial seas; and (7) all wetlands adjacent to waters mentioned above. In California, the State Water Resources Control Board and the nine Regional Water Quality Control Boards are responsible for implementing the Clean Water Act.

Relevant sections of the Clean Water Act concerning biological resources are related to Section 404. This section provides for issuance of dredge/fill permits by the USACE. Permits typically include conditions to minimize impacts on water quality. Common conditions include USACE review and approval of sediment quality analysis before dredging, a detailed pre- and post-construction monitoring plan that includes disposal site monitoring, and required compensation for loss of waters of the United States.

USACE has primary federal responsibility for administering regulations that concern waters and wetlands under two statutory authorities, the Rivers and Harbors Act (33 U.S.C. Sections 9 and 10), which governs specified activities in navigable waters, and the Clean Water Act (Section 404), which governs specified activities in waters of the United States, including wetlands and special aquatic sites. Wetlands and non-wetland waters (e.g., rivers, streams, natural ponds) are a subset of waters of the United States and receive protection under Section 404 of the Clean Water Act. USACE requires obtaining a permit if a project proposes placing structures within navigable waters and/or altering waters of the United States.

5.5.2.2 State

California Fish and Game Code

The CFGC regulates the taking or possession of birds, mammals, fish, amphibians, and reptiles, as well as natural resources such as wetlands and waters of the state. Most of the code is administered or enforced by CDFW (before January 1, 2013, California Department of Fish and Game). Applicable sections of the CFGC are discussed below.

CFGC Section 2050 et seq. (California Endangered Species Act; CESA) prohibits the “take” (defined as “to hunt, pursue, catch, capture, or kill”) of state-listed species except as otherwise provided in state law. The CESA is administered by CDFW and is similar to the federal ESA. State lead agencies are required to consult with CDFW to ensure that their authorized actions are not likely to jeopardize the continued existence of any state-listed species or result in the degradation of occupied habitat.

CFGC Section 3503 states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird., while **Section 3503.5** specifically states that it is unlawful to take, possess, or destroy any raptors (i.e., species in the orders Falconiformes and Strigiformes), including their nests or eggs. Typical violations of these codes include destruction of active nests resulting from removal of vegetation in which the nests are located. Violation of Section 3503.5 could also include failure of active raptor nests resulting from disturbance of nesting pairs by nearby project construction. This statute does not provide for the issuance of any type of incidental take permit.

Protection of fully protected species is described in **CFGC Sections 3511, 4700, 5050, and 5515**. These species include certain fish, amphibian and reptile, bird, and mammal species. These statutes prohibit take or possession of fully protected species and do not provide for authorization of incidental take of fully protected species.

Section 3513 protects California's migratory birds by making it unlawful to take or possess any migratory nongame bird as designated in the MBTA or any part of such migratory nongame bird.

The Native Plant Protection Act (**CFGC Section 1900** et seq.) includes measures to preserve, protect, and enhance rare and endangered native plant species. Definitions for "rare and endangered" are different from those contained in CESA, although CESA-listed rare and endangered species are included in the list of species protected under the act.

Section 1602 regulates activities that would divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake that supports fish or wildlife. CDFW has jurisdiction over riparian habitats associated with watercourses. Jurisdictional waters are delineated by the outer edge of riparian vegetation or at the top of the bank of streams or lakes, whichever is wider. CDFW jurisdiction does not include tidal areas or isolated resources.

Porter-Cologne Water Quality Act

The Porter-Cologne Water Quality Act of 1969, updated in 2012 (California Water Code, Section 13000 et seq.), provides for statewide coordination of water quality regulations. The act established the California State Water Resources Control Board as the statewide authority, and nine separate Regional Water Quality Control Boards were developed to oversee water quality on a day-to-day basis. Regional Water Quality Control Boards also adopt and implement water quality control plans (basin plans) that recognize and are designed to maintain the unique characteristics of each region with regard to natural water quality, actual and potential beneficial uses, maintaining water quality, and addressing the water quality problems of that region. Designated beneficial uses of state waters that may be protected against water quality degradation include preservation and enhancement of fish, wildlife, designated biological habitats of special significance, and other aquatic resources or preserves.

5.5.2.3 Local

Multiple Species Conservation Program

The City, USFWS, CDFW, and other local jurisdictions joined together in the late 1990s to develop the MSCP, a comprehensive program to preserve a network of habitat and open space in the region and ensure the viability of (generally) upland habitat and species, while still permitting some level of continued development. The City's MSCP Subarea Plan (1997a) was prepared pursuant to the outline developed by USFWS and CDFW to meet the requirements of California's Natural Communities Conservation Planning Act of 1992. Adopted by the City in March 1997, the Subarea Plan forms the basis for the MSCP Implementing Agreement, which is the contract between the City, USFWS, and CDFW (City of San Diego 1997b). The Implementing Agreement ensures implementation of the Subarea Plan and allows the City to issue "take" permits under the federal ESA and CESA to address impacts at the local level. Under the federal ESA, an ITP is required when non-federal activities would result in "take" of a threatened or endangered species. A Habitat Conservation Plan, such as the City's MSCP Subarea Plan, must accompany an application for a federal ITP. In July 1997, USFWS, CDFW, and the City entered into the 50-year MSCP Implementing Agreement, wherein the City received its federal ESA Section 10(a) ITP (City of San Diego 1997b).

Pursuant to its Section 10(a) ITP, the City has incidental "take" authority over 85 rare, threatened, and endangered species including regionally sensitive species that it aims to conserve (i.e., "MSCP Covered Species"). "MSCP Covered" refers to species that are covered by the City's federal ITP and

considered to be adequately protected within the City's Preserve, the MHPA; see subsection below for additional information). Special "Conditions of Coverage" apply to MSCP Covered Species that would be potentially affected by projects including modifying project design to avoid impacts on Covered Species in the MHPA where feasible. Additionally, all projects must adhere to MSCP Subarea Plan requirements including those for boundary line adjustments (Section 1.1.1) and Compatible Land Uses, General Planning Policies/Design Guidelines, and MHPA Land Use Adjacency Guidelines (Sections 1.4.1–1.4.3), as well as general and specific management policies where applicable. Compliance with additional state and federal policies, regulations, and permits may also be required for wetlands and species not covered or fully covered under the MSCP.

Multi-Habitat Planning Area

The MHPA is the area within which the permanent MSCP preserve will be assembled and managed for its biological resources. Input from responsible agencies and other interested participants resulted in adoption of the City's MHPA in 1997. The City's MHPA areas are defined by "hard-line" limits, "with limited development permitted based on the development area allowance of the OR-1-2 zone [open space residential zone]" (City of San Diego 1997a) and MSCP Subarea Plan requirements.

The MHPA consists of public and private lands, much of which has been conserved. Conserved lands include lands that have been set aside for mitigation or purchased for conservation. These lands may be owned by the City (i.e., dedicated lands) or other agencies, may have conservation easements, or may have other restrictions (e.g., per the City's Municipal Code's Environmentally Sensitive Lands [ESL] Regulations [ESL; see subsection below for additional information]) that protect the overall quality of the resources and prohibit development.

A maximum 25% encroachment into the MHPA is allowed for development within the site premises. If 25% of the site is outside the MHPA, development could be restricted to this area. In addition, development is required to be located in the least-sensitive area feasible. Should more than 25% encroachment be desired, an MHPA boundary line adjustment may be proposed. For parcels outside the MHPA, "there is no limit on the encroachment into sensitive biological resources, with the exception of wetlands, and listed non-covered species' habitat (which are regulated by State and federal agencies) and narrow endemic species." However, "impacts to sensitive biological resources must be assessed and mitigation, where necessary, must be provided in conformance" with the City's ESL Regulations, as implemented through compliance with the City's Biology Guidelines (City of San Diego 2012).

Multi-Habitat Planning Area Land Use Adjacency Guidelines

To address the integrity of the MHPA and mitigate for indirect impacts on the MHPA, the MSCP Subarea Plan Section 1.4.3 details MHPA Land Use Adjacency Guidelines that are to be implemented for land use proposals adjacent to the MHPA. The MHPA Land Use Adjacency Guidelines are intended to be incorporated into the Mitigation Monitoring and Reporting Program or applicable permits during the development review phase of a proposed project. These guidelines address the issues of drainage, toxic substances, lighting, noise, barriers, invasive species, brush management, and grading/land development.

City of San Diego Environmentally Sensitive Lands Regulations

ESL include sensitive biological resources, steep hillsides, coastal beaches, sensitive coastal bluffs, and 100-year floodplains. Mitigation requirements for sensitive biological resources follow the

requirements of the City's Biology Guidelines (2012) as outlined in the City's Municipal Code ESL Regulations (Chapter 14, Article 3, Division 1). Impacts on biological resources within and outside the MHPA must comply with the ESL Regulations, which also serve as standards for the determination of biological impacts and mitigation under CEQA in the City.

The purpose of the ESL Regulations is to "protect, preserve and, where damaged, restore the ESL of San Diego and the viability of the species supported by those lands." The regulations require that development avoid impacts on certain sensitive biological resources as much as possible including but not limited to MHPA lands; wetlands and vernal pools in naturally occurring complexes; federally and state-listed, non-MSCP Covered Species; vegetation communities classifiable as Tier I, II, IIA, or IIIB; habitat for rare, endangered, or threatened species; and MSCP Narrow Endemic Species. Furthermore, the ESL Regulations state that wetlands impacts should be avoided, and unavoidable impacts should be minimized to the maximum extent practicable. In addition to protecting wetlands, the ESL Regulations require that a buffer be maintained around wetlands, as appropriate, to protect wetland-associated functions and values. While a 100-foot buffer width is generally recommended, this width may be increased or decreased on a case-by-case basis in consultation with CDFW, USACE, and USFWS (City of San Diego 2012).

City of San Diego General Plan

The City's General Plan (City of San Diego 2008a) presents goals and policies for biological resources in the Conservation Element, including protecting and conserving the landforms, canyon lands, and open spaces that serve as core biological areas and wildlife linkages or are wetland habitats; encouraging the removal of invasive plant species and planting of native plants near open space preserves; applying the appropriate zoning and ESL regulations to limit development of floodplains and sensitive biological areas including wetlands, steep hillsides, canyons, and coastal lands; limiting and controlling runoff, sedimentation, and erosion during and after construction; preserving natural habitats pursuant to the MSCP; and implementing a no net loss approach to wetlands conservation in accordance with regulations.

5.5.3 Significance Determination Thresholds

5.5.3.1 Issue Questions

As identified in the City's Significance Determination Thresholds (2016), a project would exceed the thresholds of significance if it results in:

1. A substantial adverse impact, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in the MSCP or other local or regional plans, policies, or regulations, or by CDFW or USFWS.
2. A substantial adverse impact on any Tier I, Tier II, Tier IIIA, or Tier IIIB Habitats as identified in the Biology Guidelines of the Land Development manual or other sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFW or USFWS.
3. A substantial adverse impact on wetlands (including, but not limited to, marsh, vernal pool, and riparian) through direct removal, filling, hydrological interruption, or other means.
4. Substantial interference with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, including linkages identified in the MSCP Subarea Plan, or impede the use of native wildlife nursery sites.

5. A conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan, either within the MSCP plan area or in the surrounding region.
6. Introduction of land use within an area adjacent to the MHPA that would result in adverse edge effects.
7. A conflict with any local policies or ordinances protecting biological resources.
8. An introduction of invasive species of plants into a natural open space area.

5.5.3.2 Methods and Assumptions

Potential impacts on biological resources are assessed through review of the project's consistency with existing regulations (i.e., City's Biology Guidelines and MSCP Subarea Plan). Before a determination of the significance of an impact can be made, the presence and nature of the biological resources must be established. Thus, significance determination, pursuant to the City's Significance Determination Thresholds (City of San Diego 2016), proceeds in two steps. The first step consists of determining if significant biological resources are present. The second step is to determine the potential for direct and indirect impacts on identified sensitive biological resources that would occur as a result of the proposed project.

Pursuant to the City's Significance Determination Thresholds, occurrence of any of the following situations associated with identified biological resources may indicate significant direct and indirect biological impacts.

Direct Impacts

- Any encroachment in the MHPA is considered a significant impact on the preservation goals of the MSCP. Any encroachment into the MHPA (in excess of the allowable encroachment by a project) would require a boundary adjustment that would include a habitat equivalency assessment to ensure that any addition to the MHPA is at least equivalent to any subtraction from it.
- Lands containing Tier I, II, IIIA, and IIIB habitats and all wetlands are considered sensitive and declining habitats. Impacts on these resources may be considered significant.
- Impacts on individual sensitive species, outside of any impacts on habitat, may also be considered significant based upon the rarity of the species and extent of the impacts. Impacts on federally or state-listed species and all City Narrow Endemic Species should be considered significant.
- Certain species covered by the MSCP and other species not covered by the MSCP may be considered significant on a case-by-case basis taking into consideration all pertinent information regarding distribution, rarity, and the level of habitat conservation afforded by the MSCP.

Indirect Impacts

The City's Significance Determination Thresholds indicate that, depending on the circumstances, indirect effects of a project may be as significant as the direct effects of the project. Indirect effects include, but are not limited to, the following impacts.

- Introduction of urban meso-predators into a biological system

- Introduction of urban runoff into a biological system
- Introduction of invasive exotic plant species into a biological system
- Noise and lighting impacts
- Alteration of a dynamic portion of a system, such as stream flow characteristics or fire cycles
- Loss of a wetland buffer that includes no environmentally sensitive lands

5.5.4 Impact Analysis

Issue 1: Sensitive Species

Would the proposed project have a substantial adverse impact, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in the MSCP or other local or regional plans, policies, or regulations, or by CDFW or USFWS?

5.5.4.1 Impact Discussion

Direct Impacts

Plant Species

The project is anticipated to result in direct impacts on special-status plant species, including the San Diego barrel cactus and the San Diego County sunflower detected on site. Potential direct impacts on these species would include removal of individuals during grading activities for the roadway. San Diego barrel cactus is not a Narrow Endemic Species and is a Covered Species under the City's MSCP permit. In addition, the presence of five individuals constitutes a small number of the population. San Diego County sunflower has a lower status and a minimal presence within a small patch of disturbed habitat on the project site.¹ Because these species are not classified as Narrow Endemic Species, and also due to the disturbed nature of the coastal sage scrub, the project's location outside of the MHPA, and limited number of individuals, impacts on these species would not be considered significant. Furthermore, as discussed in Issue 2 below, the project would be required to provide habitat-based mitigation in the form of offsite habitat acquisition due to impacts on the disturbed coastal sage scrub. Therefore, impacts on sensitive plant species would be less than significant.

Wildlife Species

The project site does not contain any trees or other suitable habitat for nesting raptors or other native migratory birds, and therefore would not result in any direct impacts on these species. As previously discussed, coastal California gnatcatcher was recorded within habitat located 1,000 feet east of the project site, to the east of the site near I-805. No other special-status species have been recorded within or adjacent to the project site. Although not observed within the project site, coastal California gnatcatcher, Dulzura pocket mouse, and northwestern San Diego pocket mouse have a moderate potential to occur. The coastal sage scrub within the project site is limited in size and

¹ San Diego County sunflower is being recommended to be removed from the CNPS list, as it is common and widespread in San Diego County (City of San Diego 2008b).

highly disturbed in character, providing relatively few resources for wildlife due to the lack of cover and structural diversity. Additionally, there is no suitable habitat within the project site that would support nesting for the coastal California gnatcatcher. Construction activities would have the potential to directly affect species that may not be able to disperse from the site. Therefore, impacts would be significant and mitigation would be required (**Impact BIO-1**). Following construction, the disturbed coastal sage scrub would be removed, thereby resulting in a loss of habitat that has moderate potential to be utilized by these species. As discussed in Issue 2 below, the project would be required to provide habitat-based mitigation in the form of offsite habitat acquisition due to impacts on the disturbed coastal sage scrub.

Indirect Impacts

As previously detailed, the project site is not within the MHPA and therefore would not be subject to the Land Use Adjacency Guidelines. The project site is also not adjacent to the MHPA or other sensitive vegetation communities. The project site does, however, contain disturbed coastal sage scrub. As the project would remove this sensitive vegetation community, indirect impacts on sensitive species potentially utilizing this habitat would be mitigated through the purchase of offsite habitat.

Therefore, indirect impacts would be related to potential noise and lighting impacts on trees adjacent to the project site that have the potential to support nesting raptors and other native migratory birds. Concerning lighting, the project would not require any nighttime construction and therefore would not result in short-term lighting impacts. Following construction, the roadway would require lighting. As detailed in Chapter 3, *Project Description*, the project would comply with all applicable City regulations that would ensure there would be no spillover lighting and thus would not affect nesting activities. Concerning noise during construction, noise levels may temporarily exceed background levels, potentially resulting in nest abandonment for raptors and other native migratory birds that may utilize trees adjacent to the project site. Impacts would be significant and mitigation is required (**Impact BIO-2**). Following construction, operation of the roadway would slightly increase ambient noise levels within the vicinity of the project site; however, it would not significantly increase levels and raptors and other migratory native birds would be able to utilize trees for nesting activities.

5.5.4.2 Significance of Impacts

As detailed below under Issue 2, offsite purchase of habitat credits would ensure that removal of the disturbed coastal sage scrub (that contains sensitive plant species and is potentially utilized by sensitive wildlife species) would be less than significant.

Construction of the proposed project could result in direct impacts on sensitive species that have moderate potential to utilize the disturbed coastal sage scrub on site (**Impact BIO-1**). The proposed project would also have the potential to result in significant indirect impacts on raptors or other migratory birds if the species nests in trees adjacent to the project site (**Impact BIO-2**). Therefore, impacts would be potentially significant and mitigation is required.

5.5.4.3 Mitigation Measures

MM BIO-1: Sensitive Species and Migratory Birds

BIOLOGICAL RESOURCE PROTECTION DURING CONSTRUCTION

I. Prior to Construction

- A. **Biologist Verification:** The owner/permittee shall provide a letter to the City's Mitigation Monitoring Coordination (MMC) section stating that a Project Biologist (Qualified Biologist) as defined in the City of San Diego's Biological Guidelines (2012) has been retained to implement the project's biological monitoring program. The letter shall include the names and contact information of all persons involved in the biological monitoring of the project.
- B. **Preconstruction Meeting:** The Qualified Biologist shall attend the preconstruction meeting, discuss the project's biological monitoring program, and arrange to perform any follow-up mitigation measures and reporting including site-specific monitoring, restoration or revegetation, and additional fauna/flora surveys/salvage.
- C. **Biological Documents:** The Qualified Biologist shall submit all required documentation to MMC verifying that any special mitigation reports including, but not limited to, maps, plans, surveys, survey timelines, or buffers are completed or scheduled per City Biology Guidelines, MSCP, ESL Regulations, project permit conditions; CEQA, endangered species acts, and/or other local, state or federal requirements.
- D. **BCME:** The Qualified Biologist shall present a Biological Construction Mitigation/Monitoring Exhibit (BCME), which includes the biological documents in C above. In addition, it shall include: restoration/revegetation plans, plant salvage/relocation requirements (e.g., coastal cactus wren plant salvage, burrowing owl exclusions), avian or other wildlife surveys/survey schedules (including general avian nesting and USFWS protocol), timing of surveys, wetland buffers, avian construction avoidance areas/noise buffers/barriers, other impact avoidance areas, and any subsequent requirements determined by the Qualified Biologist and the City's Assistant Deputy Director or the MMC. The BCME shall include a site plan, written and graphic depiction of the project's biological mitigation/monitoring program, and a schedule. The BCME shall be approved by MMC and referenced in the construction documents.
- E. **Avian Protection Requirements:** To avoid any direct impacts to sensitive, MSCP-Covered, listed, threatened, or endangered species, or species in the list of raptors provided on page 12 (Restrictions on Grading) of the Biology Guidelines, removal of habitat that supports active nests in the proposed area of disturbance should occur outside of the established breeding season for these species (February 1 to September 15). If removal of habitat in the proposed area of disturbance must occur during the breeding season, the Qualified Biologist shall conduct a pre-construction survey to determine the presence or absence of nesting birds on the proposed area of disturbance. The pre-construction survey shall be conducted within 10 calendar days prior to the start of construction activities (including removal of vegetation). The applicant shall submit the results of the pre-construction survey to City MMC for review and approval prior to initiating any construction activities. If nesting birds are detected, a letter report

or mitigation plan in conformance with the City's Biology Guidelines and applicable state and federal law (e.g., appropriate follow-up surveys, monitoring schedules, construction barriers/buffers) shall be prepared and include proposed measures to be implemented to ensure that take of birds or eggs is avoided. The report or mitigation plan shall be submitted to the City for review and approval and implemented to the satisfaction of the City. The City's MMC Section or Resident Engineer, and Qualified Biologist shall verify and approve that all measures identified in the report or mitigation plan are in place prior to and/or during construction.

- F. Resource Delineation: Prior to construction activities, the Qualified Biologist shall supervise the placement of orange construction fencing or equivalent along the limits of disturbance adjacent to sensitive biological habitats and verify compliance with any other project conditions as shown on the BCME. This phase shall include flagging plant specimens and delimiting buffers to protect sensitive biological resources (e.g., habitats/flora & fauna species, including nesting birds) during construction. Appropriate steps/care should be taken to minimize attraction of nest predators to the site.
- G. Education: Prior to commencement of construction activities, the Qualified Biologist shall meet with the owner/permittee or designee and the construction crew and conduct an on-site educational session regarding the need to avoid impacts outside of the approved construction area and to protect sensitive flora and fauna (e.g., explain the avian and wetland buffers and the flag system for removal of invasive species or retention of sensitive plants, and clarify acceptable access routes/methods and staging areas).

II. During Construction

- A. Monitoring: All construction (including access/staging areas) shall be restricted to areas previously identified, proposed for development/staging, or previously disturbed as shown on the BCME. The Qualified Biologist shall monitor construction activities as needed to ensure that construction activities do not encroach into biologically sensitive areas, or cause other similar damage, and that the work plan has been amended to accommodate any sensitive species located during the pre-construction surveys. In addition, the Qualified Biologist shall document field activity via the Consultant Site Visit Record. The Consultant Site Visit Record shall be e-mailed to MMC on the first day of monitoring, the first week of each month, the last day of monitoring, and immediately in the case of any undocumented condition or discovery.
- B. Subsequent Resource Identification: The Qualified Biologist shall note/act to prevent any new disturbances to habitat, flora, and/or fauna on site (e.g., flag plant specimens for avoidance during access). If active nests or other previously unknown sensitive resources are detected, all project activities that directly impact the resource shall be delayed until species specific local, state, or federal regulations have been determined and applied by the Qualified Biologist.

III. Post Construction Measures

- A. In the event that impacts exceed previously allowed amounts, additional impacts shall be mitigated in accordance with City Biology Guidelines, ESL and MSCP, State CEQA, and

other applicable local, state and federal law. The Qualified Biologist shall submit a final BCME/report to the satisfaction of the City Assistant Deputy Director or MMC within 30 days of construction completion.

5.5.4.4 Significance after Mitigation

Mitigation measure **MM BIO-1** would reduce impacts on sensitive wildlife species, raptors, and other migratory birds (**Impact BIO-1** and **Impact BIO-2**) to less-than-significant levels by ensuring that construction would not directly affect species and that construction noise would not adversely affect nests by providing appropriate avoidance measures.

5.5.5 Impact Analysis

Issue 2: Sensitive Habitat

Would the proposed project result in a substantial adverse impact on any Tier I, Tier II, Tier IIIA, or Tier IIIB Habitats as identified in the Biology Guidelines of the Land Development manual or other sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFW or USFWS?

5.5.5.1 Impact Discussion

Direct Impacts

Tier I, IIIA, and IIIB Habitats were not identified within the project site. The project site contains approximately 0.25 acre of disturbed coastal sage scrub habitat, a Tier II Habitat, as well as developed lands and disturbed habitats, both Tier IV (Figure 5.5-1).

Construction of the proposed project would result in direct impacts on vegetation communities due to grading and other ground-disturbing activities. Permanent impacts would occur in areas where hardscape features would replace vegetated (non-developed) areas. Temporary impacts would occur in the areas affected by initial construction, but those areas would be restored post-construction to retain vegetation. Direct impacts on vegetation communities and land cover types are presented in Table 5.5-1. A total of 0.25 acre of Tier II sensitive upland habitat (i.e., coastal sage scrub, including the disturbed form) would be directly affected by the proposed project, and impacts would be significant (**Impact BIO-3**).

Table 5.5-1. Direct Impacts on Vegetation Communities and Land Cover Types

Vegetation Community/Land Cover Type	Subarea Plan Tier	Total Impacts
Disturbed Coastal Sage Scrub	Tier II	0.25
Developed Land	Tier IV	0.91
Disturbed Habitat	Tier IV	1.00
Total		2.16

Indirect Impacts

As previously detailed, the project site is not within or adjacent to the MHPA and therefore would not be subject to the Land Use Adjacency Guidelines. However, construction activities for the proposed project, including grading and vehicles driving on unpaved surfaces, have the potential to cause fugitive dust. The new connector road would increase the amount of impervious surface in the area that would result in additional stormwater runoff, which drains via streets and the storm drain system toward the San Diego River and eventually flows into the Pacific Ocean. There are no undisturbed native vegetation communities directly adjacent to the project site, and the surrounding area is disturbed, developed, or undergoing construction.

The proposed project would be required to implement mandatory dust control requirements, including utilizing water trucks pursuant to the San Diego Air Pollution Control District's Rule 55. In addition, the proposed project would be required to comply with the City's Municipal Separate Storm Sewer System Permit and implement hydromodification management requirements to mitigate the potential for increased runoff rates and durations caused by development and increased impervious surfaces.² Implementation of other stormwater regulations, including best management practices and the construction Stormwater Pollution Prevention Plan, are also expected to substantially control other potential adverse effects during and following construction both adjacent to and downstream from the project site.

5.5.5.2 Significance of Impacts

The proposed project would directly affect (both temporarily and permanently) a total of approximately 0.25 acre of coastal sage scrub habitat, a Tier II habitat (**Impact BIO-3**). The proposed project would not indirectly affect (either temporarily or permanently) any sensitive habitats. Direct impacts would be significant and mitigation is required. Impacts would occur outside the MHPA; therefore, in accordance with the City's Biology Guidelines, a 1:1 mitigation ratio would be required if mitigation occurs within the MHPA, for a total of 0.25 acre. If mitigation is proposed outside the MHPA, a mitigation ratio of 1.5:1 would be required, for a total of 0.38 acre.

5.5.5.3 Mitigation Measures

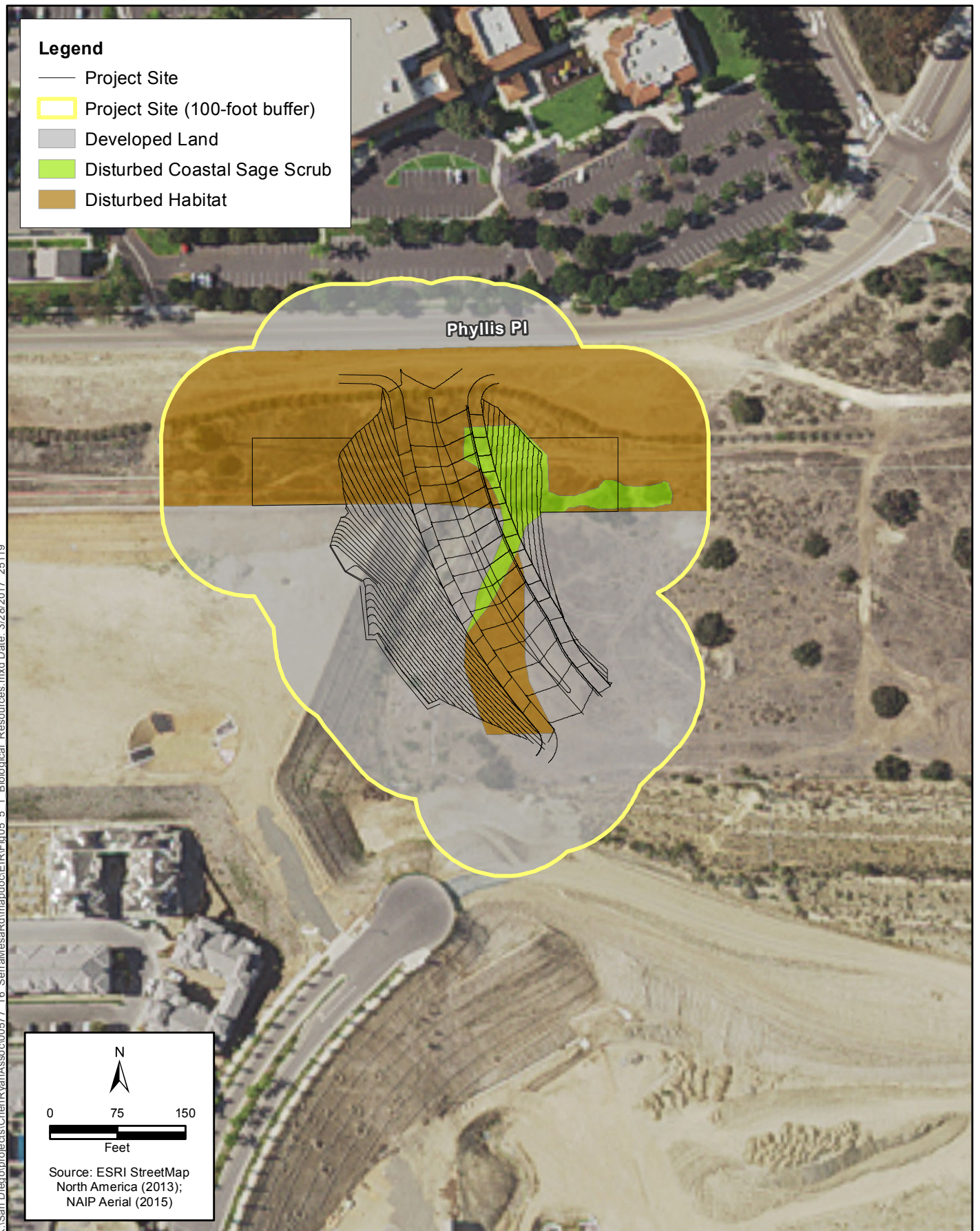
MM BIO-2

Prior to the commencement of any grading activities or, if a grading permit is required, prior to issuance of a grading permit, evidence shall be provided that demonstrates a total of 0.25 acre of credit from the San Diego Habitat Acquisition Fund or another approved mitigation bank (such as Marron Valley) has been acquired to mitigate the loss of disturbed coastal sage scrub (Tier II).

5.5.5.4 Significance after Mitigation

Mitigation measure **MM BIO-2** would reduce impacts on disturbed coastal sage scrub (**Impact BIO-3**) to less-than-significant levels, as the project would be required to ensure in-kind replacement of this sensitive vegetation community.

² Please see Section 5.8, *Hydrology and Water Quality*, for a more detailed discussion of the required water quality compliance measures and regulations.



**Figure 5.5-1
Biological Resources**

5.5.6 Impact Analysis

Issue 3: Jurisdictional Resources

Would the proposed project have a substantial adverse impact on wetlands (including, but not limited to, marsh, vernal pool, and riparian) through direct removal, filling, hydrological interruption, or other means?

5.5.6.1 Impact Discussion

No jurisdictional wetlands or non-wetland waters were observed on the project site; therefore, no impacts on jurisdictional resources would occur.

5.5.6.2 Significance of Impact

Implementation of the proposed project would have no impact on wetlands because no jurisdictional wetlands or non-wetland waters were observed on the site.

5.5.6.3 Mitigation Measures

As no impact would occur, no mitigation is required.

5.5.7 Impact Analysis

Issue 4: Wildlife Corridors

Would the proposed project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, including linkages identified in the MSCP Subarea Plan, or impede the use of native wildlife nursery sites?

5.5.7.1 Impact Discussion

The project site is not within an area that serves as an important habitat linkage or wildlife corridor and is not an identified corridor in the City's MSCP Subarea Plan. The project site is not adjacent to any significant areas of high-quality habitat and the habitat within the project site is limited in size. As a result, there is a lack of connectivity to adjacent habitats that could be used as corridors.

5.5.7.2 Significance of Impacts

Implementation of the proposed project would not substantially interfere with the movement of any native resident or migratory fish or wildlife species. Therefore, impacts would be less than significant.

5.5.7.3 Mitigation Measures

Impacts would be less than significant; therefore, no mitigation is required.

5.5.7.4 Significance after Mitigation

Impacts would remain less than significant.

5.5.8 Impact Analysis

Issues 5 – 7: Plan Consistency

Would the proposed project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan, either within the MSCP plan area or in the surrounding region?

Would the proposed project introduce land use within an area adjacent to the MHPA that would result in adverse edge effects?

Would the proposed project conflict with any local policies or ordinances protecting biological resources?

5.5.8.1 Impact Discussion

The project site is surrounded by urban development. Within the project site, habitat is limited in size and disturbed in character, which provides relatively few resources for wildlife due to the lack of cover and structural diversity.

As identified in the City's MSCP Subarea Plan, the project site is in an "Urban Area" and is not within or adjacent to the MHPA. The nearest MHPA is approximately 0.28 mile west and approximately 0.76 mile south of the site; therefore, adverse edge effects on areas adjacent to the MHPA are not anticipated. As such, the MHPA Land Use Adjacency Guidelines do not apply to this project. Implementation of stormwater regulations is expected to minimize other potential adverse edge effects during and following construction both adjacent to and downstream from the project site.

Due to the disturbed nature of the majority of the site, future implementation of the proposed project would not conflict with provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other local policies or ordinances protecting biological resources. The proposed project would result in no net loss of biological resources and would be compliant with the goals of the City's MSCP.

5.5.8.2 Significance of Impact

Implementation of the proposed project would be consistent with applicable policies, ordinances, and land use plans protecting biological resources. Therefore, impacts would be less than significant.

5.5.8.3 Mitigation Measures

No mitigation would be required.

5.5.9 Impact Analysis

Issue 8: Invasive Species

Would the proposed project result in an introduction of invasive species of plants into a natural open space area?

5.5.9.1 Impact Discussion

Construction activities have the potential to introduce nonnative plants to adjacent habitat by carrying seeds from outside sources on vehicles, people, and equipment. However, nonnative plant species are a part of the existing conditions within the project site and adjacent areas, and the project site is surrounded by urban development. In addition, as detailed within Chapter 3, *Project Description*, landscaping as part of the proposed project would include native species and be consistent with landscaping plans and permit conditions. Therefore, the proposed project is not anticipated to result in an introduction of invasive species of plants into a natural open space area and impacts would be less than significant.

5.5.9.2 Significance of Impact

Implementation of the proposed project would not result in an introduction of invasive species of plants into a natural open space area. Therefore, less-than-significant impacts are anticipated.

5.5.9.3 Mitigation Measures

Impacts would be less than significant; therefore, no mitigation is required.

5.6 Paleontological Resources

This section discusses existing paleontological conditions and analyzes potential impacts on paleontological resources resulting from the proposed project. Information provided in the analysis is partially based on the Quarry Falls PEIR (City of San Diego 2008, incorporated by reference) as well as the Geotechnical Reconnaissance prepared by Geocon, included as Appendix G to this DEIR.

5.6.1 Existing Conditions

Paleontological resources (i.e., fossils) are the remains and/or traces of prehistoric plant and animal life. Fossil remains, such as bones, teeth, shells, and leaves, are found in the geologic deposits within which they were originally buried. For the purposes of this discussion, paleontological resources can be thought of as not only actual fossil remains but also the collecting localities and the geologic formations containing those localities (City of San Diego 2016).

Geologic formations are often rated according to their potential for yielding paleontological resources, described as their “sensitivity” rating (City of San Diego 2016). Specifically, geologic formations are categorized with use of a scale that rates sensitivity between high and zero. High sensitivity ratings are assigned to formations that are known to contain paleontological sites with rare, well-preserved, critical fossil materials for interpretation as well as fossils that provide important information. Zero sensitivity is assigned to geologic formations that are entirely plutonic in origin and, therefore, have no potential for producing fossil remains.

The surficial deposits within the project site consist of compacted fill, undocumented fill, topsoil, alluvium, and Terrace Deposits that are underlain by the Stadium Conglomerate Formation. Compacted fill, associated with the adjacent grading operations, is present along the western margins of the proposed roadway. The northern portion of the proposed roadway is underlain by undocumented fill that is most likely associated with the original construction of Phyllis Place. The maximum thickness is anticipated to be approximately 70 feet. This fill consists of silty sand to sandy silt with gravel and cobble. Approximately 6 to 8 feet of alluvial soils exist within the drainage channel. These typically consist of medium-dense, silty, fine to coarse sand with abundant gravel and cobble. Terrace Deposits very likely underlie the topsoil but are exposed on the existing cut slope west of the proposed roadway. It is likely that these deposits, which have been mapped as old alluvium, will not be encountered during grading operations (Appendix G).

The Stadium Conglomerate Formation is composed of an Upper Member and a Lower Member. The Upper Member has yielded foraminifera and marine mollusks; the Lower Member has yielded benthic foraminifera and mammal assemblages. The Stadium Conglomerate Formation is identified as having high paleontological resources sensitivity (City of San Diego 2016).

5.6.2 Regulatory Framework

5.6.2.1 State

CEQA Guidelines

Pursuant to Section 15065 of the California Environmental Quality Act (CEQA) Guidelines (California Code of Regulations [CCR] Sections 15000–15387), a lead agency must determine if “a project may have a significant effect on the environment and therefore require an EIR to be prepared for the project where the project has the potential to eliminate important examples of the major periods of California history or prehistory, which includes the destruction of significant paleontological resources.”

California Public Resources Code

Chapter 1.7, Section 5097.5 of the California Public Resources Code states that any unauthorized disturbance or removal of a fossil site or fossil remains on public lands, including land under the jurisdiction of any city, as a misdemeanor and specifies that state agencies may undertake surveys and excavations as necessary on state lands to preserve or record paleontological resources. Section 30244 of the California Public Resources Code requires reasonable mitigation of adverse impacts on paleontological resources that occur as a result of development on public lands.

5.6.2.2 Local

City of San Diego

Neither the City of San Diego General Plan nor the City’s Municipal Code contains regulations or policies regarding paleontological resources. However, the City of San Diego Paleontological Guidelines (2002) provides steps to identify and mitigate significant impacts on paleontological resources, including implementation of mitigation, monitoring, and reporting programs for both public and private projects.

5.6.3 Significance Determination Thresholds

5.6.3.1 Issue Questions

According to the City’s Significance Determination Thresholds, the proposed project would have a significant impact related to paleontological resources if it would:

1. Require over 1,000 cubic yards of excavation in a high-resource potential geologic deposit/formation/rock unit; or
2. Require over 2,000 cubic yards of excavation in a moderate-resource potential geologic deposit/formation/rock unit.

5.6.4 Impact Analysis

Issue 1: Paleontological Resources

Would the project require over 1,000 cubic yards of excavation in a high-resource potential geologic deposit/formation/rock unit or require over 2,000 cubic yards of excavation in a moderate-resource potential geologic deposit/formation/rock unit?

5.6.4.2 Impact Discussion

As discussed under Section 5.6.2, *Environmental Setting*, the project site is underlain by compacted fill, undocumented fill, topsoil, alluvium, and Terrace Deposits that are underlain by the Stadium Conglomerate Formation. According to the City's Significance Determination Thresholds, the Stadium Conglomerate Formation has high paleontological resource sensitivity and, therefore, the potential to contain significant paleontological resources (City of San Diego 2016).

As described in Chapter 3, *Project Description*, construction activities associated with the proposed project would only require the placement of fill within the project site. There would be no ground-disturbing activities, such as excavation or trenching, which would result in more than 1,000 cubic yards of excavation at a depth of 10 feet or more. Therefore, because the project would not excavate more than 1,000 cubic yards of soil at a depth of more than 10 feet, impacts would be less than significant.

5.6.4.3 Significance of Impact

Although the project site is located on a geological formation with high sensitivity to contain paleontological resources, project construction activities would not require excavation or trenching and therefore would not result in more than 1,000 cubic yards of excavation at a depth of 10 feet or more. No impact on paleontological resources would occur.

5.6.4.4 Mitigation Measures

No impact would occur; therefore, no mitigation is required.

5.7 Historical and Tribal Cultural Resources

This section analyzes potential impacts resulting from the proposed project on historical (archaeological and built-environment) and tribal cultural resources. Potential impacts that may result from implementation of the proposed project have been evaluated in accordance with the City of San Diego's CEQA Significance Determination Thresholds (City of San Diego 2016a), the City of San Diego *Land Development Code, Historical Resources Regulations* (Chapter 14, Article 3, Division 2), and the *Historical Resources Guidelines* (City of San Diego 2001).

Historical resources are the physical features that reflect past human existence and are of historical, archaeological, scientific, educational, cultural, architectural, aesthetic, or traditional significance. These resources may be natural or constructed and can include archaeological sites and artifacts, buildings, groups of buildings, structures, districts, street furniture, signs, and landscapes. Traditional cultural properties, tribal cultural resources, and distinguishing architectural characteristics are also considered historical resources.

A tribal cultural resource is further defined in Public Resources Code (PRC) Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe. The tribal cultural resources discussion in this section is provided in accordance with state Assembly Bill 52.

Information in the following discussion is based on the Quarry Falls PEIR, which included the *Cultural Resources Study for the Quarry Falls Project* prepared by ASM Affiliates Inc. (2006), as well as an updated records search and supplemental information from past studies conducted in the vicinity of the project site. It should be noted that the cultural resources study area for the Quarry Falls report included the project site analyzed within this DEIR.

5.7.1 Existing Conditions

5.7.1.1 Prehistoric Resources

The prehistory of the region is evidenced through archaeological remains representing up to 10,500 years of Native American occupation. The Creation Story and history that is repeated by the local Native American groups, now and at the time of earlier ethnographic research, indicate both their presence here since the time of creation and, in some cases, migration from other areas. The earliest archaeological remains in San Diego County are believed by some investigators to represent a nomadic hunting culture characterized by the use of a variety of scrapers, choppers, bifacially worked stone tools, large projectile points and crescentics, a scarcity or absence of milling implements, and a preference for fine-grained volcanic rock over metaquartzite materials. A gathering culture that subsisted largely on shellfish and plant foods from the abundant littoral (near-shore) resources of the area is seen in the archaeological record dating from about 6000 BC to AD 0. The remains from this time period include stone-on-stone grinding tools (mano and metate), cobble-based flaked lithic technology, and flexed human burials. (City of San Diego 2007.)

The Late Prehistoric Period (Common Era 0 to 1769) in the City of San Diego is represented by the people ancestral to the Kumeyaay people of today. Prehistorically, the Kumeyaay were a hunting

and gathering culture that adapted to a wide range of ecological zones from the coast to the Peninsular Range. A shift in grinding technology reflected by the addition of the pestle and mortar to the mano and metate, signifying an increased emphasis on acorns as a primary food staple, as well as the introduction of the bow and arrow, pottery, obsidian from the Obsidian Butte source in Imperial County, and human cremation serve to differentiate Late Prehistoric populations from earlier people in the archaeological record. (City of San Diego 2007.)

The ethnohistoric period began locally about 1769 with the Spanish colonization of Alta California. The establishment of the mission system brought about profound changes in the lives of the Yuman-speaking Kumeyaay people. The greatest impact was felt by the Native Americans living in the coastal areas where the mission influence was the greatest. As a result ethnohistoric accounts of the coastal Kumeyaay are few and the information pertains largely to the people living in the mountain and desert regions. The ethnohistoric Kumeyaay were generally a hunting and gathering society characterized by nomadism from a central base. Their houses varied greatly according to locality, need, choice, and raw materials. Formal homes, built in winter, were small huts of poles covered with brush or bark. In cold weather, the brush was covered with earth to help conserve heat. In summer, windbreaks were all that were needed. Village-owned structures were ceremonial and were the center of many activities. Sweathouses were built and used by the Kumeyaay men. (City of San Diego 2007.)

5.7.1.2 Historic Period Resources

San Diego history can be divided into the Spanish Period (1769–1821), Mexican Period (1821–1846), and American Period (1846–Present). In spite of Juan Cabrillo’s earlier landfall on Point Loma in 1542, the Spanish colonization of Alta California did not begin until 1769 with the founding of Mission San Diego de Alcalá by Father Junípero Serra. Concerns over Russian and English interests in California motivated the Spanish government to send an expedition of soldiers, settlers, and missionaries to occupy and secure the northwestern borderlands of New Spain through the establishment of a Presidio, Mission, and Pueblo. In August 1774 the Spanish missionaries moved the Mission San Diego de Alcalá to its present location 6 miles up the San Diego River valley (modern Mission Valley) near the Kumeyaay village of Nipaguay. The initial Spanish occupation and mission system brought about profound changes in the lives of the Kumeyaay people. Substantial numbers of the coastal Kumeyaay were forcibly brought into the mission or died from introduced diseases. As early as 1791, presidio commandants in California were given the authority to grant small house lots and garden plots to soldiers and their families, and, sometime after 1800, soldiers and their families began to move down the hill near the San Diego River. (City of San Diego 2007.)

In 1822 the political situation changed as Mexico won its independence from Spain and San Diego became part of the Mexican Republic. The Mexican Government opened California to foreign trade; began issuing private land grants in the early 1820s, creating the rancho system of large agricultural estates; secularized the Spanish missions in 1833; and oversaw the rise of the civilian pueblo. By 1827, as many as 30 homes existed around the central plaza, and in 1835 Mexico granted San Diego official pueblo (town) status. At this time the town had a population of nearly 500 residents, later reaching a peak of roughly 600. The secularization in San Diego County triggered increased Native American hostilities against the Californios during the late 1830s. The attacks on outlying ranchos, along with unstable political and economic factors, helped San Diego’s population decline to around 150 permanent residents by 1840. San Diego’s official pueblo status was removed by 1838 and it was made a subprefecture of the Los Angeles pueblo. The Native American population continued to

decline, as Mexican occupation brought about continued displacement and acculturation of Native American populations. (City of San Diego 2007.)

The American Period began in 1846 when United States military forces occupied San Diego. The Americans assumed formal control with the Treaty of Guadalupe Hidalgo in 1848 and introduced Anglo culture and society, American political institutions, and especially American entrepreneurial commerce. In 1850, the Americanization of San Diego began to develop rapidly. On February 18, 1850, the California State Legislature formally organized San Diego County. The first elections were held at San Diego and La Playa on April 1, 1850, for county officers. San Diego grew slowly during the next decade. (City of San Diego 2007.)

After a series of struggles, San Diego began to develop fully into an active American town with the arrival of land speculator and developer Alonzo Horton in 1867. Alonzo Horton's development of a New San Diego (modern downtown) in 1867 began to swing the community focus away from Old Town and began the urbanization of San Diego. Development spread from downtown to the areas of Golden Hill, Banker's Hill, and Sherman Heights, followed by Greater North Park, Mission Hills, and the La Jolla area by the early 1900s. There was little development north of the San Diego River until Linda Vista was developed as military housing in the 1940s. The federal government improved public facilities and extended water and sewer pipelines to the area. From Linda Vista, development spread north of Mission Valley to the Clairemont Mesa and Kearny Mesa areas. Development in these communities was mixed use and residential on moderate size lots. (City of San Diego 2007.)

5.7.1.3 Project Site Conditions

The Area of Potential Effects (APE) is a geographic area within which a project may cause changes in the character or use of historical or tribal cultural resources. The project APE consists of the approximately 2-acre project site, which is identified on Figure 3-1 in Chapter 3, *Project Description*. A cultural resources study was conducted as part of the Quarry Falls PEIR and included investigation within the project APE (ASM Affiliates, Inc. 2006). This study consisted of a review of relevant site records and cultural resources reports on file at the South Coastal Information Center (SCIC), as well as an intensive pedestrian survey of the APE and consultation with Native Americans. There are no structures within the project site.

The records search indicated that no previously recorded historical resources are located within the project APE. Records also indicated that the project site had been completely surveyed 25 years ago and that no resources were located as a result of that survey. The field survey consisted of walking transects spaced at 15-meter intervals, while examining the ground for artifacts or other evidence of human activity greater than 50 years old. Because the majority of the project site had been previously disturbed, the field survey focused on the undeveloped area along the north edge of the project site. No historical resources were identified during the field survey. However, the cultural resources study stated that the APE is within an area of high sensitivity for historical resources.

The Native American Heritage Commission (NAHC) was contacted on February 2, 2005, and provided a list of Native American representatives who were identified as potentially having knowledge of historical resources in the APE (ASM Affiliates, Inc. 2006). Letters were sent on February 18, 2005, and follow-up telephone calls were placed to these contacts on March 2, 2005. No responses were received.

A supplemental records search was conducted by qualified City of San Diego staff to determine if any new sites or resources had been identified since the initial studies were conducted for the Quarry

Falls project in 2005 and 2006. One new archaeological site (P-37-034472) was recorded in the vicinity of the project site during monitoring for the Quarry Falls project (ASM Affiliates, Inc. 2013, 2015), and one previously recorded site (P-37-018407/CA-SDI-15600) was updated in December 2012 in conjunction with the survey of an existing power line for San Diego Gas and Electric Company (ASM Affiliates, Inc. 2013).

An informal tribal consultation was conducted pursuant to Assembly Bill 52 by qualified City staff for the current project in 2016 to determine if new information was available regarding potential tribal cultural resources within the project APE. No new information was provided.

5.7.2 Regulatory Framework

5.7.2.1 Federal

The National Historic Preservation Act, enacted in 1966, established the National Register of Historic Places (NRHP), authorized funding for state programs with participation by local governments, created the Advisory Council on Historic Preservation, and established a review process for protecting cultural resources. The National Historic Preservation Act provides the legal framework for most state and local preservation laws. The NRHP is the nation's official list of cultural resources worthy of preservation. It is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect historic and archaeological resources.

Other federal historic preservation legislation that provide a legal environment for documentation, evaluation, and protection of cultural resources that may be affected by federal undertakings, or by private undertakings operating under federal license, with federal funding, or on federally managed lands, include: the Archaeological and Historic Preservation Act of 1974; Native American Graves Protection and Repatriation Act (NAGPRA); Archaeological Resource Protection Act, as amended; and Executive Order 11593.

5.7.2.2 State

California Environmental Quality Act

CEQA uses the term *historical resources* to include significant prehistoric (or archaeological) and historic sites, buildings, structures, objects, and districts or landscapes. Prehistoric resources date from before the onset of the Spanish Colonial period (1769 through 1848), and historic resources date from after the onset of the Spanish Colonial period. Built environment resources typically refer to historic structures that are above ground. Historical resources also include traditional cultural properties, which are locations with enduring significance to the beliefs, customs, and/or practices of living communities (Parker and King 1990). It is important to note that the different kinds of historical resources described above may not be mutually exclusive. Historic buildings, structures, and/or objects are frequently associated with archaeological sites. Similarly, archaeological sites may also comprise traditional cultural properties for the Native American community.

According to CEQA, historical resources include: resources listed in or determined eligible for listing on the California Register of Historical Resources (CRHR); a resource included in a local register of historical resources or identified as significant in a historical resource survey that meets certain requirements; and any object, building, structure, site, area, place, record, or manuscript that a Lead

Agency determines to be historically significant.¹ CEQA also provides a definition for a *unique archaeological resource*: an archaeological artifact, object, or site that contains information needed to answer important scientific research questions; has a special and particular quality; or is directly associated with a scientifically recognized important prehistoric or historic event or person (PRC Section 21083.2). A project that affects historical resources (including unique archaeological resources) is one that has a significant effect on the environment.

Assembly Bill 52 established a consultation process with all California Native American Tribes on the NAHC list and codified this process within the CEQA statute (Section 20174 of the PRC). It also defines tribal cultural resources, as excerpted below.

(a) “Tribal cultural resources” are either of the following:

(1) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:

(A) Included or determined to be eligible for inclusion in the California Register of Historical Resources.

(B) Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.

(2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

(b) In addition, a cultural landscape that meets the criteria of subdivision (a) is a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape.

(c) A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a “non-unique archaeological resource” as defined in subdivision (h) of Section 21083.2 may also be a tribal cultural resource if it conforms with the criteria of subdivision.

California Register of Historical Resources

The CRHR is the official state listing of historical resources that are worthy of preservation, and is maintained by the State Historic Preservation Officer. Properties listed or eligible for listing on the NRHP are nominated and selected to be listed on the CRHR. Any resource eligible for the NRHP is also automatically eligible for the CRHR (PRC Section 5020 et seq.).

Similar to the NRHP, a historical resource may be considered significant by CEQA if it meets any of the following criteria for listing on the CRHR (PRC Section 5024.1).

¹ A resource that is not listed in or determined to be eligible for listing in the CRHR, not included in a local register of historic resources, or not deemed significant in a historical resource survey may nonetheless be historically significant for the purposes of CEQA (Section 15064.5 and CEQA Statutes Section 21083.2).

1. It is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
2. It is associated with the lives of persons important to California's past.
3. It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
4. Has yielded or may be likely to yield information important in prehistory or history.

California Health and Safety Code and California Native American Graves Repatriation Act

Human remains are sometimes associated with archaeological sites. According to CEQA, "archaeological sites known to contain human remains shall be treated in accordance with the provisions of the Health and Safety Code" (Section 7050.5). In addition, the California NAGPRA of 2001 is consistent with the federal NAGPRA and was enacted to ensure that all California Native American human remains and cultural items be treated with dignity and respect. The protection of human remains is also ensured by sections of the California PRC, as detailed below.

California Public Resources Code

In addition to the previously stated definitions codified in the CEQA statute, the PRC includes other regulations applicable to the project.

PRC Section 5097.5 states that a person shall not knowingly excavate, harm, or destroy any historic or prehistoric ruins or sites on public lands, unless granted permission by the public agency that has jurisdiction over those lands. Violations are classified as a misdemeanor, punishable by fine and/or imprisonment. The section outlines the specific parameters of addressing the violation.

PRC Section 5097.9 states consultation with the NAHC is required whenever Native American graves are found. Pursuant to Health and Safety Code (HSC) subdivision c of Section 7050.5, when the NAHC is notified of human remains, it shall immediately notify those persons it believes to be the Most Likely Descendants (MLDs). Section 5097.98 1(b) states:

"Upon the discovery of the Native American remains, the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located, is not damaged or disturbed by further development activity until the landowner has discussed and conferred, as prescribed in this section, with the most likely descendants regarding their recommendations, if applicable, taking into account the possibility of multiple human remains. The landowner shall discuss and confer with the descendants all reasonable options regarding the descendants' preferences for treatment."

It also states possible preferences the MLD may have for treatments, including preservation in place, nondestructive removal and analysis, relinquishment to the MLD, or other appropriate treatment.

PRC Section 622.5 establishes that any person, who is not the owner thereof, who willfully injures, disfigures, defaces, or destroys an object of archaeological or historical value on private or public lands is guilty of a misdemeanor.

5.7.2.3 Local

General Plan

The City's General Plan contains 10 elements that provide a comprehensive slate of citywide policies and further the City of Villages smart growth strategy for growth and development (City of San Diego 2016b). The Historic Preservation Element was developed to guide the preservation, protection, restoration, and rehabilitation of historical and cultural resources; improve the quality of the built environment; encourage appreciation for the City's history and culture; maintain the character and identity of communities; and contribute to the City's economic vitality through historic preservation (City of San Diego 2008). The Historic Preservation Element includes goals and policies to achieve this mission.

Goals and policies identified in the Historic Preservation Element include: identifying and preserving historical resources; integrating historic preservation planning in the larger planning process; strengthening historic preservation planning; fostering relationships with the Kumeyaay/Diegueno tribes; fostering greater public participation and education in historical resources; increasing opportunities for cultural heritage tourism; and promoting the maintenance, restoration, and rehabilitation of historical resources (City of San Diego 2008).

Municipal Code: Historical Resources Regulations

In January 2000, the City's Historical Resources Regulations (Regulations), part of the City's Municipal Code (Chapter 14, Article 3, Division 2: Purpose of Historical Resources Regulations or Sections 143.0201–143.0280), were adopted, providing a balance between sound historic preservation principles and the rights of private property owners. The Regulations have been developed to implement applicable local, State, and federal policies and mandates.

Included in these are the City's General Plan, CEQA, and Section 106 of the National Historic Preservation Act of 1966. Historical resources, in the context of the City's Regulations, include site improvements, buildings, structures, historic districts, signs, features (including significant trees or other landscaping), places, place names, interior elements and fixtures designated in conjunction with a property, or other objects historical, archaeological, scientific, educational, cultural, architectural, aesthetic, or traditional significance to the citizens of the city. These include structures, buildings, archaeological sites, objects, districts, or landscapes having physical evidence of human activities. These are usually over 45 years old, and they may have been altered or still be in use.

The Historical Resources Guidelines of the Land Development Manual (City of San Diego 2001) are incorporated in the Municipal Code by reference. These guidelines set up a Development Review Process to review projects in the City. This process is composed of two aspects: the implementation of the Regulations and the determination of impacts and mitigation under CEQA. Compliance with the Regulations begins with the determination of the need for a site-specific survey for a project. Section 143.0212(b) of the Regulations requires that historical resource sensitivity maps be used to identify properties in the City that have a probability of containing archaeological sites. These maps are based on records maintained by the SCIC of the California Historic Resources Information System and San Diego Museum of Man, as well as site-specific information in the City's files. If records show an archaeological site exists on or immediately adjacent to a subject property, the City shall require a survey.

In general, archaeological surveys are required when the proposed development is on a previously undeveloped parcel, if a known resource is recorded on the parcel or within a 1-mile radius, or if a qualified consultant or knowledgeable City staff member recommends it. A historic property (built environment) survey can be required on a project if the properties are over 45 years old and appear to have integrity of setting, design, materials, workmanship, feeling, and association. Section 143.0212(d) of the Regulations states that if a property-specific survey is required, it shall be conducted according to the Historical Resources Guidelines criteria. Using the survey results and other available applicable information, the City shall determine whether a historical resource exists, whether it is eligible for designation as a designated historical resource, and precisely where it is located.

Tribal cultural resources are not explicitly addressed in the guidelines, but are considered during the environmental review process at the same time as archaeological resources are being evaluated using similar data sources and information provided by the local tribal representative in accordance with the City's Assembly Bill 52 project notification process.

City of San Diego Register of Historical Resources

Any improvement, building, structure, sign, interior element and fixture, feature, site, place, district, area, or object may be designated a historical resource within the City of San Diego's Register of Historical Resources by the City's Historical Resources Board if it meets one or more the following designation criteria (City of San Diego 2008).

- a. Exemplifies or reflects special elements of the City's, a community's, or a neighborhood's, historical, archaeological, cultural, social, economic, political, aesthetic, engineering, landscaping, or architectural development.
- b. Is identified with persons or events significant in local, state or national history.
- c. Embodies distinctive characteristics of a style, type, period, or method of construction or is a valuable example of the use of indigenous materials or craftsmanship.
- d. Is representative of the notable work of a master builder, designer, architect, engineer, landscape architect, interior designer, artist, or craftsman.
- e. Is listed or has been determined eligible by the National Park Service for listing on the NRHP or is listed or has been determined eligible by the State Historical Preservation Officer for listing on the CRHR.
- f. Is a finite group of resources related to one another in a clearly distinguishable way; or is a geographically definable area or neighborhood containing improvements that have a special character, historical interest or aesthetic value; or that represent one or more architectural periods or styles in the history and development of the City.

5.7.3 Significance Determination Thresholds

5.7.3.1 Issue Questions

As identified in the City's Significance Determination Thresholds (2016a), a project would result in a significant impact related to historical and tribal cultural resources if it results in any of the following.

1. An alteration to a historical resource, including the adverse physical or aesthetic effects and/or destruction of a prehistoric or historic building (including an architecturally significant building), structure, or object or site;
2. Any impact on existing religious or sacred uses within the potential impact area;
3. A substantial adverse change in the significance of a Tribal Cultural Resource; or
4. The disturbance of any human remains, including those interred outside of formal cemeteries.

5.7.4 Impact Analysis

Issues 1–3: Historical Resource, Sacred/Religious Use, Tribal Cultural Resource

Would the project result in (1) an alteration, including adverse physical or aesthetic effects, and/or the destruction of a prehistoric or historic building (including an architecturally significant building), structure, object, or site; (2) any impact on existing religious or sacred uses within the potential impact area; or (3) a substantial adverse change in the significance of a Tribal Cultural Resource?

5.7.4.1 Impact Discussion

There are no buildings or above-ground structures within the project site, and no historical resources or religious or sacred uses were identified within the APE during the cultural resources study conducted by ASM Affiliates, Inc. in 2006. Additionally, Native American representatives did not provide locations of existing religious or sacred uses when contacted as part of the informal outreach process during the cultural resources survey efforts at that time (ASM Affiliates, Inc. 2006).

As part of the current project analysis, an updated records and literature search was conducted to supplement the prior work effort and to determine if new information was available regarding the potential for resources to be encountered within the project site. The record search provided information associated with two monitoring efforts conducted by ASM Affiliates, Inc. for the Quarry Falls project and one archaeological site (approximately one quarter mile to the east) that was updated during surveys associated with a San Diego Gas and Electric project in 2012.

Archaeological and Native American monitoring was conducted in one portion of the Quarry Falls site in proximity to the current project site in 2013, with negative results. Another monitoring effort was conducted in 2013 for another portion of the Quarry Falls project site, resulting in the recordation of one new site (P-37-034472/CA-SDI-21506), consisting of a dispersed artifact scatter. Excavation of four shovel test pits was conducted within the site area, terminating into formational stratum with no subsurface archaeological component. The site was recommended as not significant or eligible to the City of San Diego's Register of Historic Resources or the CRHR. The entire area of that project was graded to below the Prehistoric occupation level and the recorded site was removed. No additional features or cultural resources were identified and no additional archaeological work was recommended for that project.

As previously detailed in Section 5.7.1.3, informal tribal outreach was conducted pursuant to Assembly Bill 52 by City staff for the current project in 2016 in order to determine the potential for any tribal cultural resources (sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe) within the APE. Information from the updated records search and negative monitoring results report was discussed; however, no tribal cultural resources were identified during this informal consultation process. The project site is not

located within an area of high sensitivity for archaeological resources; however, a portion of the project site is within an area of the former Quarry Falls site that had not undergone mining and is relatively undisturbed, and there is a potential for encountering additional lithic artifacts in the undisturbed project footprint. Therefore, the proposed project would have the potential to result in an alteration to subsurface archaeological or tribal cultural resources during construction of the roadway. Impacts would be significant and mitigation is required.

Impacts during operation are not anticipated, as the project site would be constructed and paved as a roadway. Therefore, impacts associated with operation of the proposed project would be less than significant.

5.7.4.2 Significance of Impacts

Although no historical (archaeological) or tribal cultural resources were identified within the APE, the project would have the potential to disturb or alter subsurface resources during construction-related activities. Therefore, impacts would be significant and mitigation is required.

5.7.4.3 Mitigation Measures

MM-HIST-1:

I. Prior to Permit Issuance (for projects that include ground disturbance)

A. Entitlements Plan Check

1. Prior to issuance of any construction permits including, but not limited to, the first Grading Permit, Demolition Plans/Permits, and Building Plans/Permits, but prior to the first preconstruction (precon) meeting, whichever is applicable, the Assistant Deputy Director (ADD) Environmental designee shall verify that the requirements for archaeological monitoring and Native American (Kumeyaay) monitoring have been noted on the applicable construction documents through the plan check process.

B. Letters of Qualification Have Been Submitted to ADD

1. The project's cultural resources consultant shall submit a letter of verification to Mitigation Monitoring Coordination (MMC) identifying the Principal Investigator (PI) for the project and the names of all persons involved in the archaeological monitoring program, as defined in the City of San Diego Historical Resources Guidelines. If applicable, individuals involved in the archaeological monitoring program must have completed the 40-hour Hazardous Waste Operations and Emergency Response training with certification documentation.
2. MMC would provide a letter to the project's cultural resources consultant confirming the qualifications of the PI and all persons involved in the archaeological monitoring of the project meet the qualifications established in the Historical Resources Guidelines.
3. Prior to the start of work, the project's cultural resources must obtain written approval from MMC for any personnel changes associated with the monitoring program.

II. Prior to Start of Construction

A. Verification of Records Search

1. The PI shall provide verification to MMC that a site-specific records search (quarter-mile radius) has been completed. Verification includes, but is not limited to, a copy of a confirmation letter from SCIC, or, if the search was in-house, a letter of verification from the PI stating that the search was completed.
 2. The letter shall introduce any pertinent information concerning expectations and probabilities of discovery during trenching and/or grading activities.
 3. The PI may submit a detailed letter to MMC requesting a reduction to the quarter-mile radius.
- B. PI Shall Attend Precon Meetings
1. Prior to beginning any work that requires monitoring; the City shall arrange a precon meeting that shall include the PI, Native American consultant/monitor (where Native American resources may be impacted), Construction Manager (CM) and/or Grading Contractor, Resident Engineer (RE), Building Inspector (BI), if appropriate, and MMC. The qualified Archaeologist and Native American monitor shall attend any grading/excavation-related precon meetings to make comments and/or suggestions concerning the archaeological monitoring program with the CM and/or Grading Contractor.
 - a. If the PI is unable to attend the precon meeting, the City shall schedule a focused precon meeting with MMC, the PI, RE, CM, or BI, if appropriate, prior to the start of any work that requires monitoring.
 2. Identify Areas to Be Monitored
 - a. Prior to the start of any work that requires monitoring, the PI shall submit an Archaeological Monitoring Exhibit (AME) (with verification that the AME has been reviewed and approved by the Native American (Kumeyaay) consultant/monitor when Native American resources may be impacted) based on the appropriate construction documents (reduced to 11 inches x 17 inches) to MMC identifying the areas to be monitored, including the delineation of grading/excavation limits.
 - b. The AME shall be based on the results of a site-specific records search as well as information regarding existing known soil conditions (native or formation).
 3. When Monitoring Will Occur
 - a. Prior to the start of any work, the PI shall also submit a construction schedule to MMC through the RE indicating when and where monitoring would occur.
 - b. The PI may submit a detailed letter to MMC prior to the start of work or during construction requesting a modification to the monitoring program. This request shall be based on relevant information such as review of final construction documents that indicate site conditions such as depth of excavation and/or site graded to bedrock, etc. that may reduce or increase the potential for resources to be present.

III. During Construction

- A. Monitor(s) Shall Be Present during Grading/Excavation/Trenching
1. The Archaeological Monitor shall be present full time during all soil-disturbing and grading/excavation/trenching activities that could result in impacts on archaeological resources as identified on the AME. The CM is responsible for notifying the RE, PI, and MMC of changes to any construction activities such as in the case of a potential safety concern within the area being monitored. In certain

circumstances, Occupational Safety and Health Administration safety requirements may necessitate modification of the AME.

2. Native American (Kumeyaay) consultant/monitor shall determine the extent of their presence during soil-disturbing and grading/excavation/trenching activities based on the AME and provide that information to the PI and MMC. If prehistoric resources are encountered during the Native American (Kumeyaay) consultant/monitor's absence, work shall stop and the Discovery Notification Process detailed in Sections III.B–C and IV.A–D shall commence.
3. The PI may submit a detailed letter to MMC during construction requesting a modification to the monitoring program when a field condition—such as modern disturbance post-dating the previous grading/trenching activities, presence of fossil formations, or encountering of native soils—that may reduce or increase the potential for resources to be present occurs.
4. The Archaeological Monitor and Native American (Kumeyaay) consultant/monitor shall document field activity via the Consultant Site Visit Record (CSVR). The CSVRS shall be faxed or emailed by the CM to the RE the first day of monitoring, the last day of monitoring, monthly (Notification of Monitoring Completion), and in the case of ANY discoveries. The RE shall forward copies to MMC.

B. Discovery Notification Process

1. In the event of a discovery, the Archaeological Monitor shall direct the contractor to temporarily divert all soil-disturbing activities including, but not limited to, digging, trenching, excavating, or grading activities in the area of discovery and in the area reasonably suspected to overlay adjacent resources and immediately notify the RE or BI, as appropriate.
2. The Monitor shall immediately notify the PI (unless Monitor is the PI) of the discovery.
3. The PI shall immediately notify MMC by phone of the discovery, and shall also submit written documentation to MMC within 24 hours by fax or email with photos of the resource in context, if possible.
4. No soil shall be exported off site until a determination can be made regarding the significance of the resource specifically if Native American resources are encountered.

C. Determination of Significance

1. The PI and Native American (Kumeyaay) consultant/monitor, where Native American resources are discovered, shall evaluate the significance of the resource. If human remains are involved, follow protocol in Section IV below.
 - a. The PI shall immediately notify MMC by phone to discuss significance determination and shall also submit a letter to MMC indicating whether additional mitigation is required.
 - b. If the resource is significant, the PI shall submit an Archaeological Data Recovery Program that has been reviewed by the Native American (Kumeyaay) consultant/monitor, and obtain written approval from MMC. Impacts on significant resources must be mitigated before ground-disturbing activities in the area of discovery would be allowed to resume. Note: If a unique archaeological site is also a historical resource as defined in CEQA, then the limits on the amount(s) that the project may be required to pay to cover mitigation costs as indicated in CEQA Section 21083.2 shall not apply.

- c. If the resource is not significant, the PI shall submit a letter to MMC indicating that artifacts would be collected, curated, and documented in the Final Monitoring Report. The letter shall also indicate that that no further work is required.

IV. Discovery of Human Remains

If human remains are discovered, work shall halt in that area and no soil shall be exported off site until a determination can be made regarding the provenance of the human remains, and the following procedures as set forth in CEQA Section 15064.5(e), California PRC (Section 5097.98), and State HSC (Section 7050.5) shall be undertaken:

A. Notification

1. Archaeological Monitor shall notify the RE or BI as appropriate, MMC, and the PI, if the Monitor is not qualified as a PI. MMC would notify the appropriate Senior Planner in the Environmental Analysis Section (EAS) of the Development Services Department to assist with the discovery notification process.
2. The PI shall notify the Medical Examiner after consultation with the RE, either in person or via telephone.

B. Isolate Discovery Site

1. Work shall be directed away from the location of the discovery and any nearby area reasonably suspected to overlay adjacent human remains until a determination can be made by the Medical Examiner in consultation with the PI concerning the provenance of the remains.
2. The Medical Examiner, in consultation with the PI, would determine the need for a field examination to determine the provenance.
3. If a field examination is not warranted, the Medical Examiner would determine with input from the PI whether the remains are, or are most likely to be, of Native American origin.

C. If Human Remains Are Determined to Be Native American

1. The Medical Examiner would notify the NAHC within 24 hours. By law, only the Medical Examiner can make this call.
2. The NAHC would immediately identify the person or persons determined to be the MLD and provide contact information.
3. The MLD would contact the PI within 24 hours or sooner after the Medical Examiner has completed coordination, to begin the consultation process in accordance with CEQA Section 15064.5(e), the California PRC, and HSC.
4. The MLD would have 48 hours to make recommendations to the City or representative for the treatment or disposition, with proper dignity, of the human remains and associated grave goods.
5. Disposition of Native American human remains would be determined between the MLD and the PI, and, if:
 - a. The NAHC is unable to identify the MLD, or the MLD failed to make a recommendation within 48 hours after being notified by the Commission, or;
 - b. The City or authorized representative rejects the recommendation of the MLD and mediation in accordance with PRC 5097.94 (k) by the NAHC fails to provide measures acceptable to the City, then,
 - c. In order to protect these sites, the City shall do one or more of the following:
 - 1) Record the site with the NAHC;

- 2) Record an open space or conservation easement on the site; or
 - 3) Record a document with the County.
- d. Upon the discovery of multiple Native American human remains during a ground-disturbing land development activity, the City may agree that additional conferral with descendants is necessary to consider culturally appropriate treatment of multiple Native American human remains. Culturally appropriate treatment of such a discovery may be ascertained from review of the site utilizing cultural and archaeological standards. Where the parties are unable to agree on the appropriate treatment measures, the human remains and cultural materials buried with Native American human remains shall be reinterred with appropriate dignity, pursuant to Section 5.c., above.
- D. If Human Remains Are Not Native American
1. The PI shall contact the Medical Examiner with notification of the historic era context of the burial.
 2. The Medical Examiner would determine the appropriate course of action with the PI and City staff (PRC 5097.98).
 3. If the remains are of historic origin, they shall be appropriately removed and conveyed to the San Diego Museum of Man for analysis. The decision for interment of the human remains shall be made in consultation with MMC, EAS, any known descendant group, and the San Diego Museum of Man.
- V. Night and/or Weekend Work
- A. If Night and/or Weekend Work Is Included in the Contract
1. When night and/or weekend work is included in the contract package, the extent and timing shall be presented and discussed at the precon meeting.
 2. The following procedures shall be followed.
 - a. No Discoveries
In the event that no discoveries were encountered during night and/or weekend work, the PI shall record the information on the CSV and submit to MMC via fax or email by 8 a.m. of the next business day.
 - b. Discoveries
All discoveries shall be processed and documented using the existing procedures detailed in Sections III – During Construction, and IV – Discovery of Human Remains. Discovery of human remains shall always be treated as a significant discovery.
 - c. Potentially Significant Discoveries
If the PI determines that a potentially significant discovery has been made, the procedures detailed under Sections III – During Construction and IV – Discovery of Human Remains shall be followed.
 - d. The PI shall immediately contact MMC, or by 8 a.m. of the next business day, to report and discuss the findings as indicated in Section III-B, unless other specific arrangements have been made.
- B. If Night and/or Weekend Work Becomes Necessary during the Course of Construction
1. The CM shall notify the RE, or BI, as appropriate, a minimum of 24 hours before the work is to begin.

2. The RE, or BI, as appropriate, shall notify MMC immediately.
- C. All Other Procedures Described Above Shall Apply, as Appropriate

VI. Post Construction

A. Preparation and Submittal of Draft Monitoring Report

1. The PI shall submit two copies of the Draft Monitoring Report (even if negative), prepared in accordance with the Historical Resources Guidelines, that describes the results, analysis, and conclusions of all phases of the Archaeological Monitoring Program (with appropriate graphics) to MMC for review and approval within 90 days following the completion of monitoring. It should be noted that if the PI is unable to submit the Draft Monitoring Report within the allotted 90-day timeframe resulting from delays with analysis, special study results, or other complex issues, a schedule shall be submitted to MMC establishing agreed-upon due dates and the provision for submittal of monthly status reports until this measure can be met.
 - a. For significant archaeological resources encountered during monitoring, the Archaeological Data Recovery Program shall be included in the Draft Monitoring Report.
 - b. Recording Sites with State of California Department of Parks and Recreation (DPR)
 - c. The PI shall be responsible for recording (on the appropriate State of California Department of Park and Recreation forms-DPR 523 A/B) any significant or potentially significant resources encountered during the Archaeological Monitoring Program in accordance with the City's Historical Resources Guidelines, and submittal of such forms to the SCIC with the Final Monitoring Report.
2. MMC shall return the Draft Monitoring Report to the PI for revision or for preparation of the Final Report.
3. The PI shall submit revised Draft Monitoring Report to MMC for approval.
4. MMC shall provide written verification to the PI of the approved report.
5. MMC shall notify the RE or BI, as appropriate, of receipt of all Draft Monitoring Report submittals and approvals.

B. Handling of Artifacts

1. The PI shall be responsible for ensuring that all cultural remains collected are cleaned and catalogued.
2. The PI shall be responsible for ensuring that all artifacts are analyzed to identify function and chronology as they relate to the history of the area; that faunal material is identified as to species; and that specialty studies are completed, as appropriate.
3. The cost for curation is the responsibility of the property owner.

C. Curation of Artifacts: Accession Agreement and Acceptance Verification

1. The PI shall be responsible for ensuring that all artifacts associated with the survey, testing, and/or data recovery for this project are permanently curated with an appropriate institution. This shall be completed in consultation with MMC and the Native American (Kumeyaay) representative, as applicable.
2. The PI shall include the Acceptance Verification from the curation institution in the Final Monitoring Report submitted to the RE or BI and MMC.
3. When applicable to the situation, the PI shall include written verification from the Native American (Kumeyaay) consultant/monitor indicating that Native American

resources were treated in accordance with state law and/or applicable agreements. If the resources were reinterred, verification shall be provided to show what protective measures were taken to ensure no further disturbance occurs in accordance with Section IV – Discovery of Human Remains, Subsection 5.

D. Final Monitoring Report(s)

1. The PI shall submit one copy of the approved Final Monitoring Report to the RE or BI as appropriate, and one copy to MMC (even if negative), within 90 days after notification from MMC that the draft report has been approved.
2. The RE shall, in no case, issue the Notice of Completion and/or release of the Performance Bond for grading until receiving a copy of the approved Final Monitoring Report from MMC that includes the Acceptance Verification from the curation institution.

5.7.4.4 Significance After Mitigation

Implementation of **MM-HIST-1** would reduce impacts related to historical and tribal cultural resources to less-than-significant levels.

5.7.5 Impact Analysis

Issue 4: Human Remains

Would the project result in the disturbance of any human remains, including those interred outside of formal cemeteries?

5.7.5.1 Impact Discussion

The APE is not located on a known or formal cemetery, and no historical resources, including evidence of human remains, were identified during the cultural resources study. In the highly unlikely event of such discovery, compliance with existing state laws, including those previously detailed in Section 5.7.2, *Regulatory Framework*, and also set forth in **MM-HIST-1**, would ensure that human remains would not be disturbed. As previously detailed in **MM-HIST-1**, if human remains are discovered, work would halt in that area and no soil would be exported off site until a determination could be made regarding the provenance of the human remains, and the procedures set forth in CEQA Section 15064.5(e), California PRC Section 5097.98, and HSC Section 7050.5 would be followed. Impacts during operation are not anticipated, as the project site would be constructed and paved as a roadway.

5.7.5.2 Significance of Impacts

Construction activities are not expected to disturb human remains. In the unlikely event of discovery, compliance with existing state laws set forth in **MM-HIST-1** would be required, including relevant sections of the California PRC and HSC.

5.7.5.3 Mitigation Measures

The proposed project would be required to comply with **MM-HIST-1**.

5.7.5.4 Significance After Mitigation

Implementation of **MM-HIST-1** would reduce impacts related to human remains to less-than-significant levels.

5.8 Hydrology and Water Quality

This section describes the existing conditions and applicable laws and regulations for hydrology and water quality, followed by an analysis of the proposed project's potential to increase runoff, significantly alter drainage patterns, violate water quality standards or waste discharge requirements, or otherwise substantially degrade water quality. As described in Chapter 1, *Introduction*, the Quarry Falls PEIR is incorporated by reference within this DEIR. Although excerpts from the Quarry Falls PEIR are replicated and cited in parts within this section, readers are encouraged to review Sections 5.9, *Hydrology*, and 5.13, *Water Quality*, of that PEIR for the complete analysis that pertains to that development.

5.8.1 Existing Conditions

5.8.1.1 Hydrology

Hydrologic Characteristics

The project site is located within the San Diego River Watershed Management Area. With a land area of approximately 440 square miles, the San Diego River watershed is the second largest hydrologic unit in San Diego County. It also has the highest population of the County's watersheds and contains portions of the cities of San Diego, El Cajon, La Mesa, Poway, and Santee and several unincorporated jurisdictions. Hydrologic units are further subdivided for planning purposes. As shown in Figure 5.8-1, the project site is within the Mission San Diego Hydrologic Subarea (907.11) of the Lower San Diego Hydrologic Area (907.10), which is located within the San Diego Hydrologic Unit (907.00). The Mission San Diego Hydrologic Subarea encompasses approximately 37,000 acres. Annual precipitation ranges from less than 11 inches at the coast to about 35 inches around the Cuyamaca and El Capitan Reservoirs.

Soils and Geologic Formations

Five surficial soil types and one geologic formation underlie the project site. The surficial deposits consist of compacted fill, undocumented fill, topsoil, and alluvium, and the geologic formation is Terrace Deposits underlain by Stadium Conglomerate.

Soils are typically classified by the Natural Resource Conservation Service into four hydrologic soil groups of A, B, C, and D based on the soil's runoff potential. Group A generally has the smallest runoff potential and Group D the greatest. The soil at the project site is classified in Group D, having a high runoff potential.

Stormwater

The project site receives stormwater run-on that is discharged from areas of higher elevation to the north, east, and west. The drainage tributary areas contributing to run-on that discharges onto the area are composed of four offsite basins, as depicted on Figure 5.8-2. This figure also shows the general flow path of each of these basins, as well as the existing stormwater flow path on the area.

Run-on generated from the offsite basin and runoff generated on the area flows toward the south and enters the adjacent Quarry Falls site, which then drains toward an existing storm drain system to the San Diego River, as shown in Figure 5.8-2. Stormwater from the Quarry Falls site is handled by two main storm drain systems.

- **West Storm Drain System** – Consists of a 7- by 7-foot box culvert located under Friars Road near the southwest corner of the Quarry Falls site. This box culvert conveys stormwater through an open channel to a second 6- by 5-foot box culvert that discharges stormwater into the San Diego River.
- **East Storm Drain System** – Consists of a 24-inch storm drain located under the intersection of Friars Road and Qualcomm Way near the southeast corner of the Quarry Falls site. This 24-inch storm drain expands to a 36-inch storm drain before discharging stormwater into the San Diego River.

5.8.1.2 Water Resources

Surface Water

The San Diego region has 13 principal stream systems originating in the western highlands that flow to the Pacific Ocean. Most of the streams of the San Diego region are interrupted in character, having both perennial and ephemeral components due to the rainfall pattern and the development of surface water impoundments. As previously described, the project site is located within the Mission San Diego Hydrologic Subarea (907.11) of the Lower San Diego Hydrologic Area (907.10), which is located within the San Diego Hydrologic Unit (907.00). According to the Water Quality Control Plan for the San Diego Basin (Basin Plan; San Diego RWQCB 1994), the nearest surface water resource to the project site is the Lower San Diego River, approximately 0.7 mile to the south.

Flooding

The Federal Emergency Management Agency (FEMA) provides all floodplain information through the publication of Flood Insurance Rate Maps. All Flood Insurance Rate Maps delineate the location of 100- and 500-year floodplains. Based on these maps, the project site is not located within a 100- or 500-year floodplain.

Groundwater

A groundwater basin is defined as a hydrogeologic unit containing one large aquifer as well as several connected and interrelated aquifers. The project site is located adjacent to the 11.5-square-mile Mission Valley Groundwater Basin. Drained by the San Diego River, this basin underlies an east-west-trending valley and is bound by lower permeability San Diego, Poway, and Lindavista Formations. The principal water-bearing deposit is alluvium consisting of medium- to coarse-grained sand and gravel.

The exact depth to groundwater at the project site is unknown. Review of water-level data available from former monitoring wells located at the Vulcan Materials fuel dispensing area approximately 2,700 feet southwest of the project site indicates a depth to groundwater of 30 feet below ground surface measured in 2003. A review of water-level data by Geocon Inc. for wells in the vicinity of the Quarry Falls site indicates that groundwater ranges from 30 to 65 feet below ground surface. Groundwater is expected to occur deeper than 30 feet at the area, but perched groundwater may be

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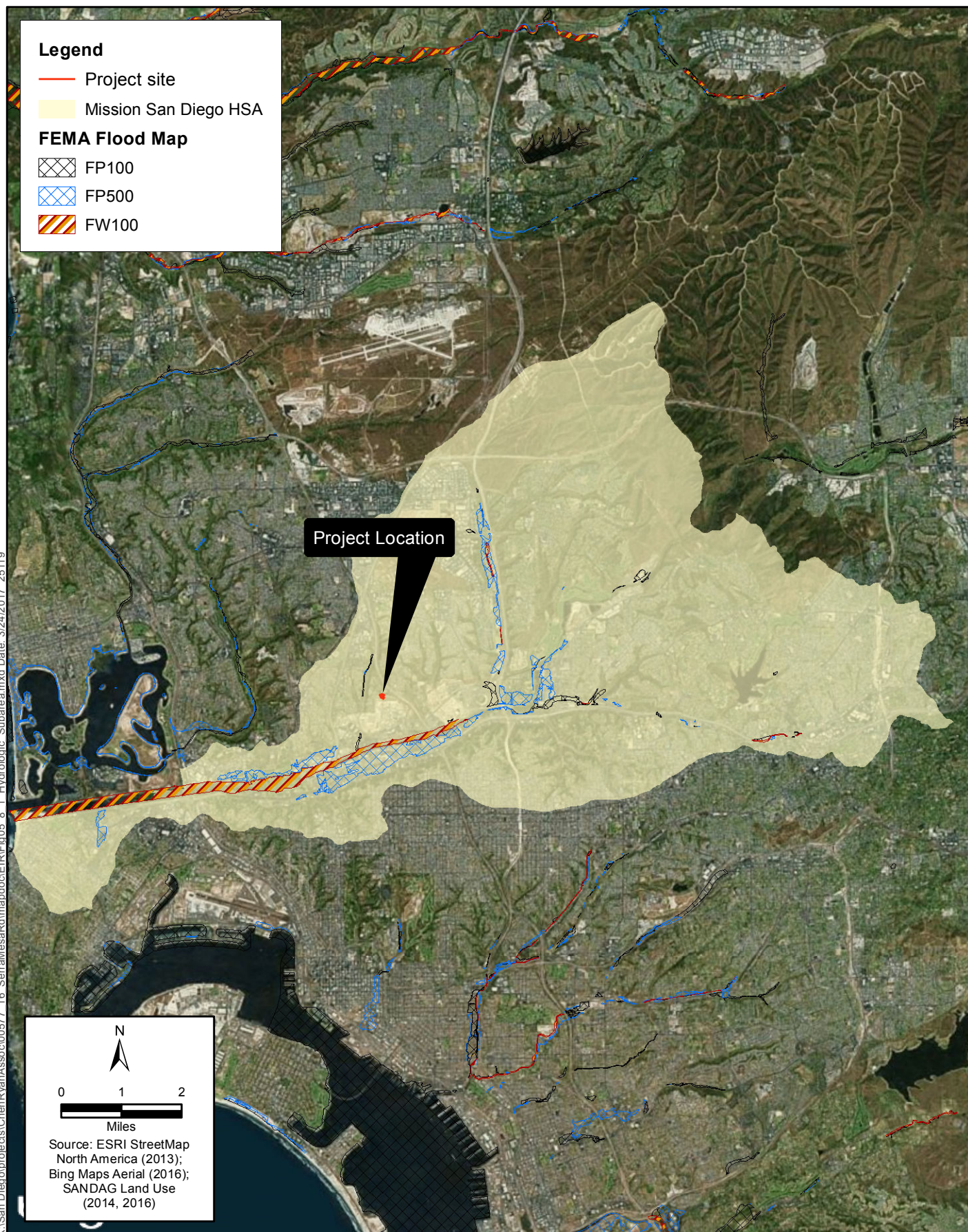
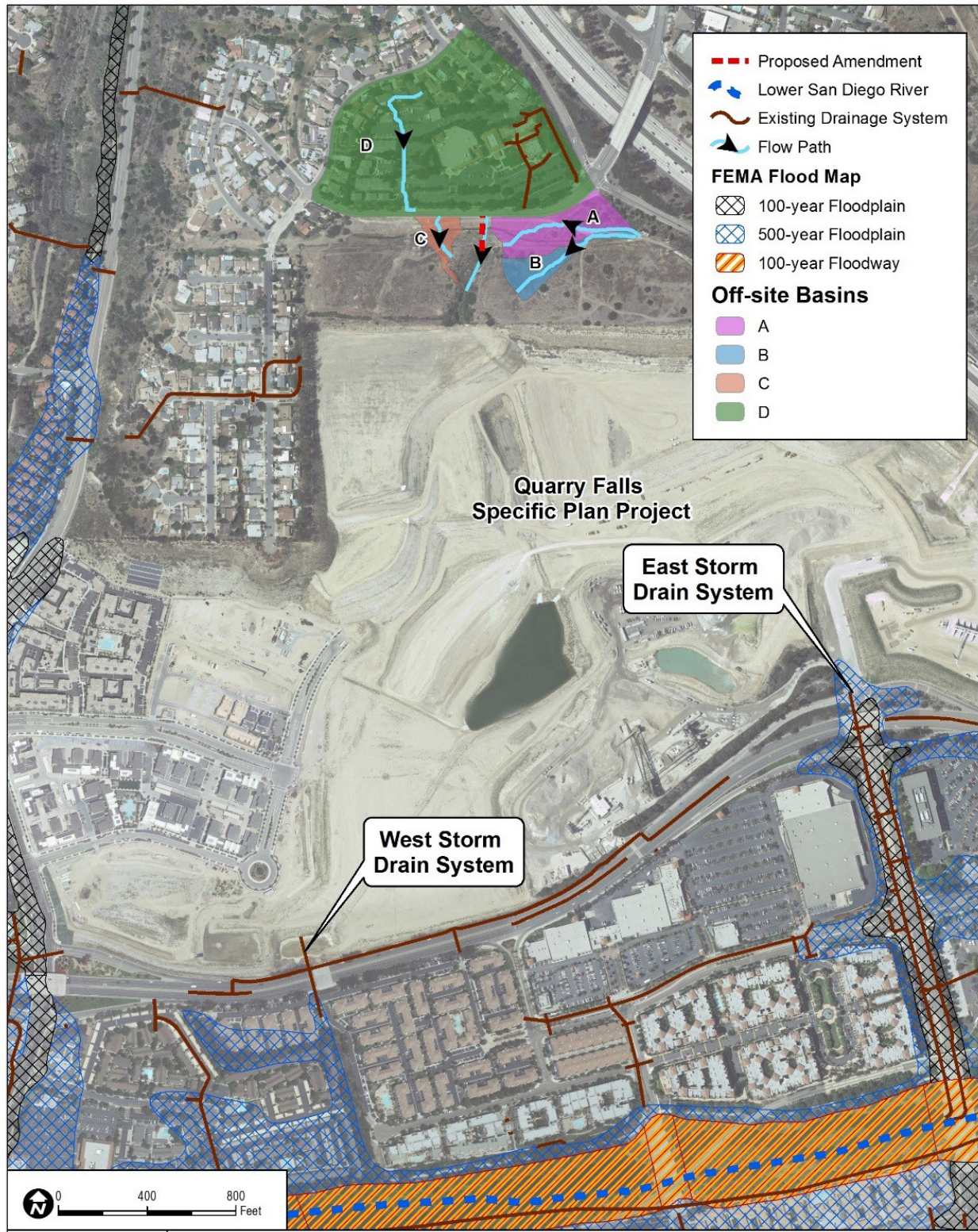


Figure 5.8-1
Hydrologic Subarea



Source: City of San Diego, 2016.

Figure 5.8-2
Drainage Overview

encountered near the water level within the existing drainage channel located on and immediately west of the area. Seasonal fluctuations of onsite groundwater conditions are assumed.

Water Quality

Stormwater that accumulates on impervious surfaces, such as parking lots, rooftops, and streets, drains directly and indirectly to waters of the United States. The City's stormwater conveyance system is separate from the sanitary sewer system and therefore does not receive any treatment prior to being discharged into streams, bays, and the ocean. The primary pollutants of concern in urban runoff are sediments, nutrients, heavy metals, organic compounds, trash and debris, oils, bacteria, and pesticides. Construction-related pollutants include sediment, concrete, paints and solvents, and hazardous materials associated with operation and maintenance of heavy equipment. Water quality is affected by sedimentation caused by erosion, runoff carrying contaminants, and direct discharge of pollutants (point-source pollution). As land is developed, the new impervious surfaces send an increased volume of runoff containing oils, heavy metals, pesticides, fertilizers, and other contaminants (nonpoint-source pollution) into adjacent watersheds.

The Lower San Diego River is designated as water quality limited segment for indicator bacteria pursuant to Clean Water Act (CWA) Section 303(d). Total maximum daily loads have been adopted to address these impairments. Groundwater quality in the Mission Valley Groundwater Basin is variable, with reported total dissolved solids (TDS) concentrations of 500 to 3,000 milligrams per liter. Impairments to groundwater include magnesium and sulfate, which are high for domestic use. In addition, chloride and TDS concentrations are high for domestic and irrigation use.

In the Basin Plan (San Diego RWQCB 1994), beneficial uses are defined as the uses of water necessary for the survival or well-being of humans, plants, and wildlife. The San Diego River and the groundwater in the Mission San Diego Hydraulic Subarea have been assigned beneficial uses in the Basin Plan in order to comply with the California Water Code and the federal CWA. The San Diego River has been assigned the beneficial uses of agricultural supply; industrial service supply; contact water recreation; non-contact water recreation; preservation of biological habitats of special significance; warm freshwater habitat; wildlife habitat; and rare, threatened, or endangered species habitat. The groundwater in the Mission San Diego Hydraulic Subarea has been assigned the potential beneficial use for municipal and domestic supply as well as the existing beneficial uses of agricultural supply, industrial service supply, and industrial process supply.

5.8.2 Regulatory Framework

Several federal, state, and local regulations govern discharges associated with construction and post-construction stormwater runoff to protect the water quality of receiving waters. The following is a summary of the regulatory framework that has been established to protect water resources.

5.8.2.1 Federal

Clean Water Act

The federal CWA of 1972 (United States Code, Title 33, Section 1251 et seq.) was designed to restore and maintain the chemical, physical, and biological integrity of waters of the United States. The CWA directs states to establish water quality standards for all waters of the United States and to review and update such standards every 3 years. The U.S. Environmental Protection Agency (EPA) has

delegated responsibility for implementation of portions of the CWA to the State Water Resources Control Board (SWRCB) and the Regional Water Quality Control Boards (RWQCBs), including water quality control planning and control programs. Applicable CWA sections include the following.

Section 208

Section 208 of the CWA requires all states to assess damages to water quality from nonpoint source pollution and to develop either regulatory or non-regulatory programs to control the pollution. The state's Section 208 program must meet EPA approval.

Section 303

Section 303 of the CWA requires states to adopt water quality standards for all surface waters of the United States. Section 304(a) requires EPA to publish water quality criteria that accurately reflect the latest scientific knowledge on the kind and extent of all effects on health and welfare that may be expected from the presence of pollutants in water. Where multiple uses exist, water quality standards must protect the most sensitive use. Water quality standards are typically numerical, although narrative criteria based on biomonitoring methods may be employed where numerical standards cannot be established or where they are needed to supplement numerical standards. Section 303(c)(2)(b) of the CWA requires states to adopt numerical water quality standards for toxic pollutants for which EPA has published water quality criteria and which reasonably could be expected to interfere with designated uses of a water body.

Under Section 303(d) of the CWA, SWRCB is required to develop a list of water quality limited segments for jurisdictional waters of the United States. The waters on the list do not meet water quality standards; therefore, the RWQCBs are required to establish priority rankings and develop action plans, called Total Maximum Daily Loads (TMDL), to improve water quality. A TMDL is a calculation of the maximum amount of a specific pollutant that a water body can receive and still meet federal water quality standards as provided in the CWA. TMDLs account for all sources of pollution, including point sources, nonpoint sources, and natural background sources. The CWA Section 303(d) list of impaired water bodies provides a prioritization and schedule for development of TMDLs for states. SWRCB, in compliance with CWA Section 303(d), publishes the list of water quality-limited segments in California, which includes a priority schedule for development of TMDLs for each contaminant or "stressor" affecting the water body.

Section 401

Every applicant for a federal permit or license for any activity that may result in a discharge to a water body must obtain a Section 401 Water Quality Certification for the proposed activity and must comply with state water quality standards prescribed in the certification. In California, these certifications are issued by SWRCB under the auspices of nine RWQCBs. Most certifications are issued in connection with CWA Section 404 U.S. Army Corps of Engineers (USACE) permits for dredge and fill discharges.

Section 402

Section 402(p) of the CWA was amended in 1987 to require EPA to establish regulations for permitting of municipal and industrial (including active construction sites) stormwater discharges under the National Pollutant Discharge Elimination System (NPDES) permit program. EPA published final regulations for industrial and municipal stormwater discharges on November 16, 1990. The

NPDES program requires certain industrial facilities and municipalities of a certain size that discharge pollutants into waters of the United States to obtain a permit. Stormwater discharges in California are commonly regulated through general and individual NPDES permits, which are adopted by SWRCB or the RWQCBs and are administered by the RWQCBs. EPA requires NPDES permits to be revised to incorporate waste-load allocations for TMDLs when the TMDLs are approved (Code of Federal Regulations, Title 40, Section 122).

Section 404

This section establishes a permit program administered by USACE that regulates the discharge of dredged materials into waters of the United States, including wetlands. Activities in waters of the United States that are regulated under this program include fills for development, water resource projects, infrastructure development, and conversion of wetlands to uplands for farming and forestry. CWA Section 404 permits are issued by USACE. There are no wetlands on the project site.

National Flood Insurance Act

The National Flood Insurance Act of 1968 established the National Flood Insurance Program, a federal program administered by FEMA. It enables individuals who have property within the 100-year floodplain to purchase insurance against flood losses. The project site is not within a 100-year floodplain.

5.8.2.2 State

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (California Water Code, Division 7, 13000 et seq.) authorizes SWRCB to adopt, review, and revise policies for all “waters of the State” (including both surface water and groundwater) and directs the RWQCB to develop regional basin plans. Section 13170 of the California Water Code also authorizes SWRCB to adopt water quality control plans on its own initiative. The San Diego Basin Plan (San Diego RWQCB 1994) is designed to preserve and enhance the quality of water resources in the San Diego region for the benefit of present and future generations. The purpose of the Basin Plan is to designate beneficial uses of the region’s surface water and groundwater, designate water quality objectives for the reasonable protection of those uses, and establish an implementation plan to achieve the objectives.

All projects resulting in discharges, whether to land or water, are subject to Section 13263 of the California Water Code and are required to obtain approval of Waste Discharge Requirements (WDRs) from the RWQCBs. Land- and groundwater-related WDRs (i.e., non-NPDES WDRs) regulate discharges of process and wash-down wastewater and privately or publicly treated domestic wastewater. WDRs for discharges to surface waters also serve as NPDES permits. These regulations are applicable to the project.

State Antidegradation Policy

The state’s Antidegradation Policy restricts degradation of surface and ground waters. This policy protects water bodies where existing quality is higher than necessary for the protection of beneficial uses. It establishes three conditions that must be met before the quality of high-quality waters may be lowered by waste discharges. The state must determine that lowering the quality of high-quality waters: (1) will be consistent with the maximum benefit to the people of the state; (2) will not

unreasonably affect present and anticipated beneficial uses of such water; and (3) will not result in water quality less than that prescribed in state policies.

Construction General Permit

Pursuant to CWA Section 402(p) and as related to the goals of the Porter-Cologne Water Quality Control Act, SWRCB has issued a statewide NPDES General Permit for Stormwater Discharges Associated with Construction Activity (Order No. 2009-0009-DWQ, NPDES No. CAS000002, as amended by Order 2010-0014-DWQ and 2012-006-DWQ) (Construction General Permit), adopted September 2, 2009 (SWRCB 2012). Every construction project that disturbs 1 or more acres of land surface or that is part of a common plan of development or sale that disturbs more than 1 acre of land surface would require coverage under this Construction General Permit. Construction activities subject to the Construction General Permit include clearing, grading, and disturbances to the ground, such as stockpiling or excavation, that result in soil disturbances of at least 1 acre of total land area. To obtain coverage under this Construction General Permit, the landowner or other applicable entity must file Permit Registration Documents prior to the commencement of construction activity, which include a Notice of Intent (NOI) and Stormwater Pollution Prevention Plan (SWPPP) prepared by a Qualified SWPPP Developer, and mail the appropriate permit fee to SWRCB.

The SWPPP has two major objectives: (1) to help identify the sources of sediment and other pollutants that affect the quality of stormwater discharges; and (2) to describe and ensure the implementation of best management practices (BMPs) to reduce or eliminate sediment and other pollutants in stormwater and non-stormwater discharges. BMPs are intended to reduce impacts to the maximum extent practicable (MEP), which is a standard created by Congress to allow regulators the flexibility necessary to tailor programs to the site-specific nature of municipal stormwater discharges. The SWPPP is required to be implemented and monitored regularly by a Qualified SWPPP Practitioner. Reducing impacts to the MEP generally relies on BMPs that emphasize pollution prevention and source control, with additional structural controls as needed. The Construction General Permit requires that specific minimum BMPs be incorporated into the SWPPP, depending on the project's sediment risk to receiving waters based on the project's erosion potential and receiving water sensitivity to sediment.

Municipal Storm Water Permit

CWA Section 402 mandates permits for municipal stormwater discharges, which are regulated under the NPDES General Permit for Municipal Separate Storm Sewer Systems (MS4 Permit). Phase I MS4 Permit regulations cover medium (serving between 100,000 and 250,000 people) and large (serving more than 250,000 people) municipalities. Phase II (Small MS4 Permit) regulations require that stormwater management plans/programs be developed by municipalities with populations smaller than 100,000, including non-traditional Small MS4s, which are facilities such as military bases, public campuses, and prison and hospital complexes.

MS4 Permits require that cities and counties develop and implement programs and measures, including BMPs, control techniques, system design and engineering methods, and other measures as appropriate, to reduce the discharge of pollutants in stormwater to the maximum extent possible. As part of permit compliance, these permit holders have created stormwater management plans for their respective locations. These plans outline the requirements for municipal operations, industrial and commercial businesses, construction sites, and planning and land development. These

requirements may include multiple measures to control pollutants in stormwater discharge. During implementation of specific projects under the program, project applicants are required to follow the guidance contained in the stormwater management plans as defined by the permit holder in that location.

SWRCB is advancing Low-Impact Development (LID) in California as a means of complying with municipal stormwater permits. LID incorporates site design, including among other things the use of vegetated swales and retention basins and minimization of impermeable surfaces, to manage stormwater to maintain a site's predevelopment runoff rates and volumes.

5.8.2.3 Local

San Diego Integrated Regional Water Management Plan

The 2013 San Diego Integrated Regional Water Management Plan was prepared under the direction of a Regional Water Management Group consisting of the San Diego County Water Authority, the County of San Diego, and the City of San Diego. The Integrated Regional Water Management Plan builds on local water and regional management plans within the San Diego region and is aimed at developing long-term water supply reliability, improving water quality, and protecting natural resources. The primary goals of the plan are to protect and enhance water quality, protect and enhance our watersheds and natural resources, and to promote and support sustainable integrated water resource management.

Dewatering Permit

Discharges from specified groundwater extraction activities (such as construction dewatering) must be permitted either by the San Diego RWQCB under the General Order R9-2015-0013 for groundwater waste discharges to surface waters or authorized by the agency with jurisdiction if discharged to a municipal separate storm sewer system (MS4). Discharge is required to meet applicable constituent limitations and pre-treatment requirements.

Water Quality Control Plan for the San Diego Basin

As previously described, the Porter-Cologne Act requires that RWQCBs adopt water quality control plans for watersheds within their jurisdictions. These plans establish water quality standards for particular surface water bodies and groundwater resources.

The San Diego RWQCB (Region 9) is responsible for the Basin Plan (San Diego RWQCB 1994). It sets forth water quality objectives for constituents that could cause an adverse effect or impact on the beneficial uses of water. Specifically, the San Diego Basin Plan is designed to accomplish the following.

- Designate beneficial uses for surface water and groundwater.
- Set the narrative and numerical objectives that must be attained or maintained to protect the designated beneficial uses.
- Describe implementation programs to protect the beneficial uses of all waters within the region.
- Describe surveillance and monitoring activities to evaluate the effectiveness of the Basin Plan.

The Basin Plan incorporates by reference all applicable SWRCB and RWQCB plans and policies.

San Diego Regional Municipal Stormwater Permit

The San Diego Regional Municipal Stormwater Permit (Order R9-2013-0001 [as amended by Order R9-2015-0001]) (Municipal Permit) regulates the conditions under which stormwater and non-stormwater discharges into and from MS4s are prohibited or limited. There are numerous jurisdictions that are covered under the Municipal Permit, including 18 cities, the County of San Diego, the San Diego Regional Airport Authority, and the San Diego Unified Port District, also known as the co-permittees. Each owns or operates an MS4, through which it discharges stormwater and non-stormwater into waters of the United States within the region.

The co-permittees are subject to the requirements of the Municipal Permit. The Municipal Permit establishes prohibitions and limitations with the goal of protecting water quality and designated beneficial uses of waters of the United States from adverse impacts caused by or contributed to by MS4 discharges. The Municipal Permit requires that each co-permittee implement a Jurisdictional Urban Runoff Management Program (JURMP) to control the contribution of pollutants to and the discharges from the MS4. The goal of the JURMPs is to implement water quality improvement strategies and runoff management programs that effectively prohibit non-stormwater discharges into the MS4s and reduce pollutants in discharges from the co-permittees' MS4s to the maximum extent practicable.

The Municipal Permit also requires that the co-permittees collectively develop a Water Quality Improvement Plan (WQIP) for each of 10 Watershed Management Areas in the region. These plans identify the highest priority water quality conditions within each watershed and specific goals, strategies, and schedules to address those priorities, including numeric goals and action levels, and requirements for water quality monitoring and assessment. The co-permittees are required to implement strategies through their JURMPs to achieve the goals of the WQIPs. The San Diego River WQIP applies to the project, which is detailed below.

The co-permittees developed the *County of San Diego BMP Design Manual* (County of San Diego 2016), which provides procedures for planning, selecting, and designing onsite structural BMPs for new development and significant redevelopment projects in accordance with Municipal Permit requirements. The *BMP Design Manual* became effective on February 26, 2016, and requires all projects to implement source-control BMPs to address specific sources of pollutants and apply site design BMPs to the development site.

As the project would qualify as a Priority Development Project (PDP), stormwater pollutant control BMPs must be implemented and meet the following performance standards.

1. Retain onsite the pollutants contained in the volume of stormwater runoff produced from a 24-hour, 85th percentile storm event by infiltration, evaporation, evapotranspiration, or harvest and reuse, and
 - a. Treat the remaining volume infeasible to retain on-site through biofiltration, and
 - b. Treat the remaining volume infeasible to treat through biofiltration with flow-through treatment control BMPs and participate in alternative compliance methods to mitigate for the pollutants not being retained on site.
2. Or, the project may be allowed to participate in an alternative compliance program in lieu of fully complying with the onsite performance standards if such a program is available in the jurisdiction of the project. Flow-through treatment control BMPs would also need to be implemented on site.

Under the Municipal Permit, co-permittees are required to implement stormwater management requirements and controls, which include requirements for stormwater BMPs during construction and post-construction, including implementing LID BMPs for development and significant redevelopment to reduce pollutants in stormwater runoff from sites through more natural processes such as infiltration and biofiltration. The *BMP Design Manual* (County of San Diego 2016) provides guidance for the BMP selection process. Design techniques include minimizing impervious areas, conserving natural areas, and utilizing vegetation and landscaping for water quality treatment benefits. Co-permittees are also required to comply with hydromodification management requirements per the *BMP Design Manual* to reduce the potential for increased erosion in receiving waters due to increased runoff rates and durations often caused by development and increased impervious surfaces.

Finally, PDPs are required to prepare a Storm Water Quality Management Plan (SWQMP). The PDP SWQMP is required to document that all permanent source control and site design BMPs have been considered for the project and implemented where feasible, document the planning process and the decisions that led to the selection of structural BMPs, provide the calculations for design of structural BMPs to demonstrate that applicable performance standards are met by the structural BMP design, identify operations and management requirements of the selected structural BMPs, and identify the maintenance mechanism for long-term operations and management of structural BMPs. The PDP SWQMP also must include copies of the relevant plan sheets showing site design, source control, and structural BMPs, and structural BMP maintenance requirements.

San Diego River Water Quality Improvement Plan

The Municipal Permit requires the phased development and implementation of a WQIP for the San Diego River watershed. As previously detailed, the San Diego River WQIP applies to the project site. The San Diego River WQIP prioritizes and addresses water quality conditions that are influenced by storm drain discharges by applying adaptive planning and management processes that are linked to the highest priority water quality condition relative to these discharges and receiving water quality improvements.

According to the San Diego River WQIP, the highest priority water quality condition is bacteria in the Lower San Diego River Watershed. Bacteria has been a focus in the watershed since adoption of the Bacteria TMDL (Water Board Resolution No. R9-2010-0001). The purpose of the Bacteria TMDL is to protect the health of those who recreate at beaches and streams. The TMDL requires responsible agencies to attain required load reductions during both dry weather and wet weather conditions within a 10- and 20-year compliance timeline, respectively. In 2012, the participating agencies of the WQIP developed a Comprehensive Load Reduction Program that proposed programs designed to achieve TMDL-specified bacteria load reductions, as well as reductions of loads of other 303(d)-listed pollutants.

Drainage Design Manual

The City of San Diego Drainage Design Manual (1984) provides policies and procedures for projects to implement regarding hydrology and design of associated infrastructure to attain reasonable standardization of drainage design throughout the City. The basic considerations are to protect the roadway and property against damage from artificial, storm, and subsurface waters; to provide for public health and safety; and to provide for low maintenance while taking into account the effect of the proposed improvement on traffic and property.

Council Policy 800-04

The purpose of Council Policy 800-04 (Drainage Facilities) is to establish guidelines for the construction and maintenance of stormwater drainage facilities and to identify and assign general financial responsibilities for the construction of various types of drainage facilities.

City of San Diego Storm Water Standards Manual

The primary objectives of the City Storm Water Standards Manual are to:

- Prohibit non-stormwater discharges.
- Reduce the discharge of pollutants to stormwater conveyance systems to the maximum extent practicable by implementing BMPs during the project's construction and operational phases.
- Provide consistency with the BMP Design Manual (County of San Diego 2016).
- Provide guidance for proper implementation of LID facilities and design approaches.
- Provide guidance for conformance with regional hydromodification management requirements.

This manual was updated, and was adopted and took effect in February 2016 to meet the requirements of the BMP Design Manual (County of San Diego 2016) in compliance with the Municipal Permit.

City of San Diego Flood Mitigation Plan

The City of San Diego prepared a citywide Flood Mitigation Plan to meet the requirements of the FEMA Disaster Mitigation Act of 2000. This plan meets the requirements for plans prepared under the FEMA program and addresses options for reducing flood hazards. As previously described, the project site is not within a 100-year floodplain or within a flood hazard area.

City of San Diego Municipal Code

The City's Municipal Code defines the regulations concerning hydrology, water quality, and floodways/floodplains in the following sections: Stormwater Management and Discharge Control Regulations (Chapter 4, Article 3, Division 3), Storm Water Runoff and Drainage Regulations (Chapter 14, Article 2, Division 2); and Environmentally Sensitive Lands Regulations (Chapter 14, Article 3, Division 1).

The purpose of the Stormwater Management and Discharge Control regulations is to further ensure the health, safety, and general welfare of the citizens of the City of San Diego by controlling and eliminating non-stormwater discharges to the stormwater conveyance system and reducing the pollutants in urban stormwater discharges to the maximum extent practicable.

All development must comply with the Storm Water Runoff and Drainage Regulations and implement measures designed to prevent erosion and control sediment, which serve to regulate the development of and impacts on drainage facilities; limit water quality impacts from development; and to minimize impacts on environmentally sensitive lands.

The purpose of development regulations for environmentally sensitive lands is to protect, preserve, and, where damaged, restore the environmentally sensitive lands of the City and the viability of the species supported by those lands. These regulations are intended to ensure that development occurs

in a manner that protects the overall quality of the resources and the natural and topographic character of the area, encourages a sensitive form of development, and reduces hazards due to flooding in specific areas while minimizing the need for construction of flood control facilities.

5.8.3 Significance Determination Thresholds

5.8.3.1 Issue Questions

The following issue questions are based on the City's Significance Determination Thresholds (2016) and provide the basis for determining significance of impacts on hydrology and water quality as a result of the proposed project's implementation.

Impacts are considered significant if the project would result in any of the following.

1. A substantial increase in impervious surfaces and associated increased runoff.
2. A substantial alteration to on- and offsite drainage patterns due to changes in runoff flow rates or volumes.
3. An increase in pollutant discharge to surface and groundwater, including downstream sedimentation, to receiving waters during or following construction, including discharge to an already impaired water body.
4. An increase in pollutant discharge to receiving waters during construction or operation, including discharge to an impaired waterbody or violate federal, state, or regional water quality standards or waste discharge requirements.

5.8.4 Impact Analysis

Issue 1: Runoff

Would the proposed project result in a substantial increase in impervious surfaces and associated increase in runoff?

5.8.4.1 Impact Discussion

Implementation of the project would result in an increase of impervious surfaces within the project site and an associated increase in runoff flow and volume. The increase in impervious surfaces due to the development of the roadway extension would result in a change in impervious surfaces from 0 to approximately 1.25 acres.

An increase in stormwater runoff from the addition of approximately 1.25 acres of impervious surfaces would be considered a PDP per the City's MS4 Permit. The project would be required to comply with the City's MS4 Permit and implement hydromodification management requirements to reduce runoff rates and durations caused by development and increased impervious surfaces. The purpose of hydromodification management requirements for PDPs is to minimize the potential of stormwater discharges from the MS4 from causing altered flow regimes and excessive downstream erosion in receiving waters.

PDPs subject to hydromodification management requirements must provide flow control for post-project runoff to meet the flow control performance standard, which would occur during final design of the project and would be subject to approval by the City. This is typically accomplished

using structural BMPs that may include any combination of infiltration basins; bioretention, biofiltration with partial retention, or biofiltration basins; or detention basins. If onsite retention and biofiltration systems are not feasible, an onsite flow-through BMP would be developed alongside an alternative compliance program per the City's *Storm Water Standards Manual* requirements, to the satisfaction of the City Engineer. In compliance with the MS4 Permit, the proposed project would be required to prepare a SWQMP to document that the general requirements of the MS4 Permit are met, including hydromodification management BMP requirements. Overall, the BMPs would capture and treat stormwater in order to reduce the runoff volumes associated with the project compared to existing conditions. As a result, the project would not result in flood hazards on other properties.

The project site is not located within a FEMA-designated 100-year flood zone (FEMA 2012), and the change in stormwater runoff as a result of the proposed project would not increase flooding on- or off site. Impacts from substantial alteration to on- or offsite drainage patterns due to changes in runoff flow rates or volumes as a result of the roadway extension would be less than significant.

Because the area is located on Group D soils that have the highest potential for runoff and therefore the lowest potential for infiltration and groundwater recharge, groundwater recharge in the Mission San Diego Hydrological Subarea would not be substantially altered following implementation of the proposed project. The proposed project is not located within an area using well water and would not have a substantial effect on groundwater supply. Future implementation of the proposed roadway extension would not use well water nor would groundwater extraction wells be installed as part of the project. Overall, the project would result in less-than-significant impacts on groundwater recharge.

5.8.4.2 Significance of Impact

Construction of the project would introduce new impervious surfaces, but the project would be designed to be consistent with all applicable regulations. Prior to construction of the roadway, the final design of the roadway would be required to demonstrate conformance with applicable stormwater regulations. With adherence to applicable regulations, the project would not affect the rate or volume of surface runoff. Impacts would be less than significant.

5.8.4.3 Mitigation Measures

Impacts would be less than significant; therefore, no mitigation is required.

5.8.5 Impact Analysis

Issue 2: Drainage Patterns

Would the proposed project result in substantial alteration to on- and offsite drainage patterns due to changes in runoff flow rates or volumes?

5.8.5.1 Impact Discussion

The project site has a general southward stormwater flow path. Currently, stormwater is discharged onto the Quarry Falls site. As discussed above, the project would result in an increase in impervious surfaces that would in turn result in increased stormwater runoff. However, as a result of compliance with the MS4 Permit and implementation of flow-through BMPs to address

hydromodification management requirements, the increase in associated runoff would not be a substantial alteration of existing stormwater runoff patterns adjacent to the project site and would be accommodated by the existing drainage system. Roadway-generated stormwater that would enter the drainage system would not result in substantial erosion and subsequent sedimentation of downstream water bodies, nor would it impact biological communities and archaeological resources, as the Quarry Falls site and the surrounding project vicinity is developed.

The project would be required to comply with the MS4 Permit, the City's Storm Water Standards, and the *BMP Design Manual* (County of San Diego 2016) to help maintain existing hydrologic conditions. The City's Storm Water Standards would mandate inclusion of LID and runoff management, which would reduce impervious surfaces and runoff volumes from current conditions, thereby improving the potential for flooding of the site.

5.8.5.2 Significance of Impact

As previously described in Section 5.8.4, prior to construction of the roadway, the final design of the roadway would be required to demonstrate conformance with applicable stormwater regulations in order to maintain existing hydrologic conditions. Compliance with existing regulations would ensure that alterations to drainage patterns would be less than significant.

5.8.5.3 Mitigation Measures

Impacts would be less than significant; therefore, no mitigation is required.

5.8.6 Impact Analysis

Issues 3 and 4: Water Quality

Would the proposed project result in (3) an increase in pollutant discharge to surface and groundwater, including downstream sedimentation, to receiving waters during or following construction, including discharge to an already impaired water body; or (4) an increase in pollutant discharge to receiving waters during construction or operation, including discharge to an impaired waterbody or violate federal, state, or regional water quality standards or waste discharge requirements?

5.8.6.1 Impact Discussion

Project implementation could potentially allow pollutants to enter receiving waters. However, standard construction and post-construction BMPs would be required, in accordance with both the Construction General Permit and Municipal Permit, to control construction- and operation-related erosion and sedimentation. Erosion and sediment controls would be used, and a project-specific SWPPP would be in place during construction activities to reduce the amount of soils disturbed, control erosion, and prevent sediment transport in runoff to surface/receiving waters. Erosion control plans would be prepared and submitted to the State of California and City of San Diego prior to construction.

Urban runoff from a developed roadway has the potential to contribute pollutants associated with automobiles. According to the *BMP Design Manual* (County of San Diego 2016), the project would fall under the category of Streets, Roads, Highways, Freeways and Driveways. The *BMP Design Manual* identifies the anticipated and potential pollutants to the stormwater conveyance system and

receiving waters for this category of projects as sediments, nutrients, heavy metals, organic compounds, trash and debris, oxygen-demanding substances, oil and grease, bacteria and viruses, and pesticides. The project would also have the potential to affect receiving waters. The most immediate receiving water for the area is the Lower San Diego River, approximately 0.7 mile to the south. The Lower San Diego River is on the 303(d) list for the various pollutants, including enterococcus, fecal coliform, low dissolved oxygen, manganese, nitrogen, phosphorus, TDS, and toxicity.

Pursuant to the *BMP Design Manual*, the entire volume of the 85th percentile, 24-hour rainfall event must be retained (i.e. intercept, store, infiltrate, evaporate, and evapotranspire). If the full volume cannot be retained on site, biofiltration pollutant controls can be implemented to treat the remaining volume. The project site and surrounding area contains various geotechnical constraints including steep slopes and Group D soils that would make biofiltration pollutant controls unlikely. While Green Street techniques could be used on Phyllis Place, due to onsite geological and soils constraints on the roadway extension itself, it is recommended that runoff be captured and routed for a combination of retention and biofiltration.

If the full volume of the 85th percentile storm cannot be feasibly captured and treated with a combination of retention and biofiltration BMPs, the project would be required to implement flow-through treatment control BMPs to treat runoff leaving the site and to implement an offsite alternative compliance program deemed by the jurisdiction-specific alternative compliance program to provide a greater overall water quality benefit for the portion of the pollutants not addressed on site. The MS4 Permit provides offsite Alternative Compliance, as an option for PDPs in lieu of implementing onsite structural BMPs to comply with pollutant control and hydromodification management requirements. The City's *Storm Water Standards Manual* contains Alternative Compliance requirements. As such, any runoff during construction and post-construction operations would be required to be minimized through these measures.

5.8.6.2 Significance of Impact

As previously described in the preceding issues, prior to construction of the roadway, the final design of the roadway would be required to demonstrate conformance with applicable stormwater regulations. The project would be required to comply with the Municipal Permit and Construction General Permit, the City Storm Water Standards, and the *BMP Design Manual*, and any runoff during construction and post-construction operations would be required to be minimized and treated through measures set forth by these regulations. Compliance with these measures would ensure significant impacts associated with water quality standards would be less than significant.

5.8.6.3 Mitigation Measures

No mitigation would be required.

5.9 Visual Effects and Neighborhood Character

This section describes the existing aesthetic and visual conditions that could be adversely affected by the proposed project; discusses the applicable laws and regulations related to aesthetics and visual quality; and analyzes the proposed project's effect on visual character, views of the project site, and views affected by introducing light or glare. The information and analysis in the following discussion have been compiled based on a review of pertinent documents.

5.9.1 Existing Conditions

5.9.1.1 Regional Context and Neighborhood Character

As discussed in Section 5.1, *Land Use*, the project site is within the southernmost portion of the Serra Mesa Community Planning Area as defined in the City's General Plan. The Serra Mesa Community Planning Area encompasses approximately 6,596 acres and is bounded by the Kearny Mesa Community Planning Area to the north, State Route (SR-) 163 and the Linda Vista Community Planning Area to the west, generally Interstate (I-) 15 to the east, and the Mission Valley Community Planning Area to the south. The Serra Mesa Community Planning Area is characterized primarily by single-family residential development. Serra Mesa also contains a large concentration of medical uses, including three major hospitals: Sharp Memorial, Sharp Mary Birch Hospital for Women and Newborns, and Rady Children's.

In contrast to Serra Mesa, Mission Valley includes higher density uses, including a high concentration of multi-family residential uses (condominiums and apartments) as well as large commercial developments. In the more immediate vicinity, the project site is in a dense urban setting surrounded primarily by existing residential development and major transportation corridors. It is bounded by Phyllis Place to the north and the Quarry Falls mixed-use project to the east, west, and south, which is in various stages of construction. Surrounding land uses include the City View Church and single- and multi-family residential development to the north and northwest, single-family residential development to the west, and vacant/graded land to the east and south.

I-805 is approximately 0.22 mile to the east of the project site. I-805 is not a designated state scenic highway and no scenic highways are within the vicinity of the project site. The nearest state scenic highway is the portion of SR-163 from the south boundary of Balboa Park to the north boundary, which is approximately 3 miles southwest of the project site.

5.9.1.2 Project Site Visual Quality

As discussed in Chapter 2, *Environmental Setting*, the project site currently comprises approximately 2 acres of undeveloped land adjacent to the 230-acre Quarry Falls site. The project site's topography ranges in elevation from approximately 218 feet above mean sea level in the southern portion to 296 feet above mean sea level in the northern portion. The northern portion of the project site slopes upward on a hillside to the point where it abuts Phyllis Place. The middle of the southern portion of the project site dips slightly in the center and then gently slopes upward to both the eastern and western edges of the project site.

The northern portion of the project site (where the proposed road would intersect with Phyllis Place) is visually characterized by hillside covered with sparse vegetation with adjacent offsite land also characterized visually as sparsely vegetated. The southern portion of the project site contains graded land, and land immediately adjacent and off site is characterized by expansive parcels of graded land. Overall, even though the site is primarily disturbed, the visual quality of the site is moderate due to the presence of the hillside.

5.9.1.3 Views from the Project Site

Short-range views from the project site are dominated by the graded Quarry Falls site to the south, east, and west including temporary construction activities and heavy equipment associated with development of the Quarry Falls project. Short-range views to the north and west consist primarily of the roadway of Phyllis Place as well as the landscaped campus of the City View Church. Some views are also available of multi-family residential development to the northwest. The tree-lined hills south of I-805 and the development of Mission Valley occupy background mid- and long-range views from the project site to the south, southeast, and southwest. Limited views of I-805 at its intersection with Friars Road are visible to the southeast from the southern part of the project site; however, in general, views of I-805 from the project area are largely obscured by intervening landscaping and development.

5.9.1.4 Views of the Project Site

From Phyllis Place to the immediate north, passing motorists, bicyclists, and pedestrians looking southward to the project site can see the flat mesa top of the northernmost portion of the project site, which includes vegetated disturbed chaparral and annual grassland, before it drops sharply into the Quarry Falls site below. A telecommunications tower and electrical pole structures adjacent to the project site are visible in the foreground from Phyllis Place. From the Phyllis Place vantage point, the rooftops of recently completed buildings within the Quarry Falls site are visible; however, the majority of the Quarry Falls site is not visible. From other surrounding roadways, such as Abbotshill Road or Kaplan Drive, intermittent views of the Quarry Falls development are available; however, the project site is not visible from these areas due to intervening single-family residences. In addition, according to the Quarry Falls PEIR, motorists traveling northbound on I-805 can see portions of the Quarry Falls development as they pass, although views are fleeting and limited due to the speed of travel and the need to look away from the direction of travel and below to view the area. However, again, views of the project site specifically are not available from I-805.

5.9.1.5 Existing Lighting, Glare, and Shading

With the exception of the Quarry Falls site immediately to the south, the project site is in a built-up urban area where neighborhood night lighting is a common feature. Light sources in the area include streetlights, building lights, illuminated signs, sidewalk lighting, and parking lot lighting. The existing lighting in the area is in compliance with all applicable City laws and regulations. The project site is not currently shaded by any structures, and there is no substantial glare within the immediate project vicinity.

5.9.2 Regulatory Framework

5.9.2.1 State

California Scenic Highway Program

The California Department of Transportation (Caltrans) manages the California Scenic Highway Program, which was created in 1963 by the California legislature to preserve and protect scenic highway corridors from changes that would diminish the aesthetic value of lands adjacent to highways. The program includes a list of highways that are eligible for designation as scenic highways or that have been designated as such. A highway may be designated as scenic based on how much of the natural landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes on the traveler's enjoyment of the view. State laws governing the Scenic Highway Program are found in the Streets and Highways Code, Sections 260 through 263. As previously described, the project site is not adjacent to a designated state scenic highway.

California Energy Code

The California Energy Code (24 CCR Part 6) creates standards to reduce energy consumption. The type of luminaries and the allowable wattage of certain outdoor lighting applications are regulated. Specifically, Section 110.9 provides mandatory requirements for lighting control devices and systems, ballasts, and luminaires.

5.9.2.2 Local

City of San Diego General Plan

The Urban Design Element of the City's General Plan provides guidance for development related to visual quality. It includes citywide design goals and policies regarding visual elements that complement the goals for pedestrian-oriented and walkable villages from the City of Villages strategy. The Urban Design Element also addresses urban form and design through policies aimed at respecting the natural environment, preserving open space systems, and targeting new growth into compact villages. Policies relevant to the project are detailed below.

Table 5.9-1. Relevant General Plan Policies

Policy Number	Policy
UD-A.1	Preserve and protect natural landforms and features.
UD-A.2	Use open space and landscape to define and link communities.
UD-A.3	Design development adjacent to natural features in a sensitive manner to highlight and complement the natural environment in areas designated for development.
UD-A.6	Create street frontages with architectural and landscape interest to provide visual appeal to the streetscape and enhance the pedestrian experience.
UD-A.10	Design or retrofit streets to improve walkability, bicycling, and transit integration; to strengthen connectivity; and to enhance community identity. Streets are an important aspect of Urban Design as referenced in the Mobility Element.

Policy Number	Policy
UD-A.13	Provide lighting from a variety of sources at appropriate intensities and qualities for safety.
UD-A.16	Minimize the visual and functional impact of utility systems and equipment on streets, sidewalks, and the public realm.
UD-B.1	Recognize that the quality of a neighborhood is linked to the overall quality of the built environment. Projects should not be viewed singularly, but viewed as part of the larger neighborhood or community plan area in which they are located for design continuity and compatibility.
UD-B.4	Create street frontages with architectural and landscape interest for both pedestrians and neighboring residents.
UD-B.5	<p>Design or retrofit streets to improve walkability, strengthen connectivity, and enhance community identity.</p> <ol style="list-style-type: none"> Design or retrofit street systems to achieve high levels of connectivity within the neighborhood street network that link individual subdivisions/projects to each other and the community. Avoid closed loop subdivisions and extensive cul-de-sac systems, except where the street layout is dictated by the topography or the need to avoid sensitive environmental resources. Design open ended cul-de-sacs to accommodate visibility and pedestrian connectivity, when development of cul-de-sacs is necessary. Emphasize the provision of high quality pedestrian and bikeway connections to transit stops/stations, village centers, and local schools. Design new streets and consider traffic calming where necessary, to reduce neighborhood speeding. Enhance community gateways to demonstrate neighborhood pride and delineate boundaries. Clarify neighborhood roadway intersections through the use of special paving and landscape. Develop a hierarchy of walkways that delineate village pathways and link to regional trails. Discourage use of walls, gates and other barriers that separate residential neighborhoods from the surrounding community and commercial areas.
UD-C.7	<p>Enhance the public streetscape for greater walkability and neighborhood aesthetics.</p> <ol style="list-style-type: none"> Preserve and enhance existing main streets. Establish build-to lines, or maximum permitted setbacks on designated streets. Design or redesign buildings to include architecturally interesting elements, pedestrian friendly entrances, outdoor dining areas, transparent windows, or other means that emphasize human-scaled design features at the ground-floor level. Implement pedestrian facilities and amenities in the public right-of-way including wider sidewalks, street trees, pedestrian-scaled lighting and signs, landscape, and street furniture. Relate the ground floor of buildings to the street in a manner that adds to the pedestrian experience while providing an appropriate level of privacy and security. Design or redesign the primary entrances of buildings to open onto the public street.

Serra Mesa Community Plan

The Serra Mesa Community Plan (adopted 1980; most recently amended in April 2011) contains an Environmental Management Element that “considers the total community environment and how it should be managed to achieve the quality of life desired by the Serra Mesa community.” Excerpts of relevant guidelines and policies are included below.

- Steep hillsides and canyons should be protected and preserved in a natural state. Where development is permitted, very low-density urbanization should occur. Natural features should be enhanced and areas of high scenic value and environmental sensitivity, conserved. This proposal can be implemented with steep hillside guidelines, open space zones and [Planned Residential Developments] PRD which is in character with the surrounding neighborhood
- Any public improvements such as roads, drainage channels, and utility services or any lessee development should be compatible with open space objectives. Public road improvements within open space areas are often not feasible due to the steep terrain and habitat preservation requirements, therefore, unimproved public road easements located within open space areas should be vacated and remain unbuilt. No through roads should be permitted to traverse designated open space.
- Diversity within neighborhoods should be encouraged to improve “sense of place” by: varying the type of street surfaces, sidewalks, lights, signs and other street furniture, innovative yet tasteful remodeling and individually distinctive landscaping.

City of San Diego Municipal Code

Land Development Code

The City’s Land Development Code (Chapters 11–15 of the Municipal Code) contains numerous provisions to guide the design of development throughout the City, including development restrictions and guidelines to protect and enhance environmentally sensitive lands (ESL). The ESL Regulations (Section 143.0101 et seq.) define steep hillsides as natural gradients equal to or in excess of 25% with a minimum elevation differential of 50 feet, or a natural gradient of 200% with a minimum elevation differential of 10 feet. The Land Development Code (Section 142.0101 et seq.) also contains grading regulations to address (among other things) landform preservation and require that all grading be designed and performed in conformance with applicable City Council policies and the standards established in the *Land Development Manual* (including the ESL Regulations, as further detailed below).

Lighting Regulations

Lighting within the City is controlled by the City’s Outdoor Lighting Regulations per Section 142.0740 of the Municipal Code. The City’s Outdoor Lighting Regulations are intended to provide public safety, conserve energy, and protect surrounding land uses as well as astronomy activities at the Palomar and Mount Laguna Observatories from excessive light generated by new development. The project is not located within 30 miles of the Palomar and Mount Laguna Observatories; therefore, regulations pertaining to these observatories are not applicable.

Lighting for the project would also be required to comply with the applicable provisions of the *Street Design Manual 2002* (City 2002)). This manual provides the following.

Street lighting shall be installed at all street intersections and shall be high-pressure sodium (HPS) vapor, except for areas which are designated for low pressure sodium (LPS) vapor.” Midblock street lighting is required if the roadway meets certain conditions, including the following.

- On Four-Lane Urban Major Streets or higher with center medians, on both sides of the street at intervals not to exceed 150 feet (45 [meters] m) within 1,302 feet (400 m) of transit stops and in residential and commercial high-crime census tracts, or in other areas on both sides of the street at intervals not to exceed 300 feet (90 m).
- In areas of high pedestrian activity, such as schools, parks, transit centers, access to transit, and commercial and recreational facilities that draw large numbers of pedestrians.
- At other locations, such as at abrupt changes in horizontal or vertical alignment, or areas of heavy pedestrian use, as needed.

Midblock street lighting shall be full cutoff, Type III fixtures and shall conform to the following:

- 250 Watt HPS or 180 Watt LPS, as applicable, for streets classified as collector or higher with curb-to-curb width greater than 52 feet (16.0 m)

Glare Regulations

Glare within the City is controlled by City’s Municipal Code Section 142.0730 (Glare Regulations). The City’s Glare Regulations include the following:

- A maximum of 50 percent of the exterior of a building may be comprised of reflective material that has a light-reflectivity factor greater than 30 percent (Section 142.0730 (a)).
- Reflective building materials shall not be permitted where the City Manager determines that their use would contribute to potential traffic hazards, diminished quality of riparian habitat, or reduced enjoyment of public open space (Section 142.0730 (b)).

City of San Diego Land Development Manual

The Land Development Manual (revised September 2004) provides information to assist in the processing and review of development applications. The Steep Hillside Guidelines (2004) are a component of this manual that provide standards and guidelines intended to assist in the interpretation and implementation of the development regulations for steep hillsides contained in the City’s Municipal Code (Chapter 14, Article 3, Division 1, Environmentally Sensitive Lands). Every proposed development that encroaches into steep hillsides will be subject to the ESL Regulations and will be evaluated for conformance with the Steep Hillside Guidelines as part of the review process for the required permit. The Steep Hillside Guidelines do not provide specific guidance for the design of roadways. These guidelines do include certain policies that are specific to certain communities, including Mission Valley. As a portion of the project site is within Mission Valley, the relevant policies are excerpted below.

- Design roads serving hillside and canyon developments carefully and sensitively.
- Roads serving Valley development (office, educational, commercial-recreation, commercial-retail) at the base of the steep hillsides should consist of short side streets branching off Camino Del Rio South or Hotel Circle South. These side streets should provide primary access to projects in preference to collector streets.

- Orient development towards the valley and take access to Mission Valley projects from roads that do not extend above the 150-foot elevation contour.
- Preserve the natural landform and greenbelt of the southern hillsides and rehabilitate the northern hillsides.

5.9.3 Significance Determination Thresholds

5.9.3.1 Issue Questions

The following significance criteria from the City's Significance Determination Thresholds for Visual Effects and Neighborhood Character provide the basis for determining the significance of impacts resulting from the proposed project. The determination of whether an aesthetics and visual quality impact would be significant is based on the thresholds described below and the professional judgment of the City as Lead Agency.

Impacts are considered significant if the proposed project would result in any of the following.

1. A substantial obstruction of any vista or scenic view from a public viewing area as identified in the community plan.
2. The creation of a negative aesthetic site or project.
3. Substantial alteration to the existing or planned character of the area.
4. The loss of any distinctive or landmark tree(s), or stand of mature trees, as identified in the community plan.
5. Substantial change in the existing landform.
6. Substantial light or glare which would adversely affect daytime or nighttime view in the area.

Where feasible, these issues have been combined for ease of discussion.

5.9.4 Impact Analysis

Issue 1: Views

Would the proposed project result in a substantial obstruction of any vista or scenic view from a public viewing area as identified in the community plan?

Projects that would block public views from designated open space areas, roads, or parks or to significant visual landmarks or scenic vistas (Pacific Ocean, downtown skyline, mountains, canyons, waterways) may result in a significant impact. It should be noted that views from private property are not protected by CEQA or the City.

5.9.4.2 Impact Discussion

The project site is not identified in the City of San Diego General Plan, Serra Mesa Community Plan, or Mission Valley Community Plan as being within a designated public view corridor. Additionally, there are no significant visual landmarks, public resources, or scenic vistas identified in these plans in the vicinity of the project site.

The proposed project would involve construction of a roadway to connect Phyllis Place with Via Alta and Franklin Ridge Road within a 2-acre site, which would be a ground-level feature with minimal vertical elements. During construction of the proposed project, soil stockpiling, construction equipment, and personnel within the construction zones may be visible to motorists, pedestrians, or bicyclists using Phyllis Place, Via Alta, and Franklin Ridge Road; however, these components would not block any views of or through the project site. Upon completion of construction, all temporary visual impacts due to construction activity would cease. Street lighting, including lighting poles, would be installed for the roadway as well as landscaping trees; however, no vertical building structures would result from implementation of the proposed project that would block views from Phyllis Place or otherwise obstruct views of motorists, pedestrians, or bicyclists from roads in the area. In addition, as part of the Quarry Falls project, a linear park would be constructed along the southern side of Phyllis Place. As noted in Chapter 3, *Project Description*, there are two approved general development plans for the linear park, one with the proposed roadway and one without. The proposed roadway is a ground-level feature, and its implementation would not obstruct views that may be available from this proposed park or from any other park or open space areas in the vicinity of the project site. Therefore, no scenic views would be blocked or affected, and implementation of the proposed project would not block or otherwise affect any designated scenic vistas.

5.9.4.3 Significance of Impact

Because there are no scenic vistas in the project area as identified in the City's General Plan or the Serra Mesa or Mission Valley Community Plans and the project would not include vertical structures that could obstruct views, impacts on scenic vistas would be less than significant.

5.9.4.4 Mitigation Measures

Impacts would be less than significant; therefore, no mitigation measures would be required.

5.9.5 Impact Analysis

Issues 2, 3, and 4: Aesthetics/Neighborhood Character/Visual Resources

Would the project result in (2) the creation of a negative aesthetic site or project; (3) substantial alteration to the existing or planned character of the area; or (4) the loss of any distinctive or landmark tree(s), or stand of mature trees, as identified in the community plan.

5.9.5.1 Impact Discussion

The project does not include any buildings or vertical structures aside from light poles. The project site is not designated as a historical landmark and does not include a stand of natural trees, vegetation, or rock outcroppings that would be considered a significant visual resource. Additionally, there are no community symbols or landmarks on site that are identified in the City's General Plan or within the Serra Mesa or Mission Valley Community Plans. As such, the proposed project would not result in the loss, isolation, or degradation of a community identification symbol or landmark, and there would be no impacts related to this threshold.

The proposed project would also not result in significant impacts on the existing or planned character of the area. The proposed project would increase the average daily traffic along Phyllis Place as it would provide a connection southwards to Mission Valley. However, the Serra Mesa

Community Plan calls for Phyllis Place to be classified as a four-lane major road. Therefore, the proposed project would not change the planned character of the area. The proposed roadway would similarly not change the character of existing residential areas to the west of the project site as there would not be a substantial amount of vehicles traveling west of the roadway connection. For example, the Abbotshill neighborhood of Serra Mesa, northwest of the project area, does not contain an outlet to a larger road network. As a result, the neighborhood character would not be significantly impacted.

Concerning site visibility, the project site is not visible from I-805. The project site is on a hillside that is visible from the Quarry Falls development and Phyllis Place. However, within the context of the substantial development occurring at the Quarry Falls site and other existing development in the vicinity of the project site, the inclusion of a relatively small segment of roadway would be minimally discernible from the surrounding area. In addition, the project would be developed using the standards for a four-lane urban major street established by the City of San Diego in the *Street Design Manual 2002*. Following these standards would ensure that all necessary components of the roadway, such as roadway and lane widths, curb cuts, sidewalks, and bicycle lanes, are incorporated, and that the proposed roadway is designed in a uniform manner. In addition, landscaping that conforms with the City's Landscape Regulations would be included in the project design to enhance the aesthetic character of the street design. As such, the proposed project would be in compliance with the City codes, which would ensure that the project is visually appealing and would not result in a negative aesthetic impact.

5.9.5.2 Significance of Impact

Implementation of the proposed project would not create a negative site aesthetic, result in substantial conflict with the existing or planned character of the neighborhood or community, or result in the loss of any distinctive or landmark tree(s), or stand of mature trees, as identified in the Serra Mesa Community Plan. Therefore, impacts related to aesthetics, neighborhood character, and visual resources would be less than significant.

5.9.5.3 Mitigation Measures

Impacts would be less than significant and therefore no mitigation measures would be required.

5.9.6 Impact Analysis

Issue 5: Landform Alteration

Would the proposed project result in substantial alteration in the existing landform?

5.9.6.1 Impact Discussion

Construction of the roadway segment could result in the substantial alteration of an existing landform. The project site is on a steep hillside with natural gradients equal to or in excess of 25%, and is, therefore, subject to the City's ESL regulations. As discussed in Chapter 3, *Project Description*, the proposed project would entail 43,500 cubic yards of fill and 0 yards of cut. The maximum fill would be approximately 46 feet. Therefore, the project would alter more than 2,000 cubic yards of earth per graded acre and/or result in a change in elevation of a steep hillside from existing grade to

proposed grade of more than 5 feet. As such, the proposed project would result in a significant impact related to landform alterations.

5.9.6.2 Significance of Impact

The proposed project would result in a substantial change to the existing landform. Impacts would be significant and mitigation would be required.

5.9.6.3 Mitigation Measures

MM-VIS-1

Prior to issuance of grading permits, the project applicant shall implement design features and grading techniques specific to the alteration of the hillside. The grading plans shall be subject to the review and approval by the City prior to issuance of a grading permit.

The grading plans shall clearly demonstrate, with both spot elevations and contours, that:

- 1) The proposed landforms shall very closely imitate the existing on-site landform and/or the undisturbed, pre-existing surrounding neighborhood landforms. This can be achieved through “naturalized” variable slopes.
- 2) The proposed slopes follow the natural existing landform and at no point vary substantially from the natural landform elevations.
- 3) The gradient of the slopes will be varied rather than left at a constant angle, in order to create a more natural appearance.
- 4) Natural landform plantings are incorporated to soften the appearance of manufactured slopes.

5.9.6.4 Significance after Mitigation

With implementation of **MM-VIS-1**, the visual impacts of landform alteration on a steep hillside would be reduced to less than significant levels.

5.9.7 Impact Analysis

Issue 6: Lighting and Glare

Would the proposed project result in substantial light or glare which would adversely affect daytime or nighttime view in the area?

5.9.7.1 Impact Discussion

The project site is in a previously developed urban area that already exhibits several major lighting sources, such as lighting along major roadways (e.g., I-805 and Abbotshill Road) and headlights from passing vehicles. Other sources of light in the area include outdoor lighting features associated with the existing residential development north and west of the area. As previously analyzed in the Quarry Falls PEIR, the Quarry Falls project would also introduce lighting that would further contribute to daytime and nighttime lighting immediately adjacent to the project site. The proposed project may include minor roadway lighting similar to that of the surrounding development and

additional vehicle headlights from nighttime travel; however, no new substantial source of lighting would be introduced to the area such that daytime or nighttime lighting conditions would be notably modified, nor would daytime or nighttime views be altered due to any lighting improvements associated with the proposed project. Given these factors, the contribution of light emitted from the addition of the proposed roadway segment would be negligible, and impacts would be less than significant.

The proposed project would include construction of a street connection. Implementation of the proposed project would not include any components that use reflective materials (i.e., windows, large surface parking lots with parked cars, etc.) that would produce substantial sources of glare. In addition, the configuration of the proposed roadway would not accommodate parking lanes along the sides of the roadway. Therefore, impacts related to glare would be less than significant.

5.9.7.2 Significance of Impact

The proposed project would not result in substantial light or glare that would adversely affect daytime or nighttime views in the area. Impacts would be less than significant.

5.9.7.3 Mitigation Measures

Impacts would be less than significant; therefore, no mitigation measures would be required.

5.10 Greenhouse Gases

This section describes global climate change and existing greenhouse gas (GHG) emission sources; summarizes applicable federal, State, and local regulations; and analyzes the potential effects of GHGs from the project on global climate change. Consistency with applicable GHG reduction plans, including the City of San Diego's Climate Action Plan (CAP), is also addressed.

5.10.1 Existing Conditions

Climate change is a complex phenomenon that has the potential to alter local climatic patterns and meteorology. Although modeling indicates that climate change will result in sea-level rise (both globally and regionally) as well as changes in climate and rainfall, among other effects, there remains uncertainty with regard to characterizing precise local climate characteristics and predicting precisely how various ecological and social systems will react to any changes in the existing climate at the local level. Regardless of this uncertainty, it is widely understood that substantial climate change is expected to occur in the future and that the entire San Diego region, including the project area, will be affected by changing climatic conditions.

The phenomenon known as the *greenhouse effect* keeps the atmosphere near Earth's surface warm enough for the successful habitation of humans and other life forms. The greenhouse effect is created by sunlight that passes through the atmosphere. Some of the sunlight striking Earth is absorbed and converted to heat, which warms the surface. The surface emits a portion of this heat as infrared radiation, some of which is re-emitted toward the surface by GHGs. Human activities that generate GHGs increase the amount of infrared radiation absorbed by the atmosphere, thus enhancing the greenhouse effect and amplifying the warming of Earth (Center for Climate and Energy Solutions 2011).

Increases in fossil fuel combustion and deforestation have exponentially increased concentrations of GHGs in the atmosphere since the Industrial Revolution. Rising atmospheric concentrations of GHGs in excess of natural levels result in increasing global surface temperatures—a phenomenon commonly referred to as *global warming*. Higher global surface temperatures, in turn, result in changes to Earth's climate system, including increased ocean temperature and acidity, reduced sea ice, variable precipitation, and increased frequency and intensity of extreme weather events (IPCC 2007). Large-scale changes to Earth's system are collectively referred to as *climate change*.

The Intergovernmental Panel on Climate Change (IPCC) was established by the World Meteorological Organization and United Nations Environment Programme to assess scientific, technical, and socioeconomic information relevant to the understanding of climate change, its potential impacts, and options for adaptation and mitigation. The IPCC estimates that the average global temperature will rise by 0.3–4.8° Celsius (0.5–8.6° Fahrenheit) during the twenty-first century (IPCC 2014). Large increases in global temperatures could have substantial adverse effects on the natural and human environments on the planet and in California. The Serra Mesa and Mission Valley Community Planning Areas are currently a source of anthropogenic GHG, with emissions generated by vehicular traffic and by the energy use, water use, and solid waste disposal of existing development.

5.10.1.1 State and Regional GHG Inventories

California Air Resources Board Inventory

The California Air Resources Board (CARB) maintains a statewide emission inventory of GHGs. As shown in Table 5.10-1, in 2014, the largest contributor to GHG emission was the transportation sector (37%). This sector includes emissions from on-road vehicles, waterborne vessels, and rail operations. The next largest contributor to emissions was the industrial sector (24%), followed by electricity generations (in-state and imports). Emissions are quantified in million metric tons (MMT) of carbon dioxide (CO₂) equivalent (CO₂e). Statewide GHG source emissions totaled approximately 427 MMT CO₂e in 1990, 487 MMT CO₂e in 2008, 459 MMT CO₂e in 2012, and 442 MMT CO₂e in 2014. Many factors affect year-to-year changes in GHG emissions, including economic activity, demographic influences, environmental conditions such as drought, and the impact of regulatory efforts to control GHG emissions. CARB has adopted multiple GHG emission reduction measures, and most of the reductions since 2008 have been driven by economic factors (recession), previous energy-efficiency actions, and the Renewables Portfolio Standard. Transportation-related emissions consistently contribute the most GHG emissions, followed by electricity generation and industrial emissions. The forestry sector is unique because it not only includes emissions associated with harvest, fire, and land use conversion (sources), but also includes removals of atmospheric CO₂ (sinks) by photosynthesis, which is then bound (sequestered) in plant tissues.

Table 5.10-1. California Greenhouse Gas Inventory (2014)

Sector	Emissions (MMT CO ₂ e)	Percentage of Inventory
Transportation	163	37%
Industrial	104	24%
Electricity Generation (In State)	52	12%
Electricity Generation (Imports)	37	8%
Agriculture & Forestry	36	8%
Residential	27	6%
Commercial	22	5%
Not Specified	1	<1%
Total	442	100%

Source: CARB 2016

5.10.1.2 City of San Diego CAP Inventory

A San Diego regional emissions inventory prepared as part of the City of San Diego's CAP reported GHG emissions totaling approximately 13 MMT CO₂e in 2010. Similar to the statewide emissions, transportation-related GHG emissions contributed the most citywide, followed by emissions associated with energy use.

5.10.2 Regulatory Framework

5.10.2.1 Federal

Federal Clean Air Act

The U.S. Environmental Protection Agency (EPA) is the federal agency responsible for implementing the federal Clean Air Act. The United States Supreme Court ruled on April 2, 2007, that CO₂ is an air pollutant as defined under the Clean Air Act, and that EPA has the authority to regulate emissions of GHGs. EPA has also acknowledged potential threats imposed by climate change in a *Cause or Contribute Finding*, which found that GHG emissions contribute to pollution that threatens public health and welfare. This was a prerequisite to finalizing the national program for GHG emissions and fuel economy standards for light-duty vehicles (passenger cars and trucks), was developed jointly by EPA and the National Highway Traffic Safety Administration. The standards were established in two phases: the first for model years 2012–2016 and the second for years 2017–2025 (U.S. Environmental Protection Agency 2012). The emissions standards will require model year 2016 vehicles to meet an estimated combined average emissions level of 250 grams of CO₂ per mile, which is equivalent to 35.5 miles per gallon if the automobile industry were to meet this CO₂ level solely through fuel economy improvements.

Mandatory Greenhouse Gas Reporting Rule

On September 22, 2009, EPA published the Final Mandatory Greenhouse Gas Reporting Rule (Reporting Rule) in the Federal Register. The Reporting Rule requires reporting of GHG data and other relevant information from fossil fuel and industrial GHG suppliers, vehicle and engine manufacturers, and any facility that would emit 25,000 metric tons or more of CO₂e per year. The Reporting Rule also mandates recordkeeping and administrative requirements to enable EPA to verify the annual GHG emissions reports.

Council on Environmental Quality NEPA Guidance

The Council on Environmental Quality released final National Environmental Policy Act (NEPA) guidance on the consideration of the effects of climate change and GHG emissions. The draft guidance applies to all proposed federal agency actions, including land and resource management actions. The guidance explains that agencies should consider both the potential effects of a proposed action on climate change, as indicated by its estimated GHG emissions, and the implications of climate change for the environmental effects of a proposed action. The guidance is intended to assist agencies in disclosing and considering the reasonably foreseeable effects of proposed actions that are relevant to their decision-making processes. While draft versions did identify 25,000 metric tons of direct CO₂e per year as an indicator that further NEPA review may be warranted, this reference point was removed in the final guidance (Council on Environmental Quality 2016).

5.10.2.2 State

California has adopted statewide legislation addressing various aspects of climate change, GHG mitigation, and energy efficiency. Much of this establishes a broad framework for the State's long-term GHG and energy reduction goals and climate change adaptation program. The former and current governors of California have also issued several executive orders (EOs) related to the State's

evolving climate change policy. Summaries of key policies, EOs, regulations, and legislation at the State level that are relevant to the project are provided below in chronological order.

Assembly Bill 1493—Pavley Rules (2002, amendments 2009)/Advanced Clean Cars (2011)

Known as Pavley I, Assembly Bill (AB) 1493 provided the nation's first GHG standards for automobiles. AB 1493 required CARB to adopt vehicle standards that will lower GHG emissions from new light-duty autos to the maximum extent feasible beginning in 2009. Additional strengthening of the Pavley standards (referred to previously as *Pavley II* and now referred to as the *Advanced Clean Cars* measure) was adopted for vehicle model years 2017–2025 in 2012. Together, the two standards are expected to increase average fuel economy to roughly 54.5 miles per gallon in 2025.

Executive Order S-03-05 (2005)

EO S-03-05 is designed to reduce California's GHG emissions to (1) 2000 levels by 2010, (2) 1990 levels by 2020, and (3) 80% below 1990 levels by 2050.

Assembly Bill 32—California Global Warming Solutions Act (2006)

AB 32 codified the State's GHG emissions target by requiring California's global warming emissions to be reduced to 1990 levels by 2020. Since being adopted, CARB, the California Energy Commission, the California Public Utilities Commission, and the California Building Standards Commission have been developing regulations that will help the State meet the goals of AB 32 and EO S-03-05. The scoping plan for AB 32 identifies specific measures to reduce GHG emissions to 1990 levels by 2020 and requires CARB and other State agencies to develop and enforce regulations and other initiatives to reduce GHG emissions. The AB 32 Scoping Plan, first adopted in 2008, comprises the State's roadmap for meeting AB 32's reduction target. Specifically, the scoping plan articulates a key role for local governments by recommending that they establish GHG emissions-reduction goals for both their municipal operations and the community that are consistent with those of the State (i.e., approximately 15% below current levels).

CARB approved the *First Update to the Scoping Plan* on May 22, 2014. The first update includes both a 2020 element and a post-2020 element. The 2020 element focuses on the State, regional, and local initiatives that are being implemented now to help the State meet the 2020 goal. The AB 32 Scoping Plan does not provide an explicit role for local air districts in implementing AB 32, but it does state that CARB will work actively with air districts in coordinating emissions reporting, encouraging and coordinating GHG reductions, and providing technical assistance in quantifying reductions (CARB 2008).

Executive Order S-01-07—Low Carbon Fuel Standard (2007)

EO S-01-07, the Low Carbon Fuel Standard (LCFS), mandates (1) that a statewide goal be established to reduce the carbon intensity of California's transportation fuels by at least 10% by 2020, with a reduction in the carbon content of fuel by a quarter of a percent starting in 2011, and (2) that a low carbon fuel standard for transportation fuels be established in California. The EO initiates a research and regulatory process at CARB. The LCFS regulation does not apply to certain transportation applications, including locomotives and ocean-going vessels. Note that the majority of the emissions benefits due to the LCFS come from the production cycle (upstream emissions) of the fuel rather

than the combustion cycle (tailpipe). As a result, LCFS-related reductions are not included in this analysis of combustion-related emissions of CO₂.

Senate Bill 375—Sustainable Communities Strategy (2008)

Senate Bill (SB) 375 provides for a new planning process that coordinates land use planning, regional transportation plans, and funding priorities in order to help California meet the GHG reduction goals established in AB 32. SB 375 requires regional transportation plans (RTPs), developed by metropolitan planning organizations, to incorporate a sustainable communities strategy (SCS). The goal of the SCS is to reduce regional vehicle miles traveled (VMT) through land use planning and consequent transportation patterns. SB 375 also includes provisions for streamlined CEQA review for some infill projects such as transit-oriented development.

The final reduction targets from CARB require the San Diego Association of Governments (SANDAG) to identify strategies to reduce per-capita GHG emissions from passenger vehicles by approximately 7% by 2020 and 13% by 2035 over base year 2005. SANDAG's 2050 RTP and SCS, which detail steps the region will take to reduce GHG emissions to State-mandated levels, were originally adopted by SANDAG on October 28, 2011 (SANDAG 2011). A legal challenge to the 2011 CEQA document for the RTP/SCS is ongoing. State law requires development of an RTP/SCS every 4 years; therefore, a new RTP/SCS was adopted by SANDAG as part of the Regional Plan on October 9, 2015, including the certification of a new EIR (SANDAG 2015).

Executive Order B-30-15 (2015)

EO B-30-15 established a medium-term goal for 2030 of reducing GHG emissions by 40% below 1990 levels and requires CARB to update its current AB 32 Scoping Plan to identify the measures to meet the 2030 target. The EO supports EO S-03-05, described above, but is currently only binding on State agencies. However, there are current (2015/2016) proposals (SB 32) at the State legislature to establish a statutory target for 2030.

Senate Bill 97

SB 97 required the Governor's Office of Planning and Research to develop recommended amendments to the State CEQA Guidelines for addressing GHG emissions. The amendments became effective on March 18, 2010.

Senate Bill 350—De Leon (Clean Energy and Pollution Reduction Act of 2015)

SB 350 was approved by the California legislature in September 2015 and signed by Governor Brown in October 2015. Its key provisions are to require the following by 2030: (1) a renewables portfolio standard of 50% and (2) a doubling of energy efficiency (electrical and natural gas) by 2030, including improvements to the efficiency of existing buildings. These mandates will be implemented by future actions of the California Public Utilities Commission and California Energy Commission.

Senate Bill 32, California Global Warming Solutions Act of 2006, and Assembly Bill 197, State Air Resources Board, Greenhouse Gases, Regulations (2016)

SB 32 (Pavley) requires CARB to ensure that statewide GHG emissions are reduced to at least 40% below the 1990 level by 2030, consistent with the target set forth in EO B-30-15. The bill became

effective alongside AB 197 (Garcia) on January 1, 2017. AB 197 creates requirements to form the Joint Legislative Committee on Climate Change Policies; requires CARB to prioritize direct emission reductions from stationary sources, mobile sources, and other sources and consider social costs when adopting regulations to reduce GHG emissions beyond the 2020 statewide limit; requires CARB to prepare reports on sources of GHGs, criteria air pollutants, and toxic air contaminants; establishes 6-year terms for voting members of CARB; and adds two legislators as non-voting members of CARB. Both bills were signed by Governor Brown in September 2016. CARB released a discussion draft of the 2030 Target Scoping Plan Update in December 2016, which outlines CARB's current thoughts on steps to achieve the 2030 reduction target of 40% below 1990 levels by 2030 prescribed in SB 32. CARB is expecting to finalize the 2030 Scoping Plan in spring 2017.

5.10.2.3 Local

San Diego Air Pollution Control District

As discussed in Section 5.3, *Air Quality*, the San Diego Air Pollution Control District administers the California and federal clean air acts according to guidelines set forth by State and federal agencies in San Diego County. Currently, the San Diego Air Pollution Control District has not adopted significance thresholds for GHGs in accordance with the State CEQA Guidelines.

City of San Diego General Plan

The Conservation Element within the City's General Plan contains policies that are relevant to the proposed roadway project, as shown in Table 5.10-2.

Table 5.10-2. Relevant General Plan Policies

Policy Number	Policy
CE-A.2	<p>Reduce the City's carbon footprint. Develop and adopt new or amended regulations, programs, and incentives as appropriate to implement the goals and policies set forth in the General Plan to:</p> <ul style="list-style-type: none"> • Create sustainable and efficient land use patterns to reduce vehicular trips and preserve open space; • Reduce fuel emission levels by encouraging alternative modes of transportation and increasing fuel efficiency; • Improve energy efficiency, especially in the transportation sector and buildings and appliances; • Reduce the Urban Heat Island effect through sustainable design and building practices; • Reduce waste by improving management and recycling programs.
CE-A.11	<ul style="list-style-type: none"> • Implement sustainable landscape design and maintenance. • Strategically plant deciduous shade trees, evergreen trees, and drought tolerant native vegetation, as appropriate, to contribute to sustainable development goals. • Reduce use of lawn types that require high levels of irrigation. • Minimize the use of landscape equipment powered by fossil fuels. • Implement water conservation measures in site/building design and landscaping. • Encourage the use of high efficiency irrigation technology, and recycled site water to reduce the use of potable water for irrigation. Use recycled water to meet the needs of development projects to the maximum extent feasible.

Policy Number	Policy
CE-A.12	<p>Reduce the San Diego Urban Heat Island, through actions such as:</p> <ul style="list-style-type: none"> • Using cool roofing materials, such as reflective, low heat retention tiles, membranes and coatings, or vegetated eco-roofs to reduce heat build-up; • Planting trees and other vegetation, to provide shade and cool air temperatures; • Reducing heat build-up in parking lots through increased shading or use of cool paving materials as feasible

City of San Diego Climate Action Plan

In December 2015, the City adopted its CAP, which identifies measures to meet GHG reduction targets for 2020 and 2035. The CAP consists of a 2010 inventory of GHG emissions, a business-as-usual (BAU) projection for emissions at 2020 and 2035, State targets, and emission reductions with implementation of the CAP. The City identifies GHG reduction strategies focusing on energy and water-efficient buildings; clean and renewable energy; bicycling, walking, transit, and land use; zero waste; and climate resiliency.

Accounting for future population and economic growth, the City projects GHG emissions will be approximately 15.9 MMT CO_{2e} in 2020 and 16.7 MMT CO_{2e} in 2035. To achieve its proportional share of the State reduction targets for 2020 (AB 32) and 2050 (EO S-3-05), the City would need to reduce emissions below the 2010 baseline by 15% in 2020 and 50% by 2035. To meet these goals, the City must implement strategies that reduce emissions to approximately 11.0 MMT CO_{2e} in 2020 and 6.5 MMT CO_{2e} in 2035. Through implementation of the CAP, the City is projected to reduce emissions even further below targets by 1.2 MMT CO_{2e} by 2020 and 205,462 MMT CO_{2e} by 2035. The CAP includes a Monitoring and Reporting Program. Measure 1.4 of the Monitoring and Reporting Program calls for City Staff to annually evaluate City policies, plans (including the CAP), and codes as needed to ensure the CAP reduction targets are met.

The City's CAP includes five overarching strategies to achieve the GHG reduction goals of the CAP; (1) Energy & Water Efficient Building; (2) Clean & Renewable Energy; (3) Bicycling, Walking, Transit, & Land Use; (4) Zero Waste (Gas & Waste Management), and (5) Climate Resiliency. In particular, Strategy 3 (Bicycling, Walking, Transit, & Land Use) includes various goals and actions that cover a broad range of activities that aim to reduce VMT and improve mobility by implementing appropriate land use changes and promoting alternative modes of travel, among others.

It is important to note that the future population and land use growth in the CAP are based on the community plans that were in effect at the time the CAP was being developed. The projected transportation sector emissions in the CAP are largely affected by the future year VMT that was estimated based on implementation of those community plans. Therefore, proposed changes to the land uses and circulation networks in the community plans are evaluated as components of the City's CAP.

Strategy 3 of the CAP contains various Supporting Measures to help achieve the Bicycling, Walking, Transit, & Land Use goals of the CAP. The measures that are relevant to the roadway project include the following.

- Implement bicycle improvements concurrent with street resurfacing projects, including lane diets, green bike lanes, sharrows, and buffered bike lanes.

- Identify and address gaps in the City's pedestrian network and opportunities for improved pedestrian crossings, using the City's Pedestrian Master Plan and the City's sidewalk assessment.
- Achieve better walkability and transit-supportive densities by locating a majority of all new residential development within Transit Priority Areas.
- In addition to commuting, implement infrastructure improvements including "complete streets" to facilitate alternative transportation modes for all travel trips.

With the July 2016 adoption of an amendment to the CAP to include the CAP Consistency Checklist, the CAP meets all the requirements of State CEQA Guidelines Section 15183.5(b)(1)(A – F) to be a Qualified GHG Reduction Plan. In meeting these requirements, the City of San Diego has analyzed and mitigated the significant effects of GHG emissions for the entire City at the programmatic level. Pursuant to State CEQA Guidelines Sections 15183.5(b), 15064(h)(3), and 15130(d), the City may determine that a project's incremental contribution to a cumulative GHG effect is not cumulatively considerable if the project complies with the requirements of a previously adopted Qualified GHG Reduction Plan. The CAP Final EIR concluded that implementation of the CAP, which includes an annual monitoring program, would result in less-than-significant overall citywide GHG emissions, and this analysis tiers from that analysis in the CAP certified Final EIR.

5.10.3 Significance Determination Thresholds

5.10.3.1 Issue Questions

As identified in the City's Significance Determination Thresholds (2016), impacts related to GHG emissions would be significant if the project would:

1. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment, and/or
2. Conflict with the City's Climate Action Plan or another applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

5.10.3.2 Methodology and Assumptions

The State CEQA Guidelines do not indicate what amount of GHG emissions would constitute a significant impact on the environment. Instead, they authorize the lead agency to consider thresholds of significance previously adopted or recommended by other public agencies or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence (State CEQA Guidelines Sections 15064.4(a) and 15064.7(c)). The California Supreme Court decision in the *Centers for Biological Diversity et al. vs. California Department of Fish and Wildlife, the Newhall Land and Farming Company* (2015) 62 Cal.4th 204 (hereafter Newhall Ranch) confirmed that there are multiple potential pathways for evaluating project-level GHG emissions consistent with CEQA, depending on the circumstances of a given

project. These potential pathways include reliance on the BAU model,¹ numeric thresholds, and compliance with regulatory programs, including qualified GHG reduction plans (i.e., CAP).

As discussed under Section 5.10.2.3, the City's CAP is a qualified GHG Reduction Plan per the requirements of State CEQA Guidelines Section 15183.5. As such, consistency with the City's CAP is used to evaluate the significance of the project's GHG impact. A consistency analysis of the proposed project with the CAP is evaluated first through a comparison of the land use and transportation scenarios on which the CAP is based, and secondly through consideration of the specific emission calculations that are included in the CAP.

Projected transportation sector emissions in the CAP are based on VMT. If the proposed project would result in increased VMT compared to the baseline scenario, it may result in an emissions increase that would conflict with the goals, policies, and reductions necessary to reach the CAP's reduction targets. Further analysis would be required to determine if such increases were consistent with the CAP.

The proposed project is a roadway connection that aims to improve local mobility between the Serra Mesa and Mission Valley planning areas. By providing a new roadway connection, the project may affect future vehicle circulation on local roadways and freeways, as motor vehicles would reroute their future trips based on the new roadway connection. As such, the new roadway connection would introduce new trips to the project area that currently use an alternative route, thereby affecting, and potentially reducing, traffic volumes on existing surrounding roadways. Therefore, in order to analyze the potential effects of the project on regional roadway network and the City's mobility goals, the operational analysis focuses solely on the change in regional traffic volumes and the associated change in GHG emissions that would result from project implementation.

In order to determine the change in regional traffic volumes, regional VMT for the project was modeled by SANDAG (Appendix H). VMT was modeled for the existing conditions (2013),² without the proposed roadway connection for both the Near-Term (Year 2017) and Long-Term (Year 2035) scenarios, and with the proposed project for both the Near-Term (Year 2017) and Long-Term (Year 2035) traffic scenarios.

If VMT and associated emissions from project implementation are less than or equal to the baseline conditions, then impacts would be less than significant and no further analysis is required. However, if VMT and associated emissions from implementation of the project are greater than baseline conditions, then impacts related to GHG emissions would require further evaluation to determine if the project's emissions are consistent with the CAP.

¹ Only if "an examination of the data behind the Scoping Plan's business-as-usual model allowed the lead agency to determine what level of reduction from business as usual a new land use development at the proposed location must contribute in order to comply with statewide goals."

² Results for existing conditions are presented for informational purposes only. The impact determination is based on the proposed project's change to the Near-Term (2017) and Long-Term (2035) baseline scenarios.

5.10.4 Impact Analysis

Issue 1: GHG Emissions

Would the proposed project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?

5.10.4.2 Impact Discussion

Construction

Construction activities would generate short-term emissions of CO₂, methane (CH₄), and nitrous oxide (N₂O) from the use of equipment (e.g., graders) and on-road vehicles (e.g., employee commuter cars). GHG emissions generated by construction activities were estimated using the most recent version of the Sacramento Metropolitan Air Quality Management District's Road Construction Emissions Model (RCEM) (Version 8.1.0, 2016)³ and the assumptions described in Section 5.3, *Air Quality*.

Table 5.10-3 summarizes the estimated emissions levels for each phase of construction, which are (1) grubbing/land clearing; (2) grading; (3) drainage/utilities/sub-grade; and (4) paving. Total emissions over the 9-month construction period are also presented, as well as average annual emissions amortized over a 30-year project lifetime. To be conservative, all construction emissions are assumed to occur in 2017.

Table 5.10-3. Estimated Construction Emissions (metric tons)

Phase	CO ₂	CH ₄	N ₂ O	CO ₂ e
Grubbing/land clearing	119	<0.1	<0.1	121
Grading	351	0.1	<0.1	355
Drainage/utilities/sub-grade	188	<0.1	<0.1	190
Paving	38	<0.1	<0.1	39
<i>Total Construction</i>	<i>697</i>	<i>0.2</i>	<i><0.1</i>	<i>704</i>
Average Annual ¹	23	<0.01	<0.01	23

Source: Sacramento Metropolitan Air Quality Management District 2016.

Totals may not add exactly due to rounding.

¹ Total construction emissions amortized over a 30-year project lifetime.

Operation

As stated under Section 5.10.3.2, consistency with the CAP and its associated emissions is first evaluated through a comparison of the land use and transportation scenarios that were used in developing the CAP. As discussed in Section 5.1, *Land Use*, the project site is designated by the General Plan as Residential, by the Serra Mesa Community Plan as Low-Density Residential, and by the Mission Valley Community Plan as multiple use (through the Quarry Falls Specific Plan). As

³ The Sacramento Metropolitan Air Quality Management District develops and maintains the RCEM, but the emission factors and analysis procedures are applicable to projects throughout the state.

noted therein, the proposed roadway connection is included in the Mission Valley Community Plan. Therefore, because the project is consistent with the land use plan (i.e., Mission Valley Community Plan) that was used in the formulation of the CAP, then the project and its associated emissions are accounted for in the CAP. Moreover, the project would be consistent with the goals and policies of the City's General Plan by increasing mobility options by including bike and pedestrian access and by providing a more direct route to transit in Mission Valley that would provide vehicle congestion relief in some areas and reduce VMT regionally. Therefore, because the project's VMT is accounted for in the City's CAP and because the project is consistent with the mobility goals of the General Plan, the proposed project is considered consistent with the CAP and would not generate GHG emissions, either directly or indirectly, that would have a significant impact on the environment.

A quantitative analysis was also conducted to further evaluate the impact that the proposed project would have on CAP implementation. The proposed project would add a roadway connection to the physical roadway network that would affect future vehicle circulation on local roadways and freeways. As on-road vehicles would reroute future trips with the proposed roadway connection, the project would affect traffic volumes on surrounding roadways. The operational analysis evaluates how the change in traffic volumes as result of the proposed project would affect GHG emissions.

Section 5.2, *Transportation and Circulation*, and Appendix C provide additional detail on the traffic modeling analysis and indicate how various freeway and arterial segments would be affected as a result of the proposed project. Appendix H includes the modeling results performed by SANDAG in calculating the regional VMT effects of the project within the project vicinity. The average daily traffic was multiplied by the segment lengths to determine the VMT associated with each freeway and arterial segment affected by the proposed project. The changes in emission estimates are based on the VMT for the freeway and arterial segments as a result of the proposed project.

Table 5.10-4 summarizes the modeled VMT and associated emissions by scenario and presents a comparison of project emissions to the existing and baseline conditions. The differences in emissions between the project and baseline conditions represent emissions generated directly as a result of the change in VMT due to implementation of the project. The Near-Term (2017) and Long-Term (2035) year analyses account for reductions in vehicular emission rates as a result of continuing improvements in engine technology and the retirement of older, higher-emitting vehicles. Refer to Appendix D for the modeling emission factors.

Table 5.10-4. Estimated Annual Vehicle Miles Traveled and Operational Emissions (metric tons)

Analysis Scenario	VMT	CO₂	Other¹	CO₂e
2013 Existing ²	1,847,366	872	44	916
2017 Near-Term Baseline	2,055,012	889	44	934
2017 Near-Term with Project	2,040,522	883	44	927
2035 Long-Term Baseline	2,367,056	718	36	753
2035 Long-Term with Project	2,349,333	712	36	748
Comparison to Baseline Conditions				
2017 Near-Term	-14,490	-6	<0	-7
2035 Long-Term	-17,723	-5	<0	-6

Source: California Air Resources Board EMFAC model. Totals may not add exactly due to rounding.

¹ Includes CH₄, N₂O, and other trace GHGs emissions emitted by typical passenger vehicles (U.S. Environmental Protection Agency 2013a and 2013b).

² Presented for informational purposes. Impact determination made based on comparison of project effects over near-term and long-term baseline conditions (see Section 5.10.3.2).

As shown in Table 5.10-4, the project would reduce regional annual VMT by 14,490 relative to the 2017 Near-Term baseline condition and by 17,723 relative to the 2035 Long-Term baseline condition. As a result of this change in VMT, emissions would decrease relative to baseline conditions. This reduction in emissions would be due primarily to the reduction in VMT achieved by the more direct route offered by the proposed road connection, relative to other arterials in the vicinity. Because the project would reduce GHG emissions on the roadway network, the project is considered to have a net benefit to the region that would help the City achieve its designated reduction targets.

5.10.4.3 Significance of Impact

Implementation of the proposed project would reduce VMT and associated emissions by providing a direct linkage that is consistent with the mobility goals of the City's General Plan, relevant community plans, and the VMT and emissions reduction targets within the CAP. By reducing GHG emissions relative to conditions without the project in place and by improving local transportation efficiency by providing a new bicycle and pedestrian connection consistent with the CAP's overarching land use and transportation strategy, the project would not generate GHG emissions, either directly or indirectly, that would have a significant impact on the environment.

5.10.4.4 Mitigation Measures

Impacts would be less than significant; therefore, no mitigation is required.

5.10.5 Impact Analysis

Issue 2: Plan Consistency

Would the proposed project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs?

5.10.5.2 Impact Discussion

The regulatory plans and policies discussed in Section 5.10.2 aim to reduce national, state, and local GHG emissions by primarily targeting the largest emitters of GHGs: the transportation and energy sectors. Plan goals and regulatory standards are thus largely focused on the automobile industry and public utilities. For the transportation sector, the reduction strategy is generally three-pronged: to reduce GHG emissions from vehicles by improving engine design; to reduce the carbon content of transportation fuels through research, funding, and incentives to fuel suppliers; and to reduce VMT through land use change and infrastructure investments.

Consistency with State Plans

The AB 32 Scoping Plan provides a framework for actions to reduce California's GHG emissions and requires CARB and other State agencies to adopt regulations and other initiatives to reduce GHGs. As such, the Scoping Plan is not directly applicable to specific projects, although there are several regulatory measures aimed at the identification and reduction of GHG emissions. Most of these measures focus on area source emissions (e.g., energy usage, high-global-warming-potential GHGs in consumer products) and changes to the vehicle fleet (e.g., more fuel-efficient vehicles, reduced VMT, fuel economy). The project would not conflict with these regulations. Rather, the project would facilitate regional reductions in VMT, consistent with the Scoping Plan's transportation goals.

Consistency with Regional Plans

SANDAG's RTP/SCS was adopted to reduce GHG emissions attributable to passenger vehicles in the San Diego region. Although the RTP/SCS does not regulate land use or supersede the exercise of land use authority by SANDAG's member jurisdictions (i.e., the County of San Diego and cities therein), the RTP/SCS is a relevant regional reference document for evaluating the intersection of land use and transportation patterns, and the corresponding GHG emissions. The project would not generate additional trips; rather, the project would result in a redistribution of vehicle trips in the surrounding area. As discussed above, the project would not result in higher VMT when compared to existing traffic conditions. Therefore, the project would not conflict with the underlying assumptions of the RTP/SCS.

Consistency with Local Plans

The City has adopted a CAP for reducing GHG emissions. While the CAP does not include any goals or measures that directly relate to transportation infrastructure projects, the CAP establishes five primary strategies for achieving the goals of the plan. Strategy 1 relates to Energy & Water Efficient Buildings and the CAP Consistency Checklist outlines measures such as green roofs and low-flow water fixtures to reduce energy and water use within new buildings or structures within the City. While the proposed project would not construct any new buildings or structures, landscaping along the proposed roadway would be low-maintenance, low-water plantings that ensure that landscaping irrigation is reduced.

Strategy 2 relates to Clean & Renewable Energy and the CAP Consistency Checklist outlines measures, such as on-site solar systems, for residential and non-residential buildings to utilize. Therefore, this strategy would not be applicable to the proposed project, as it comprises the construction and operation of a roadway connection.

Strategy 3 (Bicycling, Walking, Transit & Land Use) has a number of goals that aim to improve mobility and enhance vehicle fuel efficiency. These cover a broad range of activities that aim to reduce VMT, improve mobility, and enhance vehicle fuel efficiency. Specific implementation measures involve changing land uses, adopting a new perspective on community design, promoting alternative modes of travel, revising parking standards, and managing parking. As previously detailed under Issue 1, the proposed project would reduce regional VMT when compared to baseline conditions. The VMT reductions achieved by the project would be consistent with these goals. In addition, the proposed project would increase connectivity for non-motorists adjacent to a Transit Priority Area. Cyclists and pedestrians would be able to utilize the roadway, as it would include Class II bike lanes and a pedestrian walkway. This roadway would also provide another connection for cyclists and pedestrians within the vicinity of the project site to access the Metropolitan Transit System Trolley Stations in Mission Valley (i.e., Rio Vista and Mission Valley trolley stops).

The primary goal of Strategy 4 (Zero Waste – Gas & Waste Management) is to divert solid waste and capture landfill CH₄ gas emissions. This goal is a Citywide initiative and does not directly relate to the proposed project. Finally, Strategy 5 (Climate Resiliency) calls for further analysis of the resiliency issues that face the various areas of the City, which is also a Citywide initiative. This strategy calls for the implementation of an Urban Tree Planting Program. The proposed project would include native, drought-tolerant landscaping that would include street trees.

Overall, the proposed project would be consistent with the City's CAP, as it would reduce regional VMT and associated GHG emissions. In addition, because the project would reduce GHG emissions relative to baseline conditions, it would not produce emissions greater than that assumed for the community planning area in the CAP's GHG inventory.

5.10.5.3 Significance of Impact

The proposed project would be consistent with applicable State, regional, and local plans and policies for reducing GHG emissions. Accordingly, impacts would be less than significant.

5.10.5.4 Mitigation Measures

Impacts would be less than significant; therefore, no mitigation is required.

Chapter 6

Cumulative Impacts

This chapter considers the cumulative effects of past, present, and reasonably foreseeable future projects and the proposed project's contribution to these effects. Past projects are defined as those that were recently completed and are now operational. Present projects are defined as those that are under construction but not yet operational. Reasonably foreseeable future projects are defined as those for which a development application has been submitted or credible information is available to suggest that project development is a probable outcome.

6.1 Methodology

The discussion of cumulative impacts is guided by State CEQA Guidelines Section 15130, which is summarized as follows.

- An EIR shall discuss cumulative impacts of a project when the project's incremental effect is cumulatively considerable.
- An EIR shall not discuss impacts that do not result in part from the project evaluated in the EIR.
- When the cumulative effect of the project's incremental contribution and the effect of the other projects are not significant, the EIR shall briefly indicate why, based on facts and analysis.
- An EIR may identify a significant cumulative effect but determine that a project's contribution is not cumulatively considerable. The determination may be a result of the project implementing or funding its fair share of mitigation that is designed to alleviate the cumulative impact.
- The discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great of detail as is provided for the effects attributable to the project alone. The discussion should be guided by standards of practicality and reasonableness and focus on the cumulative impact to which the identified other projects contribute rather than the attributes of other projects that do not contribute to the cumulative impact.

According to Section 15130(b) of the State CEQA Guidelines, cumulative impact analysis may be conducted using one of two methods: the List Method, which includes a list of past, present, and probable activities producing related or cumulative impacts, or the Plan Method, which uses a summary of projections contained in an adopted general plan or related planning document, or a prior environmental document that has been certified, that evaluated regional conditions contributing to the cumulative impact. The cumulative analysis that follows for the majority of issue areas uses the Plan Method but, in many cases, is supplemented by the List Method. The Plan Method is more accurate primarily because the project's Transportation Impact Analysis provides a scenario for the anticipated 2035 condition. This future condition is based on the forecast contained in the San Diego Association of Governments (SANDAG) Series 12 traffic model. As such, the cumulative analyses for long-term transportation impacts as well as long-term traffic-related impacts associated with air quality, greenhouse gas (GHG) emissions, and noise and vibration use the Plan Method.

6.2 List of Cumulative Projects

Based on information provided by the City, 12 cumulative projects were considered in this analysis (Figure 6-1). The projects listed in the cumulative study area have submitted or approved applications, are under construction, or have recently been completed. The cumulative projects identified in the study area are listed in Table 6-1, below. Note that project numbering corresponds to the numbers shown in Figure 6-1.

Table 6-1. Cumulative Projects List

Name	Type	Project Size	ADT	Status (2016)	Notes
1. Quarry Falls (Civita)	Residential Retail Commercial Community Commercial Neighborhood Commercial Commercial Office Recreation Center	4,780 DUs 503,000 sq. ft. 50,000 sq. ft. 50,000 sq. ft. 620,000 sq. ft. 4,000 sq. ft.	52,330	Entitled	Project buildout complete by 2035; phases of active construction
2. Mission Valley Fire Station	Fire Station	16,000 sq. ft.	50	Constructed	Station is open
3. Shawnee Master Plan	Multi-Family Residential Commercial/Retail	996 DUs 30,000 sq. ft.	6,793	Entitled	Not yet constructed
4. Mission Road Townhomes	Multi-Family Residential	55 townhomes	Not known	Proposed, not entitled	Environmental review
5. Hanover Residential—Twain	Residential	374 DUs	7,021	Entitled	Under construction
6. Hanover Residential—Fairmount	Residential	383 DUs			
7. Union Tribune Master Plan	Multi-Family Residential Specialty Retail	200 DUs 3,000 sq. ft.	1,128	Entitled	Not yet constructed
8. Town and Country	Multi-Family Residential Hotel/Convention Center Public Park	840 DUs (-254 rooms)	2,066	Proposed, not entitled	DEIR released for public review
9. Legacy International Center	Timeshare Religious Facility	127 rooms 196,165 sq. ft.	1,805	Proposed, not entitled	DEIR released for public review
10. Camino Del Rio Mixed Use	Multi-Family Residential Office Retail	305 DUs 5,000 sq. ft. 4,000 sq. ft.	1,432	Entitled	Under construction
11. Hazard Center Redevelopment	Residential Commercial/Retail	473 DUs 4,205 sq. ft.	950	Entitled	Not yet constructed
12. Friars Road Multi-Family	Multi-Family Residential (Office)	319 DUs (20,548 sq. ft.)	828	Proposed, not entitled	Environmental review

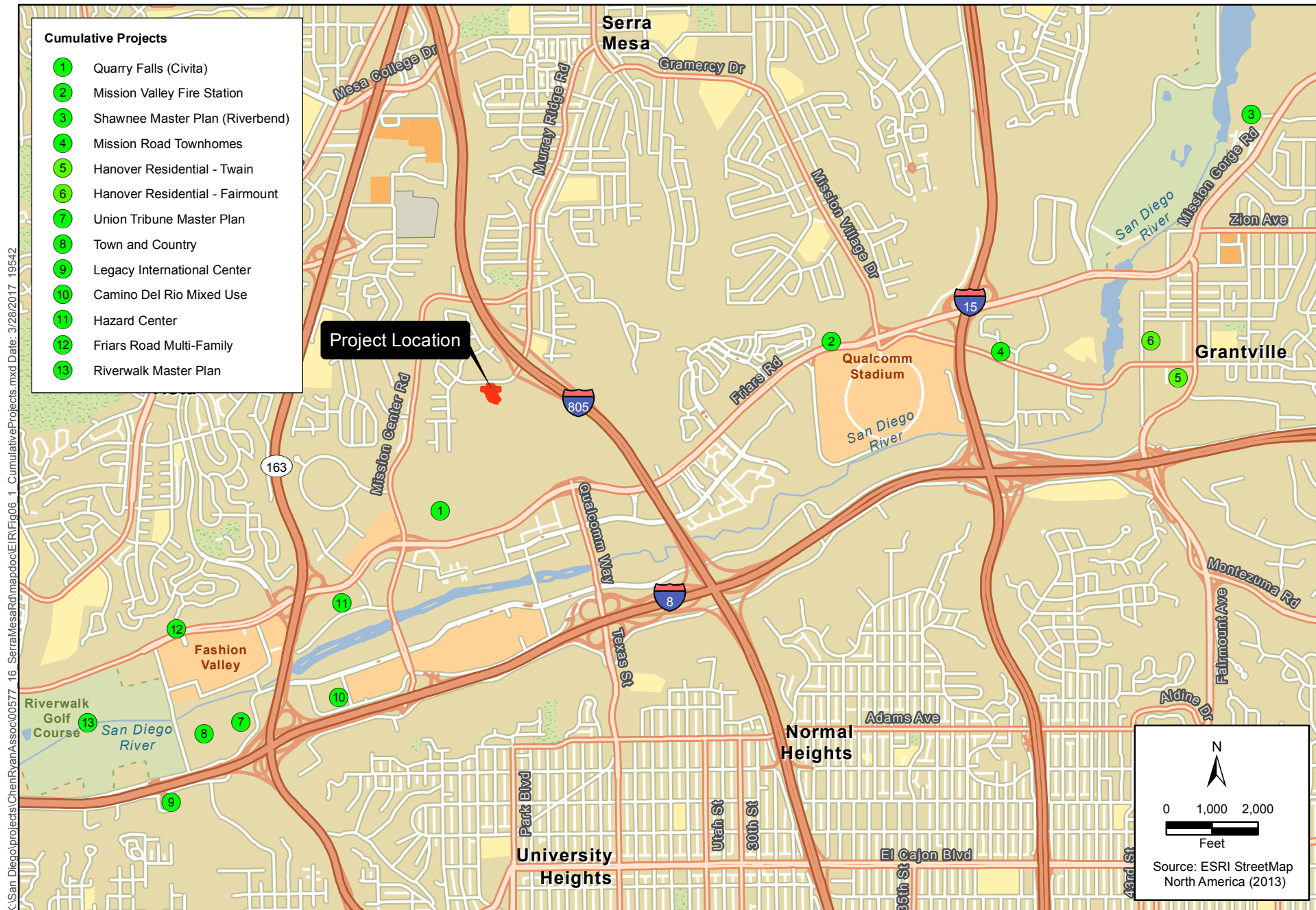


Figure 6-1
Cumulative Projects Location

Name	Type	Project Size	ADT	Status (2016)	Notes
13. Riverwalk Master Plan ¹	Residential Hotel Office Retail	1,329 DUs 1,000 hotel rooms 200,000 sq. ft. 2,582,000 sq. ft.	67,000	Entitled	Not yet constructed

¹ As of May 2015, the Riverwalk Master Plan (formerly Levi-Cushman Specific Plan) proposes to develop 4,000 dwelling units (DUs), 150,000 square feet (sq. ft.) of commercial retail and office space, 950,000 sq. ft. of office space, a 900-room hotel, and a 40-acre park, generating average daily traffic (ADT) of 51,980. This is lower than original specific plan trip ADT generation of 67,000.

6.3 Cumulative Impact Analysis

The discussion below evaluates the potential for the proposed project to contribute to a cumulative adverse impact on the environment. For each resource area, an introductory statement is made regarding what would amount to a significant cumulative impact in a particular resource area. The geographic scope of the area affected by cumulative effects generally varies according to the issue area. The study area for each issue area is described further under the respective resource headings that follow.

The analysis that follows considers two separate impacts: (1) the significance of the cumulative effect from past, present, and reasonably foreseeable projects, and (2) in the event a cumulative effect is identified, the proposed project's incremental contribution to the identified cumulative effect.¹ If it is determined that the proposed project's contribution to the cumulative effect is considerable, feasible mitigation is imposed.

As detailed in Chapter 7, the proposed project would have no impacts on agriculture and forestry resources, energy use, geologic conditions, health and safety, mineral resources, population and housing, public services and facilities, public utilities, and recreation. In addition, as detailed in Section 5.6, *Paleontological Resources*, the project would have no impact on paleontological resources. Therefore, the project has no potential to contribute to cumulative impacts in a manner that would be considered cumulatively considerable. Correspondingly, no additional cumulative analysis is warranted for these resource topics (Section 15130(a)(1) of the State CEQA Guidelines).

6.3.1 Land Use

A cumulatively considerable land use impact would result if the proposed project were to (1) contribute to a significant cumulative impact related a deviation or variance that would in turn result in a physical impact on the environment, (2) conflict with the environmental goals of the community plan in which it would be located, (3) physically divide an established community, (4) conflict with the provisions of the City's Multiple Species Conservation Program (MSCP) Subarea Plan, or (5) be incompatible with an adopted Airport Land Use Compatibility Plan (ALUCP). Within

¹ The analysis also considers the rare circumstance of when a significant cumulative effect is not identified from past, present, and probable future projects, but the proposed project's incremental contribution is so large that when its contribution is combined with the less-than-significant cumulative impact, the impact becomes cumulatively significant.

the City, land use categories are established in the General Plan and then refined within each community plan. Conflicts with the community plan could result in a change to the planned land uses and development patterns within the community plan area.

6.3.1.1 Geographic Scope

The geographic scope for the first three issues includes the Serra Mesa and Mission Valley Community Plan areas because these are the local plans that provide land use designations and long-term buildout blueprints for the respective communities in which the project would be located. For the fourth issue, the cumulative study area is the City's MSCP Subarea Plan area, whereas the study area for the fifth issue is the area covered by the Montgomery Field ALUCP.

6.3.1.2 Cumulative Effects

The General Plan and community plans within the City provide land use designations and long-term buildout blueprints for the respective communities. Development projects that propose deviations or variances from these plans have the potential to cumulatively contribute to the planned character of the communities. Development projects throughout the past few decades, current proposed projects (see Table 6-1), and probable future projects have and will likely continue to propose deviations, variances, or amendments to the Mission Valley Community Plan. For example, cumulative projects such as the Quarry Falls (#1), Union Tribune Master Plan (#6), Town and Country Redevelopment (#7), Legacy International Center (#8), and Hazard Center Redevelopment (#10) projects included deviations/variations from development regulations and/or amendments to the Mission Valley Community Plan.

Past actions have altered development patterns within the community, and it is foreseeable that future actions will continue to do so. However, projects will be required to demonstrate consistency with the guiding vision of the general plan, which sets forth a "city of villages" strategy that aims to concentrate density in parts of the city that are considered appropriate, such as community areas like those within Mission Valley that are adjacent to existing transit and jobs. Furthermore, all projects that require a discretionary permit must demonstrate that a deviation or variance from existing regulations will not cause a significant impact on the environment or require mitigation. For example, if a project were to exceed development regulations that, in turn, cause significant traffic impacts on the circulation system, the project would be required to mitigate those impacts through fees or other feasible measures.

None of the development projects identified in Table 6-1 propose increased density within the Serra Mesa Community Plan area, which is primarily a low-density residential area. However, the Serra Mesa community is bordered by other areas that have seen an increase in growth, including Mission Valley and the Grantville area (see Table 6-1). The Serra Mesa Community Plan calls for the protection of open space areas, canyons, and steep slopes. These regulations are enforced through the City's Environmentally Sensitive Lands Regulations as well as the MSCP Subarea Plan.

Cumulative projects would be required to fully mitigate impacts related to the MSCP Subarea Plan and the Montgomery Field ALUCP prior to approval. For example, any project that impacts sensitive habitat within the Multi-Habitat Planning Area would be required to show in-kind mitigation, such as off-site acquisition, prior to any project approval. Similarly, if a project were to propose a use that conflicts with the Montgomery Field ALUCP, such as a tall building that interferes with flight paths,

mitigation would be required by the Airport Land Use Commission and the City prior to project approval.

Therefore, although historical development over the decades has increased density in Mission Valley and Grantville, and reasonably foreseeable future projects will continue this path of development, changes from past, present, and reasonably foreseeable future projects have been and will continue to be in compliance with existing regulations set forth in the general plan and applicable community plans. Although historical development has not significantly increased the density in the Serra Mesa community, any proposed development that would exceed the community plan's land use designations would require a Community Plan Amendment. It would also be required to mitigate for any impacts associated with growth that would exceed such regulations. As previously detailed, projects are required to demonstrate conformance with the MSCP Subarea Plan and the Montgomery Field ALUCP. Consequently, a cumulatively significant impact from past, present, and reasonably foreseeable future projects is not present.

6.3.1.3 Project Contribution

As discussed in Section 5.1, *Land Use*, the project would not require deviation or a variance from development regulations and would be consistent with the land use designations and zoning. The proposed project would not increase density because it would not include any buildings for residential, commercial, or industrial uses. As demonstrated in Tables 5.1-1 and 5.1-2, the proposed project would be consistent with applicable policies set forth in the general plan, Serra Mesa Community Plan, and Mission Valley Community Plan.

The proposed project would not divide existing communities. It would provide a roadway connection close to regional roadways and freeways (I-805) that, if constructed, would provide a direct connection between the Serra Mesa and Mission Valley community planning areas and more access options for regional trips. Serra Mesa and Mission Valley are currently somewhat divided in the vicinity of the project site because of intervening topography and steep slopes. As such, the street connection between the two adjacent communities would help link them and would not incrementally contribute to a cumulative impact regarding community division.

As detailed in Section 5.1, *Land Use*, the proposed project would not conflict with any regulations set forth in the Montgomery Field ALUCP. The proposed project would not include construction of vertical structures that would conflict with overflight zones or land uses established within the Montgomery Field ALUCP, nor would it otherwise interfere with existing aircraft operations. Therefore, it would not incrementally contribute to a cumulative impact regarding inconsistency with the Montgomery Field ALUCP.

The proposed project would not affect any sensitive habitat within the Multi-Habitat Planning Area and therefore would not conflict with the MSCP Subarea Plan.

Because other past, present, and reasonably foreseeable future projects identified in Table 6-1 have not resulted in a significant land use impact and a cumulatively significant impact does not exist, the proposed project would not result in an impact such that a cumulatively significant impact would be created, and the project's contribution to land use impacts would be less than cumulatively considerable.

6.3.1.4 Level of Significance Prior to Mitigation

The proposed project's incremental contribution to cumulative impacts related to land use would not be cumulatively considerable.

6.3.1.5 Mitigation Measures

No mitigation is required.

6.3.2 Transportation and Circulation

Cumulatively considerable impacts on transportation and circulation could result when past, present, and reasonably foreseeable future projects combine to result in unacceptable roadway, intersection, or freeway ramp operations or contribute to traffic hazards. A significant impact on roadway segment or intersection operations would occur if the proposed project were to cause a segment or intersection to degrade to level of service (LOS) E or LOS F. These impacts were previously detailed within Issue 3 of Section 5.2, *Transportation and Circulation*. However, they are summarized below.

Impacts on segments, intersections, or freeways would occur if any of the criteria in Table 6-2 were to be exceeded. Impacts on alternative transportation modes are also considered. This includes determining whether adequate pedestrian, bicycle, and mass transit facilities are available. In addition, recent interim guidance issued by the California Department of Transportation (Caltrans) now advises using vehicle miles traveled (VMT) to determine if a project would have a significant impact on a Caltrans freeway segment within Caltrans' jurisdiction.

Table 6-2. City of San Diego Measure of Significant Project Traffic Impacts

LOS with Project	Allowable Change Due to Impact					
	Freeways		Roadway Segments		Intersections	Ramp Metering
	V/C	Speed (mph)	V/C	Speed (mph)	Delay (seconds)	Delay (minutes)
E (or ramp meter delays above 15 min)	0.01	1.0	0.02	1.0	2.0	2.0
F (or ramp meter delays above 15 min)	0.005	0.5	0.01	0.5	1.0	1.0

Source: City of San Diego 2016.
LOS = level of service; mph = miles per hour; V/C = volume-to-capacity ratio

6.3.2.1 Geographic Scope

The geographic scope for cumulative transportation and circulation impacts includes all intersections and roadway segments to which the project would contribute 50 or more peak-hour trips in the Near-Term (Year 2017) and Long-Term (Year 2035) scenarios. It should be noted that the traffic generated from the cumulative projects identified in Table 6-1 were included in both scenarios. In addition, the Long-Term (Year 2035) scenario represents the planned transportation

system with the projected buildout conditions of the traffic study area, including the Mission Valley and Serra Mesa community plans.

6.3.2.2 Cumulative Effects

Roadway Capacity

Although the cumulative effects of the project were previously detailed in Section 5.2, *Transportation and Circulation*, they are summarized in this section. The baseline conditions of the Near-Term (Year 2017) and Long-Term (Year 2035) scenarios represent the traffic conditions within the study area without the project. Tables referenced below can be found in Section 5.2.

Near-Term (Year 2017) Baseline Conditions

Tables 5.2-10 through 5.2-13 show the baseline conditions for the Near-Term (Year 2017) scenario. As shown in Table 5.2-10, the following two roadway segments would operate at an unacceptable level of service (LOS).

- Mission Center Road from Aquatera Driveway to Murray Ridge Road
- Murray Ridge Road from the I-805 northbound (NB) ramp to Mission Center Road

As shown in Table 5.2-11, none of the intersections operate at an unacceptable LOS in the Near-Term baseline condition. As shown in Table 5.2-13, no freeway ramp meters would operate at an unacceptable delay (15 minutes or more) in the near-term baseline condition.

As detailed in Appendix H to this DEIR, the VMT for the study area for the Near-Term (Year 2017) baseline condition is 531,382, while the region-wide total (i.e., San Diego region) is 1,523,630.

Long-Term (Year 2035) Baseline Conditions

Tables 5.2-16 through 5.2-19 show the baseline conditions for the Long-Term (Year 2035) scenario.

As shown in Table 5.2-16, in the baseline condition, the following six roadway segments would operate at an unacceptable LOS.

- Mission Center Road from Aquatera Driveway to Murray Ridge Road
- Murray Ridge Road from the I-805 NB ramp to Mission Center Road
- Murray Ridge Road from Mission Center Road to Pinecrest Avenue
- Murray Ridge Road from Pinecrest Avenue to Sandrock Road
- Phyllis Place from the I-805 southbound (SB) ramp to the I-805 NB ramp
- Rio San Diego Drive from Qualcomm Way to Rio Bonito Way

As shown in Table 5.2-17, the following five intersections would operate at an unacceptable LOS in the Long-Term (Year 2035) baseline condition:

- Friars Road and Northside Drive (LOS E, PM peak hour)
- Mission Center Road and Murray Ridge Road/Phyllis Place (LOS E and F, AM and PM peak hour, respectively)
- Murray Ridge Road and the I-805 SB ramp (LOS E, PM peak hour)

- Qualcomm Way and Friars Road eastbound (EB) ramp (LOS E, PM peak hour)
- Qualcomm Way and Friars Road westbound (WB) ramp (LOS F, PM peak hour)

As shown in Table 5.2-18, no freeway ramps in the baseline condition would operate with more than 15 minutes of delay.

As detailed in Appendix H to this DEIR, the baseline condition VMT within the study area would be 733,403 in Year 2035. Region-wide, the VMT prior to consideration of the project's contribution would be 1,633,653 in Year 2035.

Therefore, because roadway segments and intersections are projected to operate at an unacceptable LOS, the cumulative effect of past, present, and reasonably foreseeable future projects would result in a cumulatively significant transportation and circulation impact.

Traffic Hazards

There are no existing traffic hazards within the vicinity of the project site, including along Phyllis Place or any roadways within Quarry Falls.

6.3.2.3 Project Contribution

Roadway Capacity

As previously detailed within Issues 1, 2, and 3 of Section 5.2, *Transportation and Circulation*, traffic that would be redistributed under the proposed project was added to the Near-Term and Long-Term traffic model to determine impacts on roadway segments, intersections, and freeway ramp meters.

Table 6-2 summarizes the transportation facilities that would be significantly affected by the proposed project in the Near-Term (2017) scenario.

Table 6-2. Summary of Near-Term (Year 2017) Impacts on Roadways, Intersections, and Metered Freeway On-Ramps

Impact Number	Impact Location
Roadway Segments	
Impact TRAF-1	Murray Ridge Road, from Mission Center Road to Pinecrest Avenue
Impact TRAF-2	Murray Ridge Road, from Pinecrest Avenue to Sandrock Road
Impact TRAF-3	Phyllis Place, from Franklin Ridge Road to I-805 SB ramps
Impact TRAF-4	Phyllis Place, from I-805 SB ramps to I-805 NB ramps
Intersections	
Impact TRAF-5	Murray Ridge Road and I-805 NB ramps
Impact TRAF-6	Murray Ridge Road and I-805 SB ramps
Impact TRAF-7	Qualcomm Way and Friars Road WB

An analysis of the regional VMT was conducted with the implementation of the proposed roadway connection. The modeled VMT with the roadway connection under the Near-Term Scenario (Year 2017) within the study area is 521,826. This represents a 1.8 percent decrease of VMT within

the study area. With the proposed project, the region-wide VMT total is 1,518,696, a decrease of 0.32 percent. Therefore, as the proposed project would reduce VMT, impacts associated with freeway mainline segments would be less than significant.

Table 6-3 summarizes the transportation facilities that would be significantly affected by the proposed project in the Long-Term (2035) scenario.

Table 6-3. Summary of Long-Term (Year 2035) Impacts on Roadways, Intersections and Metered Freeway On-Ramps

Impact Number	Impact Location
Roadway Segments	
Impact TRA-8	Franklin Ridge Road from Via Alta to Civita Boulevard
Impact TRA-9	Murray Ridge Road from Mission Center Road to Pinecrest Avenue
Impact TRA-10	Murray Ridge Road from Pinecrest Avenue to Sandrock Road
Impact TRA-11	Phyllis Place from Franklin Ridge Road to I-805 SB ramps
Impact TRA-12	Phyllis Place from I-805 SB ramps to I-805 NB ramps
Impact TRA-13	Rio San Diego Drive from Qualcomm Way to Rio Bonito Way
Intersections	
Impact TRA-14	Murray Ridge Road and Sandrock Road
Impact TRA-15	Murray Ridge Road and I-805 NB ramps
Impact TRA-16	Murray Ridge Road and I-805 SB ramps
Impact TRA-17	Via Alta and Franklin Ridge Road
Metered Freeway On-Ramps	
Impact TRA-18	I-805 SB ramp at Murray Ridge Road

With the proposed project, VMT within the study area would be 720,196, a 1.8 percent decrease in VMT when compared to the baseline condition in Year 2035. Region-wide, the VMT with the project would be 1,629,137, a 0.28 percent decrease compared to the baseline condition in Year 2035. Therefore, as the proposed project would reduce VMT within the study area and the region, impacts would be less than significant.

As summarized in the tables above, the proposed project would result in significant impacts on study area roadway segments, intersections, and a freeway ramp meter. The project would contribute significant impacts to an area that would experience significant impacts even without the project. Therefore, the project's contribution would be cumulatively considerable.

Traffic Hazards

Traffic hazards associated with projects are typically localized near the project site, as is the case with the proposed project. The proposed project would contribute to a cumulatively significant impact if the project contributed to a traffic hazards within the cumulative study area. The proposed project would result in inadequate sight distance for motorists exiting the City View Church driveway if the driveway cannot ultimately be relocated. Therefore, the project's contribution would be cumulatively considerable.

6.3.2.4 Level of Significance Prior to Mitigation

The project would contribute significant impacts to an area that would experience significant impacts even without the project. Therefore, the project's contribution would be cumulatively considerable and mitigation would be required to reduce the project's contribution to a level determined to be less than cumulatively considerable.

6.3.2.5 Mitigation Measures

Within Section 5.2, *Transportation and Circulation*, of this DEIR, Section 5.2.4.3 (Near-Term scenario) and Section 5.2.5.3 (Long-Term scenario) detail the mitigation measures for impacts on roadway segments, intersections, and freeway ramp meters; however, they are summarized below.

Roadway Capacity

Near-Term Scenario

Table 6-4 shows the mitigation measures for this scenario.

Table 6-4. Summary of Near-Term (Year 2017) Mitigation Measures

Roadway Segments	MM-TRAF-1: Prior to the commencement of any grading activities or, if a grading permit is required, prior to issuance of a grading permit, Murray Ridge Road shall be restriped from Mission Center Road to Pinecrest Avenue to accommodate two lanes in each direction and a center left-turn lane. The new classification for this segment of Murray Ridge Road will be a four-lane Collector.
	MM-TRAF-2: Prior to the commencement of any grading activities or, if a grading permit is required, prior to issuance of a grading permit, Murray Ridge Road shall be restriped from Pinecrest Avenue to Sandrock Road to accommodate two lanes in each direction and a center left-turn lane. The new classification for this segment of Murray Ridge Road will be a four-lane Collector.
	MM-TRAF-3: Prior to the commencement of any grading activities or, if a grading permit is required, prior to issuance of a grading permit, Phyllis Place shall be widened from Franklin Ridge Road to I-805 SB ramps to accommodate five total lanes (three EB and two WB), including a median. The new classification for this segment of Phyllis Place will be a five-lane Major Arterial.
	MM-TRAF-4: Prior to the commencement of any grading activities or, if a grading permit is required, prior to issuance of a grading permit, Phyllis Place shall be restriped from I-805 SB ramps to I-805 NB ramps to accommodate a total of five lanes. The new classification for this segment of Phyllis Place will be a four-lane Collector.
Intersections	MM-TRAF-5: Prior to the commencement of any grading activities or, if a grading permit is required, prior to issuance of a grading permit, at the intersection, the NB off-ramp approach shall be restriped, the EB approach shall be restriped, the WB approach shall be reconfigured, and the NB on-ramp approach shall be widened.

MM-TRAF-6: Prior to the commencement of any grading activities or, if a grading permit is required, prior to issuance of a grading permit, at the intersection, the EB approach shall be widened to accommodate two through lanes and an exclusive right-turn lane, the SB on-ramp shall be widened, and the SB off-ramp shall be widened to accommodate one share-through-left lane and two exclusive right-turn lanes.

MM-TRAF-7: Prior to the commencement of any grading activities or, if a grading permit is required, prior to issuance of a grading permit, the Qualcomm Way and Friars Road WB ramps intersection shall be reconfigured with the following improvements: the SB approach shall be widened to accommodate two through lanes and one exclusive right-turn lane; the NB approach shall be restriped to accommodate two through lanes and two left-turn lanes; and the WB on-ramp shall be widened to accommodate two receiving lanes.

Long-Term Scenario

Table 6-5 shows the mitigation measures for this scenario.

Table 6-5. Summary of Long-Term (Year 2035) Mitigation Measures

Roadway Segments	MM-TRAF-8: Prior to the commencement of any grading activities or, if a grading permit is required, prior to issuance of a grading permit, Franklin Ridge Road shall be widened to accommodate two lanes in each direction and a center left-turn lane. The new classification for this segment of Franklin Ridge Road would be a four-lane Collector.
	MM-TRAF-9: Prior to the commencement of any grading activities or, if a grading permit is required, prior to issuance of a grading permit, Murray Ridge Road from Mission Center Road to Pinecrest Avenue shall be restriped to accommodate two lanes in each direction and a center left-turn lane. The new classification for this segment of Murray Ridge Road will be a four-lane Collector.
	MM-TRAF-10: Prior to the commencement of any grading activities or, if a grading permit is required, prior to issuance of a grading permit, Murray Ridge Road shall be restriped to accommodate two lanes in each direction and a center left-turn lane. The new classification for this segment of Murray Ridge Road will be a four-lane Collector.
	MM-TRAF-11: Prior to the commencement of any grading activities or, if a grading permit is required, prior to issuance of a grading permit, Phyllis Place from Franklin Ridge Road to I-805 SB ramp shall be reconfigured to accommodate five total lanes (three EB and two WB), including a median. The new classification for this segment of Phyllis Place will be a five-lane Major Arterial.
	MM-TRAF-12: Prior to the commencement of any grading activities or, if a grading permit is required, prior to issuance of a grading permit, Phyllis Place from I-805 SB ramp to I-805 NB ramp shall be restriped to accommodate five total lanes. The new classification for this segment of Phyllis Place will be a five-lane Major Arterial.
	MM-TRAF-13: Prior to the commencement of any grading activities or, if a grading permit is required, prior to issuance of a grading permit, the segment of Rio San Diego Drive from Qualcomm Way to Rio Bonito Way shall be reconfigured to include the necessary median commensurate with a four-lane Major Arterial.
Intersections	MM-TRAF-14: Prior to the commencement of any grading activities or, if a grading permit is required, prior to issuance of a grading permit, this intersection shall be reconfigured such that the left-turn lanes in both the NB and SB directions will allow both through movements and left turns.

MM-TRAF-15: Prior to the commencement of any grading activities or, if a grading permit is required, prior to issuance of a grading permit, at the intersection, the NB off-ramp approach shall be restriped, the EB approach shall be restriped, the WB approach shall be reconfigured, and the NB on-ramp approach shall be widened.

MM-TRAF-16: Prior to the commencement of any grading activities or, if a grading permit is required, prior to issuance of a grading permit, at the intersection, the EB approach shall be widened to accommodate two through lanes and an exclusive right-turn lane, the SB on-ramp shall be widened, and the SB off-ramp shall be widened to accommodate one share-through-left lane and two exclusive right-turn lanes.

MM-TRAF-17: Prior to the commencement of any grading activities or, if a grading permit is required, prior to issuance of a grading permit, this intersection shall be reconfigured such that the EB through/right-turn lane will be converted to a left/through/right-turn lane to account for additional EB to NB traffic.

Freeway Ramp Meters	MM-TRAF-18: Prior to the commencement of any grading activities or, if a grading permit is required, prior to issuance of a grading permit, the applicant shall contribute a fair share contribution, in coordination with Caltrans, which would be applied toward an additional regular traffic ramp lane on the I-805 SB on-ramp from Murray Ridge Road.
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Traffic Hazards

MM-TRAF-19: Prior to the commencement of any grading activities or, if a grading permit is required, prior to issuance of a grading permit, the City View Church driveway shall be relocated as part of the four-way intersection design with the proposed roadway connection and Phyllis Place.

Implementation of this measure would reduce the impact to a level below significance; however, the City's ability to implement this measure may be limited. The City View Church is a privately owned property. The relocation of the driveway may in turn require the removal of trees and the reconfiguration of other internal access considerations within the Church property, such as the drop-off area in front of the church that is connected to the existing driveway. Due to the uncertainty of being able to implement this measure in light of countervailing considerations, this analysis does not assume it will occur. In the event it does not, the impact would remain significant and unavoidable.

6.3.2.6 Level of Significance after Mitigation

Near-Term Scenario

As shown in Table 5.2-15, if mitigation were fully implemented, there would be less-than-significant impacts at the following roadway segments. However, this analysis assumes that the mitigation measures would not be implemented (for the reasons detailed in Section 5.2.4.3) at the following segments:

- Murray Ridge Road, from Mission Center Road to Pinecrest Avenue (**Impact TRAF-1**)
- Murray Ridge Road, from Pinecrest Avenue to Sandrock Road (**Impact TRAF-2**)

Therefore, impacts at these segments under the Near-Term scenario would be cumulatively considerable and unavoidable.

Table 5.2-14 shows the post-mitigation measure LOS. As shown, mitigation would improve LOS at the following impacted segments to an acceptable level.

- Phyllis Place, from Franklin Ridge Road to I-805 SB ramps (**Impact TRAF-3**)
- Phyllis Place, from I-805 SB ramps to I-805 NB ramps (**Impact TRAF-4**)

Therefore, impacts at these segments under the Near-Term scenario would be not be cumulatively considerable after mitigation.

As shown in Table 5.2-15, mitigation would improve LOS at the following intersections to an acceptable level:

- Murray Ridge Road/I-805 NB ramps(**Impact TRAF-5**)
- Murray Ridge Road/I-805 SB ramps (**Impact TRAF-6**)
- Qualcomm Way/Friars Road WB ramp (**Impact TRAF-7**)

Therefore, intersection impacts under the Near-Term scenario at these locations would not be cumulatively considerable after mitigation.

Long-Term Scenario

As shown in Table 5.2-20, if mitigation were fully implemented, there would be less-than-significant impacts at the following roadway segments. However, this analysis assumes that the mitigation measures would not be implemented (for the reasons detailed in Section 5.2.5.3) at the following segments:

- Franklin Ridge Road, from Via Alta to Civita Boulevard (**Impact TRAF-8**)
- Murray Ridge Road, from Mission Center Road to Pinecrest Avenue (**Impact TRAF-9**)
- Murray Ridge Road, from Pinecrest Avenue to Sandrock Road (**Impact TRAF-10**)
- Rio San Diego Drive, from Qualcomm Way to Rio Bonito Way (**Impact TRAF-13**)

Therefore, impacts at these segments under the Long-Term scenario would be cumulatively considerable and unavoidable.

As shown in Table 5.2-20, mitigation would improve LOS at the following segments to an acceptable level:

- Phyllis Place, from Franklin Ridge Road to I-805 SB ramps (**Impact TRAF-11**)
- Phyllis Place, from I-805 SB ramps to I-805 NB ramps (**Impact TRAF-12**)

Therefore, impacts at these segments under the Long-Term scenario would not be cumulatively considerable after mitigation.

As shown in Table 5.2-22, if mitigation were fully implemented, there would be less-than-significant impacts at the following intersection. However, this analysis assumes that the mitigation measure would not be implemented (for the reasons detailed in Section 5.2.5.3) at the following intersection:

- Murray Ridge Road and Sandrock Road (**Impact TRAF-14**)

Therefore, impacts at this intersection under the Long-Term scenario would be cumulatively considerable and unavoidable.

As shown in Table 5.2-21, mitigation would improve LOS at the following intersections; however, it would not be reduced to an acceptable level at the following intersections in the PM peak hour.

- Murray Ridge Road/I-805 NB ramps; PM peak hour (**Impact TRAF-15**)
- Murray Ridge Road/I-805 SB ramps; PM peak hour (**Impact TRAF-16**)

Therefore, impacts at these intersections in the PM peak hour under the Long-Term scenario would be cumulatively considerable and unavoidable.

As shown in Table 5.2-21, mitigation would improve LOS at the following intersections to an acceptable level.

- Via Alta/Franklin Ridge Road; PM peak hour (**Impact TRAF-17**)

Therefore, impacts at these intersections in the respective peak hours under the Long-Term scenario would not be cumulatively considerable after mitigation.

Table 5.2-22 shows the post-mitigation measure LOS for impacted freeway ramp meters. As shown, mitigation would improve delay at the following ramp meter to an acceptable level.

- I-805 SB on-ramp at Murray Ridge Road (**Impact TRAF-18**)

Therefore, impacts at this ramp meter under the Long-Term scenario would not be cumulatively considerable after mitigation.

Traffic Hazards

If mitigation were fully implemented, traffic hazard impacts would be reduced to less-than-significant levels. However, this analysis assumes that the mitigation measure would not be implemented. Therefore, impacts would be cumulatively considerable and unavoidable.

6.3.3 Air Quality

Cumulatively considerable air quality impacts would result when cumulative projects' emissions would combine to (1) degrade air quality conditions to levels that would be below attainment levels for the San Diego Air Basin (SDAB), (2) delay attainment of air quality standards, (3) affect sensitive receptors, or (4) subject surrounding areas to objectionable odors. Neither the City nor San Diego Air Pollution Control District (SDAPCD) have established quantitative thresholds for determining whether a project's incremental contribution to emissions would be cumulatively considerable. Therefore, the City's and County of San Diego's screening-level thresholds for cumulative air quality impacts, based on SDAPCD Rule 20.1 for non-major stationary sources, are used for the analysis of impacts related to emissions from proposed project construction and operations, as evaluated within the context of past, present, and reasonably foreseeable future projects. Substantial evidence for using City and SDAPCD threshold levels for this project is contained within Section 5.3.3.2 of this DEIR.

6.3.3.1 Geographic Scope

The SDAB, which covers 4,260 square miles of Southern California and is contiguous with San Diego County, represents the geographic scope for cumulative air quality impacts related to consistency with air quality plans and air quality threshold levels. This is because plans and thresholds are established at the air basin level to provide air quality standards for the entire air basin, which, in this case, is the entire county. Cumulative impacts on sensitive receptors, including impacts from

odors, are considered at a more localized level because of the more limited area of dispersion. This may include surrounding neighborhoods and areas close to the sources of the emissions and odors.

6.3.3.2 Cumulative Effects

Past projects within the SDAB have involved emissions of ozone precursors (reactive organic gases [ROG] and nitrogen oxides [NO_x]), particulate matter 10 micrometers or less in diameter (PM₁₀), and particulate matter 2.5 micrometers or less in diameter (PM_{2.5}), resulting in nonattainment status (see Section 5.3, *Air Quality*) for the 8-hour ozone standard under the National Ambient Air Quality Standards (NAAQS) as well as nonattainment status for ozone, PM₁₀, and PM_{2.5} under the California Ambient Air Quality Standards (CAAQS). Therefore, the emissions of concern within the SDAB are ozone precursors (ROG and NO_x), PM₁₀, and PM_{2.5}. The nonattainment status for the entire county is a consequence of past and present projects and subject to continued nonattainment status as a result of the cumulative contribution of reasonably foreseeable future projects within the county, such as those listed in Table 6-1. However, the only reasonably foreseeable future project within 1,000 feet that could have impacts on localized air quality conditions is the Quarry Falls project (cumulative project #1). Overall, the cumulative air quality impact from past, present, and reasonably foreseeable future projects is significant.

6.3.3.3 Project Contribution

As discussed under Issue 1 of Section 5.3, the proposed project would not include any structures or development that would generate population growth; therefore, it would not exceed the growth projections in the general plan or SANDAG's regional growth projections. Additionally, the proposed project would not include trip-generating uses (e.g., residential or commercial units), and its implementation would reduce VMT compared to existing traffic conditions. The proposed project would be consistent with the local general plan and SANDAG's growth projections and, as such, would be considered consistent at a regional level with the underlying growth forecasts in the Regional Air Quality Strategy (RAQS) and State Implementation Plan (SIP). The RAQS and SIP are designed to bring the SDAB into attainment status for state and federal ozone standards. Therefore, although there is a significant cumulative impact from past, present, and reasonably foreseeable future projects, resulting in nonattainment status for some criteria pollutants in the air basin, the proposed project's incremental contribution to cumulative air emissions would not conflict with progress toward attainment of the air quality standards described in the RAQS and SIP.

As discussed under Issue 2 and shown in Table 5.3-5 of Section 5.3, *Air Quality*, criteria pollutant emissions would be below SDAPCD trigger levels for all pollutants during construction. Although the effects from past, present, and reasonably foreseeable future projects are considered cumulatively significant, the proposed project's incremental contribution from construction emissions would not result in a net increase in nonattainment pollutants because it would not exceed SDAB's cumulative impact thresholds during project construction. Moreover, possible cumulative impacts on air quality as a result of these combined activities would be addressed by standard SDAPCD measures, which apply to construction projects, including fugitive dust control, per Rule 55. Once operational, the proposed road connection would offer a more direct route and divert traffic from other arterials in the vicinity, resulting in reduced criteria pollutant emissions relative to no-project and existing conditions. Consequently, the proposed project's incremental contribution to this cumulative air quality impact would not be cumulatively considerable.

In analyzing cumulative operational emissions from the proposed project, the analysis must specifically evaluate a project's contribution to the cumulative increase in pollutants for which the SDAB is designated as nonattainment for the CAAQS and NAAQS. If the future implementation of the project does not exceed thresholds and is determined to have less-than-significant project-specific impacts, it may still contribute to a significant cumulative impact on air quality if the emissions from the construction, in combination with the emissions from other proposed or reasonably foreseeable future projects, are in excess of established thresholds. However, the proposed project would be considered to have only a significant cumulative impact if the future construction's contribution accounts for a significant proportion of the cumulative total emissions (i.e., it represents a "cumulatively considerable contribution" to the cumulative air quality impact).

Operation of the proposed project would result in a decrease in VMT, as compared to existing traffic conditions (see Section 5.3.5). As such, the proposed project would reduce criteria pollutant emissions, relative Long-Term (i.e. cumulative) conditions. This result would be a regional and long-term air quality benefit.

As discussed under Issue 3 in Section 5.3.6, the proposed project would not expose sensitive receptors to substantial pollutant concentrations during construction or operation. Although diesel-powered equipment would generate diesel particulate matter, construction would be short term. Emissions would dissipate as a function of distance and, therefore, be lower at the nearest sensitive receptor. Off-road diesel construction equipment and heavy-duty diesel trucks, which would be used at both the project site and during construction of the Quarry Falls project (cumulative project #1), are regulated under three Airborne Toxic Control Measures. Although the redistribution of vehicle trips may move traffic closer to receptors adjacent to the road connection, the diverted traffic would predominantly be passenger vehicles, which are not a significant source of diesel emissions. Similarly, the project would not create a carbon monoxide hotspot. Therefore, the proposed project's incremental contribution to this cumulative health risk impact would not be cumulatively considerable.

6.3.3.4 Level of Significance Prior to Mitigation

The proposed project's incremental contribution to cumulative impacts related to air quality would not be cumulatively considerable.

6.3.3.5 Mitigation Measures

No mitigation is required.

6.3.3.6 Level of Significance After Mitigation

The proposed project's incremental contribution to cumulative impacts related to air quality would not be cumulatively considerable and therefore would be less than significant.

6.3.4 Noise

A cumulatively considerable impact from noise and vibration would result if the proposed project were to contribute to cumulative impacts related to (1) exceedances of noise standards, (2) ground-borne vibration, or (3) substantial ambient noise levels when evaluated within the context of past, present, and reasonably foreseeable future projects. Impacts related to air traffic noise were

determined to have no impact at the project level; therefore, cumulative impacts related to air traffic noise were not evaluated.

6.3.4.1 Geographic Scope

The study area for the cumulative noise impact analysis is defined as the area within a 1,000-foot radius of the project site.

6.3.4.2 Cumulative Effects

In general, noise is a highly localized effect. A noise source operating close to a receiver will tend to dominate the noise environment at that receiver, and any similar sources operating at distances of 1,000 feet or more would typically have a negligible effect on the overall noise level at the receiver. Thus, there is typically no meaningful cumulative effect created by two noise sources that are separated by 1,000 feet. The only project listed within Table 6-1 within 1,000 feet of the project site is the Quarry Falls project. The Quarry Falls site is undergoing various phases of active construction; therefore, the potential exists for construction to occur within 1,000 feet of the proposed project. However, the Quarry Falls project is required to comply with the mitigation measures set forth in the Quarry Falls PEIR as well as existing City regulations, including the Noise Ordinance. Consequently, a cumulatively significant impact from past, present, and reasonably foreseeable future projects is not present.

Concerning the existing cumulative ambient noise environment, ambient noise in the vicinity of the project site is generated primarily by traffic along I-805 as well as arterial roadways in the project vicinity. The existing ADT volume along Phyllis Place is 2,420 trips. The existing ADT volume along Friars Road between I-805 and Qualcomm Way is 36,466 trips. As detailed in Section 5.4, *Noise*, the measured average noise level (L_{eq}) within the vicinity of the project site ranges from 52 A-weighted decibels (dBA) L_{eq} at Site M2 to 62 dBA L_{eq} at Site M3. With regard to existing traffic noise, several receivers in the vicinity of the project site were modeled. The noise levels ranged from 54 dBA L_{eq} at a future residence west of the proposed roadway to 69 dBA L_{eq} at a residence adjacent to Mission Center Road.

Construction vibration effects are highly localized, as well. Vibration from construction activities is assessed using instantaneous vibration (peak particle velocity), which is typically caused by distinct events from a single piece of equipment. As previously detailed, the only localized cumulative project is Quarry Falls, which is directly adjacent to the project site. As described in its PEIR, Quarry Falls is a phased project, which can lead to previously constructed uses experiencing the effects of ongoing construction (including ground-borne vibration). However, the Quarry Falls PEIR required mitigation to reduce potential impacts from construction, including a requirement to prepare and implement a noise mitigation plan that identifies temporary noise barriers, restricts heavy equipment, and increases setback distances (Quarry Falls PEIR, page 5.5-15). Consequently, a cumulatively significant impact from past, present, and reasonably foreseeable future projects is not present.

6.3.4.3 Project Contribution

As previously detailed in Section 5.4, *Noise*, the proposed project would be required to adhere to mitigation measure **MM-NOI-1** in order to reduce potentially significant construction noise impacts to less-than-significant levels. As previously described, the only reasonably foreseeable future project within 1,000 feet of the project site is the Quarry Falls project. The Quarry Falls project is

similarly required to adhere to existing regulations and mitigation measures detailed within the Quarry Falls PEIR (see Section 5.5 of the Quarry Falls PEIR).

Potential cumulative impacts are analyzed as part of the traffic noise analysis included in Table 5.4-7 (see Section 5.4, *Noise*). Estimated long-term traffic noise levels include the cumulative effects of the proposed project and any other related projects in the vicinity. Referring to Table 5.4-7, long-term traffic noise levels are estimated to range from 58 to 70 decibels (dB) Community Noise Equivalent Level (CNEL) without the project and 59 to 71 dB CNEL with the project. For all receivers except R3, R7, and R11, noise levels would increase by less than 3 dB relative to existing conditions. At R3, representing residential land uses adjacent to Civita Boulevard, the estimated cumulative traffic noise increase would be 3 dB (increasing from 58 to 61 dB CNEL); at R7, representing future residential land uses west of the proposed roadway extension, the estimated cumulative traffic noise increase would be 5 dB (increasing from 54 to 59 dB CNEL); and at R11, representing residential land uses adjacent to Via Alta, the estimated cumulative traffic noise increase would be 3 dB (increasing from 60 to 63 dB CNEL). Cumulative traffic noise with the proposed project is estimated to result in one exceedance of the City of San Diego's 65 dBA CNEL exterior noise standard (at R8, adjacent to Qualcomm Way and south of Friars Road), but the associated increase would be less than 3 dBA. Cumulative traffic would not result in an exceedance of the City of San Diego's exterior noise standard of 70 dB CNEL for churches. Therefore, the project's incremental contribution to significant cumulative operational noise impacts from past, present, and reasonably foreseeable future projects would be less than cumulatively considerable.

6.3.4.4 Level of Significance Prior to Mitigation

Prior to mitigation, cumulative impacts related to construction noise would be potentially significant. Operational (traffic-related) noise impacts would be less than significant.

6.3.4.5 Mitigation Measures

Mitigation measure **MM NOI-1**, as described in Section 5.4, *Noise*, shall be implemented.

6.3.4.6 Level of Significance After Mitigation

The project's contribution to cumulative construction noise would not be cumulatively considerable with mitigation incorporated.

6.3.5 Biological Resources

A cumulatively considerable impact on biological resources would result if the proposed project were to contribute to cumulative impacts related to (1) sensitive habitat or species, (2) sensitive habitat/natural communities, (3) federally protected wetlands, or (4) wildlife movement corridors.

6.3.5.1 Geographic Scope

The geographic area for biological resources includes Mission Valley and Serra Mesa. Biological resources can have commonalities across a large regional area while also having very unique and specific characteristics in certain locations. In Mission Valley and Serra Mesa, the dense urbanized setting creates limited habitat opportunities, and biological resources tend to be fairly isolated, with areas of connectivity restricted to a few linear features, such as the canyons within Serra Mesa and the San Diego River in Mission Valley. Present and reasonably foreseeable future projects that could

contribute to cumulative impacts on biological resources are projects that include grading, paving, landscaping, road construction, and building construction.

6.3.5.2 Cumulative Effects

The project site and surrounding areas within Mission Valley and Serra Mesa have been transformed by historical development projects that represent the urban development seen today. Present and future projects will continue to urbanize the area. The sensitive biological resources that remain within these communities and throughout the city are protected by the City's MSCP Subarea Plan; present and future projects would be required to be consistent with the plan. Moreover, present and future projects would comply with the requirements of the Migratory Bird Treaty Act, which contains regulations pertaining to take, including feathers, nests, or eggs. It would also require present and future projects to avoid and/or mitigate potential impacts on any nesting birds.

6.3.5.3 Project Contribution

As discussed in Section 5.5, *Biological Resources*, the proposed project would directly affect 0.25 acre of disturbed coastal sage scrub, a Tier II sensitive upland habitat, pursuant to the MSCP Subarea Plan. This is a significant impact that would require mitigation. Additionally, there is moderate potential for birds that are protected under the federal Migratory Bird Treaty Act to be significantly affected, which would also require mitigation. Implementation of the mitigation detailed in Section 5.5 would ensure that sensitive habitat would have adequate protection, in compliance with the City's MSCP Subarea Plan, thereby ensuring a regional conservation effort and the protection of sensitive biological resources. Mitigation would also ensure compliance with the Migratory Bird Treaty Act, which all development projects are required to comply with.

The project site is not part of a wildlife corridor and therefore it would not contribute to the incremental loss of a regional wildlife corridor. Therefore, the project's incremental contribution to wildlife corridor impacts from past, present, and reasonably foreseeable future projects would be less than cumulatively considerable.

6.3.5.4 Level of Significance Prior to Mitigation

Impacts related to sensitive habitat and migratory birds would be potentially cumulatively significant.

6.3.5.5 Mitigation Measures

Mitigation detailed in Section 5.5, including mitigation measures **MM-BIO-1** and **MM-BIO-2**, would also mitigate cumulative impacts associated with sensitive habitat and migratory birds.

6.3.5.6 Level of Significance after Mitigation

Implementation of mitigation measures **MM-BIO-1** and **MM-BIO-2** would reduce cumulative impacts to less than significant.

6.3.6 Historical and Tribal Cultural Resources

The project would have a significant impact requiring mitigation if its contribution to a cumulatively significant impact associated with the loss or destruction of historical and tribal cultural resources is considerable in relation to the cumulatively significant impact.

6.3.6.1 Geographic Scope

The geographic scope of analysis for cumulative historical resource impacts depends on the type of resource but generally includes the Mission Valley and Serra Mesa areas. For instance, prehistoric and paleontological resources could be located within any of the natural landforms that surround the project site. Historical archaeological or Tribal Cultural Resources could be present within the surrounding artificial soils and fill. Impacts on buried archaeological resources generally occur from ground-disturbing activities, such as grading and dredging, while impacts on the historic built environment typically result from modification, relocation, and demolition of existing structures.

6.3.6.2 Cumulative Effects

Historical development within Mission Valley and Serra Mesa represents the urban development seen today. As discussed in Section 5.7, *Historical and Tribal Cultural Resources*, no archaeological resources have been recorded within the project site; however, the potential for subsurface resources exists.

Present and reasonably foreseeable future projects within the Mission Valley and Serra Mesa areas could result in impacts on important archaeological artifacts during construction activities that disturb soils where the potential exists to encounter isolated archaeological deposits or other items of historic value. Therefore, cumulative development in the project area could result in the loss and/or degradation of cultural resources. However, the City of San Diego's CEQA Significance Criteria call for extensive archaeological monitoring, based on the location of sensitive cultural resources. Therefore, because all cumulative projects in the city would implement detailed mitigation to avoid the destruction of any sensitive archaeological resources, cumulative impacts on cultural resources from the projects listed in Table 6-1 would be less than significant.

6.3.6.3 Project Contribution

Archaeological and historical investigations did not identify any archaeological or historical resources within the project site. Nevertheless, the potential exists for project construction activities to result in impacts on subsurface historical and Tribal Cultural Resources. However, mitigation required at the project level (**MM-HIST-1**) would ensure that the project's potential impact on historical and Tribal Cultural Resources would be less than significant. When combined with the cumulative projects listed in Table 6-1, which would also implement mitigation in areas of sensitivity, pursuant to the City's CEQA Significance Criteria, cumulative impacts would be less than significant, and the project's contribution to the cumulative impact would not be considerable.

6.3.6.4 Level of Significance Prior to Mitigation

Mitigation (**MM-HIST-1**) is required for project-specific impacts, as discussed in Section 5.7, *Historical and Tribal Cultural Resources*. With this mitigation, impacts on historical and Tribal

Cultural Resources would be avoided. Therefore, the proposed project would not result in a cumulatively considerable contribution to cumulative cultural resources impacts.

6.3.6.5 Mitigation Measures

No mitigation is required at the cumulative level. However, the proposed project would implement mitigation measure **MM-HIST-1** to reduce project-specific impacts to a less-than-significant level.

6.3.6.6 Level of Significance After Mitigation

Mitigation measure **MM-HIST-1** is required for project-related impacts. However, once implemented, it would also help the proposed project avoid any cumulatively considerable contribution to such impacts by reducing the potential for damaging unknown archaeological resources that may be present. In addition, should an unexpected discovery of human remains be made, California Health and Safety Code Section 7050.5 and California Public Resources Code Section 5097.98 would apply. Therefore, cumulative impacts would be reduced to less than cumulatively significant.

6.3.7 Hydrology and Water Quality

A significant cumulative impact on hydrology and water quality would result if the proposed project were to contribute to impacts related to water quality standard violations, increased runoff that would be in excess of available capacity, and alterations to drainage patterns that would lead to erosion or flooding, as evaluated within the context of past, present, and reasonably foreseeable future projects.

6.3.7.1 Geographic Scope

The geographic scope of analysis for cumulative impacts on hydrology and water quality includes the San Diego River watershed, which includes all of the projects listed in Table 6-1.

6.3.7.2 Cumulative Effects

Past projects within the San Diego River watershed have contributed pollutants to the Lower San Diego River, as evidenced by the Clean Water Act Section 303(d) List of Water Quality Limited Segments Requiring Total Maximum Daily Loads. Current and future projects would be subject to the state and local regulatory standards that must be achieved during construction and operation to reduce or avoid polluted runoff to the maximum extent practicable. These current and reasonably foreseeable future projects could contribute pollutants such as oil and grease, suspended solids, metals, gasoline, pesticides, and pathogens to the stormwater conveyance system and receiving waters. The majority of the projects listed in Table 6-1 would involve at least 1 acre of grading, except for the recently constructed Mission Valley Fire Station. These projects would be required to comply with the National Pollutant Discharge Elimination System Construction General Permit, which requires preparation of a Storm Water Pollution Prevention Plan (SWPPP) by a Qualified SWPPP Developer and implementation of best management practices (BMPs) by a Qualified SWPPP Practitioner to ensure that runoff from individual projects would meet current water quality standards.

Present and reasonably foreseeable future projects would be subject to regulations that require compliance with water quality standards, including state and local water quality regulations, such as

the City of San Diego's Stormwater Management and Discharge Control Ordinance, which identifies water quality BMP requirements (for projects within the City's jurisdiction). The City's Stormwater Management and Discharge Control Ordinance requires implementation of measures to reduce the risk of non-stormwater discharges and pollutant discharges through the use of BMPs. However, because the Lower San Diego River is currently an impaired water body and has been for some time, the cumulative effect of past, present, and reasonably foreseeable future projects may result in a cumulatively significant water quality impact.

6.3.7.3 Project Contribution

A cumulatively significant impact on hydrology and water quality presently exists because of the Lower San Diego River's status as an impaired water body and the potential for present and future projects to further degrade the water body. The proposed project would involve land-disturbing activities that would expose soils and, as such, would require compliance with the Construction General Permit. Compliance with the Construction General Permit would require development and implementation of a SWPPP by a Qualified SWPPP Developer. The SWPPP would list the BMPs that would be implemented by the Qualified SWPPP Practitioner to protect stormwater runoff and include a monitoring plan for measuring BMP effectiveness. At a minimum, BMPs would include practices to minimize contact between construction materials, equipment, and maintenance supplies (e.g., fuels, lubricants, paints, solvents, adhesives) with stormwater. The SWPPP would specify properly designed, centralized storage areas to keep these materials out of the rain. If grading must be conducted during the rainy season, the primary BMPs selected would focus on erosion control (i.e., keeping sediment in place), followed by sediment control (i.e., keeping sediment on the site). In addition to the SWPPP, implementation of construction BMPs would be required, which would reduce impacts on water quality.

The proposed project would result in an increase in impervious surface areas and may increase the volume of runoff. Operational activities would involve vehicle traffic on the roadway, which could generate pollutants (trash, debris/litter), metals, nutrients, oil and grease, organics, and sediment. The project would be required to comply with the municipal separate storm sewer system permit, the City's stormwater standards, and the *BMP Design Manual* (County of San Diego 2016) to reduce the volume of runoff, treat pollutants, and generally maintain existing hydrologic conditions. The City's stormwater standards would mandate inclusion of Low-Impact Development and runoff management, which would reduce the amount of impervious surfaces and runoff volumes compared with current conditions. Therefore, the project's incremental contribution to significant cumulative water quality impacts from past, present, and reasonably foreseeable future projects would be less than cumulatively considerable.

6.3.7.4 Level of Significance Prior to Mitigation

The proposed project's incremental contribution to cumulative impacts related to hydrology and water quality would not be cumulatively considerable.

6.3.7.5 Mitigation Measures

No mitigation is required.

6.3.8 Visual Effects and Neighborhood Character

A cumulatively considerable impact on aesthetics and visual quality would result if the proposed project were to contribute to a significant cumulative impact related to a substantial and adverse change in the overall character of the area or cumulative blockage of a view that would affect the overall scenic quality of a resource, develop structures that would substantially differ from the character of the vicinity, or result in the addition of a substantial cumulative amount of light and/or glare.

6.3.8.1 Geographic Scope

The geographic scope of analysis for cumulative aesthetics and visual quality impacts to which the proposed project may contribute is within the immediate vicinity of the project site and the Quarry Falls site. The topography of this area includes a valley that is surrounded by major roadways (I-805 to the east, Friars Road and I-8 to the south); this confines the cumulative viewshed to this area. As described in Section 5.9, the project site currently comprises approximately 2 acres of undeveloped land adjacent to the 230-acre Quarry Falls site. The northern portion of the project site slopes upward on a hillside to the point where it abuts Phyllis Place. The middle of the southern portion of the project site dips slightly in the center and then gently slopes upward to both the eastern and western edges of the project site. The northern portion of the project site (where the proposed road would intersect with Phyllis Place) is visually characterized by a hillside covered with sparse vegetation; the adjacent off-site land is also characterized visually as sparsely vegetated. The southern portion of the project site contains graded land; land immediately adjacent and off site is characterized by expansive parcels of graded land. Overall, even though the site is primarily disturbed, the visual quality of the site is moderate because of the presence of the hillside.

6.3.8.2 Cumulative Effects

Past projects within the cumulative viewshed included the former mining operation on the Quarry Falls site, roadways, and energy transmission towers operated by San Diego Gas & Electric. These projects changed the condition of the cumulative study area from one that is undisturbed to primarily disturbed, although the hillside south of Phyllis Place remains somewhat undisturbed. Present projects include the development associated with Quarry Falls, which is transforming the site from that of a mining operation to a mixed-use development composed of residences, commercial/retail uses, roadways, and open space areas. The Quarry Falls PEIR concluded that the Quarry Falls project would result in a significant change to the visual character of the site and surrounding area, changing the existing site from a mining site to urban development, similar to what occurs in adjacent areas surrounding the site. No mitigation measures were identified to reduce the significant change in the visual character of the site and surrounding area to below a level of significance. Therefore, the cumulative visual effect of past, present, and reasonably foreseeable future projects is cumulatively significant.

6.3.8.3 Project Contribution

The proposed project does not include vertical structures (other than light poles) that would be added to the viewshed. The project site is on a hillside that is visible from the Quarry Falls development and Phyllis Place. However, within the context of the substantial development occurring at the Quarry Falls site and other existing development in the vicinity of the project site, the inclusion of a relatively small segment of roadway would be minimally discernible from the

surrounding area. In addition, the project would be developed using the standards for a four-lane urban major street established by the City of San Diego in the *Street Design Manual* (2002). Following these standards would ensure that all necessary components of the roadway, such as roadway and lane widths, curb cuts, sidewalks, and bicycle lanes, would be incorporated and that the proposed roadway would be designed in a uniform manner. Landscaping that conforms to the City's landscape regulations would also be included in the project design to enhance the character of the street design. However, as previously detailed under Issue 5 in Section 5.9, *Visual Effects and Neighborhood Character*, the project site is on a steep hillside with natural gradients equal to or in excess of 25%; therefore, it would be subject to the City's Environmentally Sensitive Lands Regulations.

The project would alter more than 2,000 cubic yards of earth per graded acre and/or result in a change in elevation for a steep hillside, from existing grade to a proposed grade of more than 5 feet. As such, the proposed project would have the potential to result in an incremental contribution to significant cumulative landform alteration impacts.

6.3.8.4 Level of Significance Prior to Mitigation

Mitigation detailed in Section 5.9, including mitigation measure **MM-VIS-1**, would apply to cumulative impacts associated with landform alteration.

6.3.8.5 Mitigation Measures

Implementation of mitigation measure **MM-VIS-1** would reduce this project's impacts to less-than-significant levels.

6.3.8.6 Level of Significance After Mitigation

With implementation of mitigation, the proposed project's incremental contribution to cumulative impacts related to visual quality would be incremental and would not be cumulatively considerable and, therefore, would be less than cumulatively significant.

6.3.9 Greenhouse Gas Emissions

The potential exists for a cumulatively considerable GHG emissions-related impact if the project is inconsistent with the City's Climate Action Plan (CAP), which is a qualified GHG Reduction Plan.

6.3.9.1 Geographic Scope

Climate change is a cumulative issue; therefore, the geographic scope for cumulative GHG emissions impacts is global. Because climate change is the result of cumulative global emissions, no single project, when considered in isolation, can cause climate change—a single project's emissions are not large enough to change the radiative balance of the atmosphere. Because climate change is the result of GHG emissions, and GHGs are emitted by innumerable sources worldwide, cumulative GHG emissions that contribute to global climate change would have a significant cumulative impact on the natural environment as well as human development and activity. The global increase in GHG emissions that has occurred and will occur in the future is the result of the actions and choices of individuals, businesses, local governments, states, and nations. Furthermore, although climate change impacts will most likely vary by geography and intensity, the impacts that result from cumulative global emissions will be felt worldwide. The GHG emissions and climate change analysis

within Section 5.10, *Greenhouse Gases*, is inherently a cumulative analysis. However, a summary of the discussion is provided below.

6.3.9.2 Cumulative Effects

Past, present, and reasonably foreseeable future projects throughout the region, state, nation, and world will continue to contribute to the cumulative impacts of global climate change. However, development projects within the City of San Diego are required to demonstrate consistency with the City's CAP. In December 2015, the City adopted its CAP, which identifies measures to meet GHG reduction targets for 2020 and 2035. The CAP consists of a 2010 inventory of GHG emissions, a business-as-usual projection for emissions at 2020 and 2035, State targets, and emission reductions with implementation of the CAP. The City identifies GHG reduction strategies focusing on energy and water-efficient buildings; clean and renewable energy; bicycling, walking, transit, and land use; zero waste; and climate resiliency.

With the July 2016 adoption of an amendment to the CAP to include the CAP Consistency Checklist, the CAP meets all the requirements of State CEQA Guidelines Section 15183.5(b)(1)(A – F) to be a Qualified GHG Reduction Plan. In meeting these requirements, the City of San Diego has analyzed and mitigated the significant effects of GHG emissions for the entire City at the programmatic level. Pursuant to State CEQA Guidelines Sections 15183.5(b), 15064(h)(3), and 15130(d), the City may determine that a project's incremental contribution to a cumulative GHG effect is not cumulatively considerable if the project complies with the requirements of a previously adopted Qualified GHG Reduction Plan. The CAP Final EIR concluded that implementation of the CAP, which includes an annual monitoring program, would result in less-than-significant overall citywide GHG emissions, and this analysis tiers from that analysis in the CAP certified Final EIR. Therefore, future projects that are determined to be consistent with the CAP would not incrementally contribute to a cumulative GHG effect.

6.3.9.3 Project Contribution

As previously detailed in Section 5.10.4, implementation of the proposed project would reduce VMT and associated emissions by providing a direct linkage that is consistent with the mobility goals of the City's General Plan, relevant community plans, and the VMT and emissions reduction targets within the CAP. By reducing GHG emissions relative to baseline conditions and by improving local transportation efficiency by providing a new bicycle and pedestrian connection consistent with the CAP's overarching land use and transportation strategy, the project would not generate GHG emissions, either directly or indirectly, that would have a significant impact on the environment. Therefore, the project's incremental contribution to significant cumulative GHG emissions impacts from past, present, and reasonably foreseeable future projects would be less than cumulatively considerable.

6.3.9.4 Level of Significance Prior to Mitigation

The proposed project's incremental contribution to cumulative impacts related to GHG emissions would not be cumulatively considerable.

6.3.9.5 Mitigation Measures

No mitigation is required.

6.3.9.6 Level of Significance After Mitigation

The proposed project's incremental contribution to cumulative impacts related to GHG emissions would not be cumulatively considerable and therefore would be less than significant.

Chapter 7

Effects Not Found To Be Significant

Section 15128 of the State CEQA Guidelines requires that an EIR briefly describe potential environmental effects that were determined not to be significant and therefore were not discussed in detail in the EIR. The environmental issues discussed in the following sections are not considered significant, and the reasons for the conclusion of non-significance are discussed below. The determination is based on the City of San Diego's CEQA Significance Determination Thresholds (2016) and Appendix G of the State CEQA Guidelines.

7.1 Agricultural and Forestry Resources

According to the City's Significance Determination Thresholds and Appendix G of the State CEQA Guidelines, the following issues provide guidance to determine potential significance of impacts on agricultural resources.

Issue 1: Would the proposed project result in conversion of a substantial amount of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

Issue 2: Would the proposed project conflict with existing zoning for agricultural use, or Williamson Act contract?

There are several classifications of farmland, including Prime Farmland, Farmland of Statewide Importance, Farmland of Local Importance, and Unique Farmland. According to the City of San Diego's General Plan EIR, there are about 15,900 acres of land designated for agricultural uses. Areas of continuing significant agricultural production in the City are located in the San Pasqual Valley, Otay Mesa, and the Tijuana River Valley.

The project site is in an urbanized area where there is no farmland or agricultural resources. According to the Farmland Mapping and Monitoring Program of the California Department of Conservation (2015), the project site is classified as Urban and Built-Up Land and does not contain any Prime Farmland or Farmland of Statewide Importance. The site is not zoned for agricultural use, nor is there a Williamson Act contract for the site (California Department of Conservation 2013). Implementation of the proposed project on the project site would not involve changes to the existing environment that, because of the location or nature, could result in the conversion of Farmland to non-agricultural use. No impact related to agricultural resources would occur.

- Issue 3:** Would the proposed project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?
- Issue 4:** Would the proposed project result in the loss of forest land or conversion of forest land to non-forest use?
- Issue 5:** Would the proposed project involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?

The project site is within an almost entirely urbanized area. No land zoned or designated as forest land or timberland exists within the project site or the City of San Diego. Therefore, the proposed project would not conflict with existing zoning for forest land or timberland, nor would it result in the loss of forest land or conversion of forest land to other uses. Overall, implementation of the proposed project would not involve any changes in the existing environment that would result in the conversion of farmland or forest land and it would have no impact on agriculture or forest resources.

7.2 Energy Use

The State CEQA Guidelines recommend an EIR consider the potentially significant energy implications of a project, if relevant. Appendix F to the State CEQA Guidelines identifies the following potential environmental impacts related to energy that may be included in an EIR.

1. The project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of the project, including construction, operation, maintenance, and/or removal. If appropriate, the energy intensiveness of materials may be discussed.
2. The effects of the project on local and regional energy supplies and on requirements for additional capacity.
3. The effects of the project on peak- and base-period demands for electricity and other forms of energy.
4. The degree to which the project complies with existing energy standards.
5. The effects of the project on energy resources.
6. The project's projected transportation energy use requirements and its overall use of efficient transportation alternatives.

The State CEQA Guidelines recommend that the discussion of applicable energy impacts focus on whether the project would result in the wasteful, inefficient, or unnecessary consumption of energy (Public Resources Code Section 21100(b)(3)). Accordingly, based on the criteria outlined in Appendix F of the State CEQA Guidelines, the proposed project would cause significant impacts related to energy if it would lead to a wasteful, inefficient, and unnecessary usage of direct or indirect energy. For the purposes of this analysis, "wasteful" and "inefficient" are defined as circumstances in which the project would conflict with applicable State or local energy standards. State and local energy legislation focuses on reducing energy consumption and improving energy

efficiency. Accordingly, if the project conflicts with State or local energy policies, which were designed to avoid wasteful and inefficient energy usage through improved energy efficiency and reduced energy consumption, it would result in a significant impact related to energy resources.

Because energy legislation adopted by California and local governments is intended to conserve statewide and regional energy consumption, projects that conflict with applicable plans and policies would also contribute to a cumulative energy impact. Accordingly, for the purposes of this analysis, the project would result in a significant cumulative impact if it conflicts with applicable State or local energy standards, and, as such, the project-level and cumulative impact determinations are identical.

The energy analysis for the project evaluates both direct and indirect energy, as defined below.

Direct energy is the energy used in the actual propulsion of motor vehicles using transportation facilities. Direct energy associated with the project consists of energy consumed by all vehicles entering and passing through the transportation study area. The project would affect the energy consumed, relative to existing conditions, by changing vehicle speeds and patterns.

Indirect energy is the energy used for construction, maintenance, and operation of the project, and any substantial energy expenditures related to project-induced land use changes and mode shifts. Indirect energy associated with the project consists of energy consumed during construction, electricity used to power pedestrian lighting fixtures, and energy consumed by routine operations and maintenance activities.

Issue 1: Would the proposed project lead to a wasteful, inefficient, and unnecessary usage of direct energy?

Direct energy consumption would result from motor vehicles using transportation facilities and would be affected by the project's effect on vehicle speeds and travel patterns in the immediate vicinity. Table 7-1 shows the estimated energy consumption directly related to motor vehicle travel.

Table 7-1. Estimated Annual Operational Energy Consumption^a

Phase	Gasoline		Diesel	
	Gallons of Fuel	Million BTU	Gallons of Fuel	Million BTU
2013 Existing	98,554	11,228	5,435	704
2017 No Project	95,246	10,851	5,209	675
2017 Project	94,574	10,775	5,173	670
2035 No Project	75,772	8,632	5,139	665
2035 Project	75,205	8,568	5,100	660

Sources: ARB 2014; Climate Registry 2015; Oak Ridge National Laboratory 2014
^a million British thermal units (BTUs) per year

Implementation of the project would redistribute vehicle trips by diverting traffic to the new road connection, resulting in an increase in local vehicle miles traveled (VMT) (within the project area) and a corresponding reduction in regional VMT on surrounding arterials and freeways. As shown in Table 7-1, this reduction in regional VMT would reduce fuel and energy consumption during both the opening year (2017) and buildout year (2035) conditions compared to both existing (2013) and no project conditions. Moreover, as shown in Table 7-1, fuel consumption trends downward over

time, as fuel economy-related regulations come online, including regulations that improve both passenger vehicle and medium- and heavy-duty truck fuel economy. These regulations, which reduce greenhouse gas emissions by improving fuel economy, are described in detail within Section 5.10, *Greenhouse Gases*. The project would therefore not result in a wasteful, inefficient, and unnecessary usage of direct energy, and impacts would be less than significant.

Issue 2: Would the proposed project lead to a wasteful, inefficient, and unnecessary usage of indirect energy?

Indirect energy consumption would result from project construction, operation, and maintenance of the roadway. Construction of the project would result in the consumption of energy (e.g., fossil fuels) to manufacture and deliver materials to construct the roadway. Operation and maintenance of the project would result in the consumption of energy to power new pedestrian-scale lighting fixtures and maintain the roadway. Maintenance activities required for the 460-foot-long roadway are not expected to be significant as they would be infrequent, primarily related to the maintenance of landscaping within the median.

Construction and demolition activities are anticipated to occur over a 9-month period. Manufacturing and transport of pavement, striping, curbs, landscaping, and other construction materials would require a one-time expenditure of energy. Likewise, energy would be consumed by heavy-duty equipment used to grade, pave, and construct the roadway; trucks to haul and move around debris and materials; and passenger vehicles to bring workers to and from the project site. Energy use associated with project construction is estimated to result in the short-term consumption of 8,844 million BTUs. This represents a small demand on local and regional fuel supplies that would be easily accommodated. Moreover, this demand for fuel would have no noticeable effect on peak or baseline demands for energy. Therefore, construction of the project would not result in a wasteful, inefficient, and unnecessary usage of indirect energy. Once constructed, new pedestrian-scale lighting fixtures would represent a long-term source of electricity consumption.

While construction would result in a short-term increase in energy use, construction design features would help conserve energy. For example, as described in Chapter 3, *Project Description*, the fill soil for the roadway is expected to be transported from the Quarry Falls site, which would significantly reduce the amount of off-site haul trips. The new pedestrian-scale lighting fixtures would also be designed to provide low-level lighting and minimize energy consumption. Specifically, the project would install high efficiency light emitting diode (LED) bulbs as feasible to achieve a natural appearance (color temperature = 4,000–4,200 degrees Kelvin), which consume about 75% less electricity than typical incandescent bulbs (U.S. Department of Energy 2014). These energy conservation features are consistent with State and local policies to reduce energy.

Therefore, the project would not result in an inefficient, wasteful, and unnecessary consumption of indirect energy, and impacts would be less than significant.

7.3 Geologic Conditions

Information in the following discussion is based on the geologic reconnaissance report that was prepared by GEOCON Inc. (GEOCON) in June 2013 for the project, included as Appendix G to this DEIR. This section is also based on information from the Preliminary Geotechnical Investigation

Report and the Addendum and Revised Addendum reports prepared for the Quarry Falls project in April 2005, October 2005, and February 2006.

Pursuant to the recent Supreme Court case decision in *California Building Industry Association v. Bay Area Air Quality Management District* (2015) 62 Cal. 4th 369, Case No. S213478, CEQA does not require an analysis of how the existing environmental conditions will affect a project's residents or users unless the project would exacerbate those conditions. Therefore, when discussing impacts of the environment on the project, such as how a fault rupture or soil condition may affect a project, the analysis will first determine if there is a potential for the project to exacerbate the issue. If evidence indicates it would not, then the analysis will conclude by stating such. If it would potentially exacerbate the issue, then evidence is provided to determine if the exacerbation would or would not be significant.

According to the City's CEQA Significance Determination Thresholds, the following issues provide guidance to determine potential significance of impacts on geological conditions.

Issue 1: Would the proposed project expose people or structures to geologic hazards such as earthquakes, landslides, mudslides, ground failure, or similar hazards?

The City of San Diego Seismic Safety Study, Geologic Hazards and Faults, Map Sheet 21 classifies the project site as Hazard Category 53: level or sloping terrain, unfavorable geologic structure, low to moderate risk (Figure 7-1). A review of geologic literature and experience with the soil and geologic conditions in the general area indicates that known active, potentially active, or inactive faults are not located at the site. The site is not within a State of California Earthquake Fault Zone.

Six known active faults are within a 50-mile radius of the project site. The nearest known active fault is the Newport-Inglewood/Rose Canyon fault system, 3 miles to the west, which would be the dominant source of ground motion in the event of an earthquake. Earthquakes that might occur from this fault system or other faults within the region are potential generators of significant ground motion at the site. The project site could be subjected to moderate to severe ground shaking in the event of an earthquake along any of the faults in the region.

Concerning landslide potential, based on a review of aerial photographs and published geologic maps, and the relatively level topography, the geological reconnaissance report stated that landslides are not present at the project site or at a location that could affect the site.

The project consists of the construction and operation of a roadway connection; therefore, there would be no buildings or structures that would accommodate human occupancy and in turn expose structures to geologic hazards. There is the potential for vehicles, pedestrians, or cyclists to be utilizing the roadway in the event of an earthquake; however, the project site is not located on an active fault.

While the project site may experience strong seismic ground shaking, the proposed project would not exacerbate the potential for strong seismic ground shaking to occur or cause the ground shaking to be more powerful. Influencing seismic ground shaking would require deep and significant intrusion, such as from the creation of reservoirs and the pumping of fluids in deep wells, to increase the potential for a rupture to occur (Southern California Earthquake Center n.d.). The occurrence of earthquakes in the region is common and strong ground shaking is likely to occur at some point, but the proposed project would have no potential to exacerbate the potential for earthquakes. Therefore, the proposed project could not cause ground failure or an earthquake.

Additionally, incorporation of the general recommendations, soil and excavation recommendations, preliminary grading recommendations, site drainage and moisture protection recommendations, preliminary pavement recommendations, grading plan review, and future geotechnical investigation recommendations as stated in the geologic reconnaissance would ensure the roadway meets applicable standards. Therefore, impacts on geologic hazards would be less than significant.

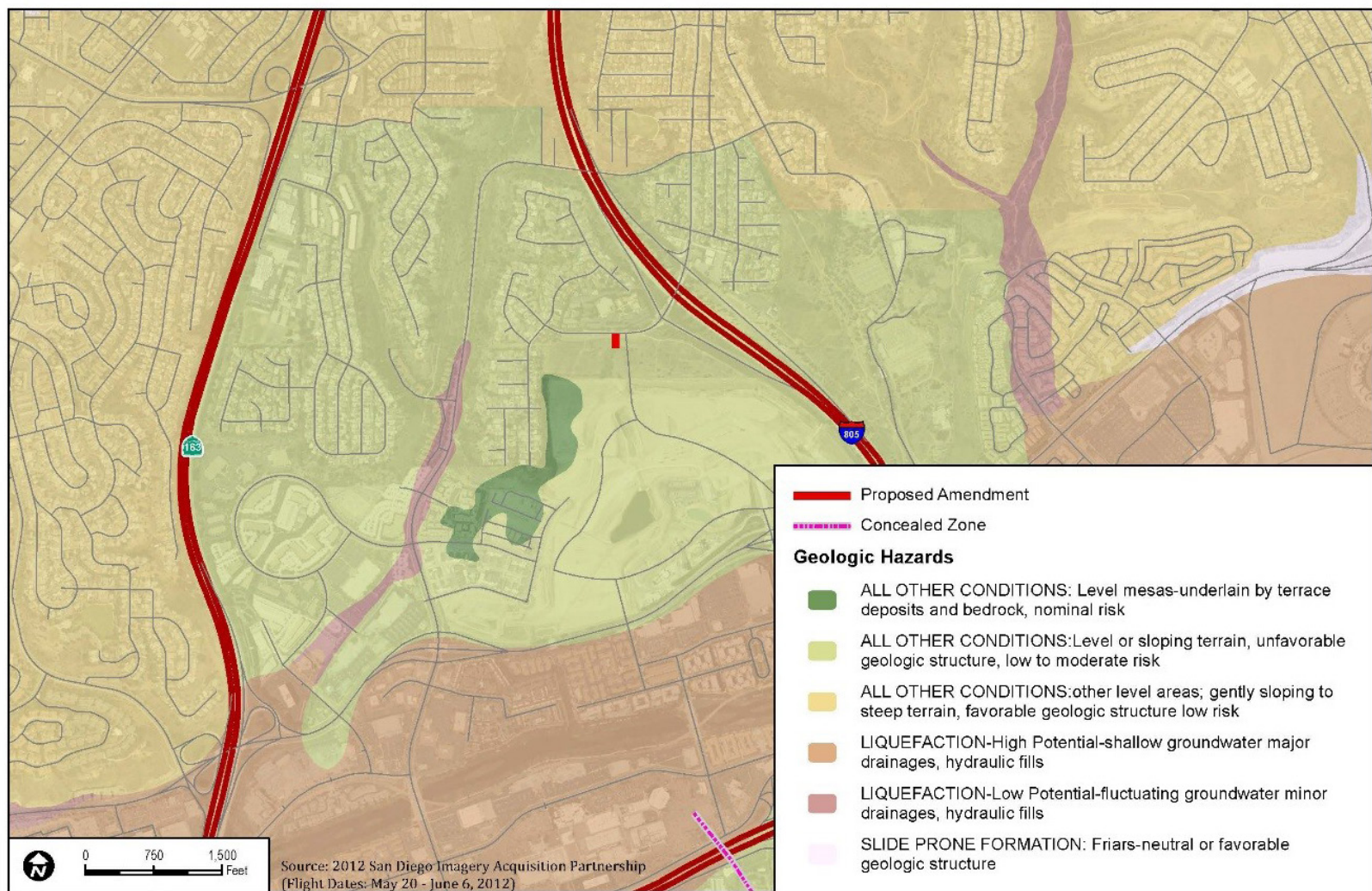
Issue 2: Would the proposed project result in a substantial increase in wind or water erosion of soils, either on or off the site?

Five surficial soil types and one geologic formation underlie the project site. The surficial deposits consist of compacted fill, undocumented fill, topsoil, alluvium, and Terrace Deposits underlain by the Stadium Conglomerate. On-site soils consist of both expansive and non-expansive soils. On-site topsoil maintains a “very high” expansion potential as identified in the site-specific geologic reconnaissance. Construction activities would expose and disturb soils and could therefore increase the potential for soil erosion on site. However, adherence to the erosion control standards during construction established by the City’s *Land Development Manual* and other regulations would be required. In compliance with the National Pollution Discharge Elimination System, the applicant would prepare a stormwater pollution prevention plan that specifies best management practices to be implemented during project construction to prevent pollutants from contacting stormwater and control erosion and sedimentation. The stormwater pollution prevention plan would be prepared and submitted to the Regional Water Quality Control Board for review and approval prior to the start of construction.

Additionally, incorporation of the site-specific geotechnical recommendations as stated in the geologic reconnaissance conducted by GEOCON (2013), as well as adherence to appropriate engineering design and construction measures to meet California Building Code standards, would ensure that impacts from wind or soil erosion would remain less than significant.

Issue 3: Would the proposed project 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 an on-or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

The project would not be located on natural materials that are unstable or that would become unstable as a result of the project. The potential for liquefaction in the project area is considered low due to the presence of shallow, dense formational materials and the lack of permanent, near-surface groundwater (GEOCON 2013). According to the geological reconnaissance, the risk of on- or off-site landslide, lateral spreading, subsidence, or collapse is low. With incorporation of the site-specific geotechnical recommendations as stated in the geologic reconnaissance conducted by GEOCON (2013), as well as adherence to standards in the City’s *Land Development Manual*, and the appropriate engineering design and construction measures to meet applicable standards, impacts from unstable soils would be less than significant.



Source: City of San Diego, 2016.

Figure 7-1
Geologic Hazards and Faults

7.4 Health and Safety

According to the City's CEQA Significance Determination Thresholds, the following issues provide guidance to determine potential significance of impacts on health and safety.

- Issue 1:** Would the proposed project result in hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within a quarter mile of an existing or proposed school?
- Issue 2:** Would the proposed project be located on a site included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or environment?
- Issue 3:** Would the proposed project expose people to toxic substances, such as pesticides and herbicides, some of which have long-lasting ability, applied to the soil during previous agricultural uses?

The project site is partially within the Quarry Falls site, which was historically used for mining operations that required the storage and usage of hazardous materials including gasoline, diesel fuel, concrete additives, iron oxides, antifreeze, capping compounds, fly ash, lubricating oils, compressed gases, calcium chloride, calcium nitrite, potassium hydroxide, cleansers, and pond flocculants (see Section 5.7 of the Quarry Falls Program EIR). The Quarry Falls site has also historically contained multiple underground storage tanks (USTs) for the purposes of fuel and hot asphalt storage. These USTs were removed as mining operations on the Quarry Falls site phased out.

A review of two databases containing existing hazardous material sites was conducted: Envirostor (California Department of Toxic Substances Control 2016) and Geotracker (State Water Resources Control Board 2016). Two cleanup programs were completed and approved prior to construction of the Quarry Falls residential units located just north of Friars Road. Two other leaking UST cases in the vicinity of Friars Road were also completed and are listed as closed. All four of these records are more than 0.5 mile south of the project site.

The project site itself is vacant and has not historically contained uses that would store or use hazardous materials. The project site is also not known to contain any USTs or belowground hazardous materials. As such, the project site would not be located on an existing hazardous material site, and impacts would be less than significant.

The project site is approximately 0.25 mile southwest of the Faith Community School. This school is on the opposite side of Interstate (I-) 805 along Murray Ridge Road. The proposed roadway connection itself would not represent a stationary source of hazardous materials storage. However, there is the potential that trucks transporting hazardous materials may use the roadway connection. Vehicles that transport hazardous materials are subject to numerous regulations, including those set forth by the U.S. Department of Transportation, California Department of Transportation, U.S. Environmental Protection Agency, California Department of Toxic Substances Control, California Highway Patrol, and California State Fire Marshall. Furthermore, the roadway would not be a roadway of regional significance (such as I-805), where trucks are more likely to be traveling with hazardous substances. Therefore, impacts from hazardous emissions or hazardous or acutely hazardous materials, substances, or waste within a quarter mile of an existing or proposed school would be less than significant.

The project would allow for an approximately 1-acre right-of-way that would include a roadway and sidewalks. The remainder of the area would contain native landscaping that would not utilize pesticides or herbicides. Historically the area has been undeveloped land, and the project does not propose to use the land for agricultural purposes that could expose people to toxic substances, such as pesticides and herbicides. Therefore, impacts associated with exposure of people to toxic substances, such as pesticides and herbicides, would be less than significant.

Issue 4: Would the proposed project result in a safety hazard for people residing or working in a designated airport influence area?

Issue 5: Would the proposed project result in a safety hazard for people residing or working within 2 miles of a private airstrip or a private airport or heliport facility that is not covered by an adopted Airport Land Use Compatibility Plan?

The project site is not within 2 miles of a private airstrip, but it is approximately 1.8 miles south of the Montgomery Field Airport. The Montgomery Field Airport Land Use Compatibility Plan (ALUCP) (San Diego County Airport Land Use Commission 2010) addresses four types of airport land use compatibility factors, including safety. The safety zone boundaries are based on general aircraft accident location data, runway configuration, and aircraft operational procedures. As shown on Figure 7-2, the project site is outside all safety zone boundaries established in the Montgomery Field ALUCP. Additionally, the project would allow for a roadway connection and would not include any vertical structures that could potentially interfere with aircraft safety. As such, the project would not result in an airport-related safety hazard for people residing or working in a designated airport influence area or within 2 miles of a private airstrip or a private airport or heliport facility that is not covered by an adopted ALUCP, and impacts would be less than significant.

Issue 6: Would the proposed project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The proposed project would amend the Serra Mesa Community Plan to include a street connection with supported bicycle and pedestrian facilities. This would provide an additional ingress and egress roadway for the surrounding area, and provide additional emergency access for emergency responders to the area. As a result, the proposed project would not physically interfere with an adopted emergency response plan or emergency evacuation plan, and would increase emergency access opportunities in the vicinity; no impact would occur.

Issue 7: Would the proposed project expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including when wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

As shown on Figure 7-3, the project site is not within a Very High Fire Hazard Severity Zone. The area directly to the north of the project is currently developed, and the land adjacent to the east, west, and south of the project area is currently being developed and would be maintained as part of the Quarry Falls project. Therefore, the project site is not in a developed urban area that is surrounded by physical development and would not result in the construction of buildings or residences that would be occupied by people. As such, impacts related to exposing people or structures to a significant risk of loss, injury, or death involving wildland fires would be less than significant.



Source: City of San Diego, 2016.

Figure 7-2
Montgomery Field Safety Compatibility Map



Source: City of San Diego, 2016.

Figure 7-3
Very High Fire Hazard Severity Zone

7.5 Mineral Resources

According to the City's CEQA Significance Determination Thresholds, the following issues provide guidance to determine potential significance of impacts on mineral resources.

Issue 1: Would the proposed project result in a loss of availability of significant mineral resources (e.g., sand or gravel) as identified the Open File Report 96-04, Update of Mineral Land Classification: Aggregate Materials in the Western San Diego County Production – Consumption Region, 1996, Department of Conservation, California Department of Geological Survey (located in the EAS library)?

The southern portion of the project site is within the Quarry Falls site, which is a former mining site that has since been reclaimed and is now a mixed-use development that currently contains residential uses and will also contain commercial uses. According to the California Department of Conservation, Division of Mines and Geology, the project site is within Mineral Resource Zone 2 (MRZ-2), which includes areas containing mineral deposits, or where there is a high likelihood of mineral deposits. As previously detailed, the southern portion of the project site has been previously mined for resources, while the northern portion consists of a primarily undeveloped hillside. As a portion of the project site (and the entire Quarry Falls site) no longer contains mineral resources, no impact would occur.

7.6 Population and Housing

As the City's CEQA Significance Determination Thresholds do not establish significance thresholds for population and housing, the following issues from Appendix G of the State CEQA Guidelines provide guidance to determine potential significance of impacts on population and housing.

Issue 1: Would the proposed project induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?

The proposed project consists of the construction and operation of a roadway and does not propose any use (i.e., new homes or businesses) that would induce substantial population growth in the area. Therefore, no direct impact on population growth would occur.

Related to potential indirect impacts, the proposed project includes a roadway connection that is referenced in the Mission Valley Community Plan and other applicable City planning documents such as the Bicycle Master Plan and Climate Action Plan. The proposed roadway connection is not included in the Serra Mesa Community Plan; however, the proposed project includes a Community Plan Amendment to the Serra Mesa Community Plan to include the proposed roadway connection. The proposed project would extend roadway infrastructure by connecting existing built-out neighborhoods to the north with approved and currently developing areas in the Quarry Falls project to the west, south, and east. The proposed project would accommodate the planned growth in the surrounding communities by providing a connection for vehicles, bicycles, and pedestrians between the Mission Valley and Serra Mesa communities and also providing regional access to I-805. It is not anticipated that this project would result in the development of additional growth-inducing projects as there is not much vacant, developable land within the project vicinity, and the Serra Mesa Community Plan designates most of the surrounding area as low density. Furthermore,

the proposed project would not provide roadway access to an area that was wholly inaccessible (e.g., a roadway to a rural area from a highway). As previously detailed, the proposed project intends to connect existing urban communities and provide additional options within the transportation network. Impacts would therefore be less than significant.

Issue 2: Would the proposed project displace a substantial number of existing housing units, necessitating the construction of replacement housing elsewhere?

Issue 3: Would the proposed project displace a substantial number of people, necessitating the construction of replacement housing elsewhere?

The project site is vacant and does not include any existing housing units. Therefore, the proposed project would not displace any existing housing or people. No impact would occur.

7.7 Public Services and Facilities

According to the City's CEQA Significance Determination Thresholds, the following issue provides guidance to determine potential significance of impacts on public services and facilities.

Issue 1: Would the proposed project have an effect upon, or result in a need for new or modified government services in, any of the following areas: fire/life safety protection; police protection; schools; maintenance of public facilities, including roads, parks, or other recreational facilities; and libraries?

7.7.1 Fire–Rescue Services

The project site would be served by the San Diego Fire-Rescue Department Fire Station 45, which is located at 9366 Friars Road, approximately 1.3 miles east of the project site (Trame pers. comm.). Fire Station 45 serves an approximately 4.28-square-mile area in West Mission Valley and its surrounding areas (City of San Diego 2016a). Fire Station 45 opened in November 2015 and contains four battalion chief vehicles, Fire Engine 45, and two HAZMAT response units. In fiscal year 2016, Fire Station 45 responded to more than 3,080 incidents, including fire, rescue, emergency medical, non-emergency medical, and hazards.

Fire Station 28 at 3880 Kearny Villa Road, approximately 1.9 miles north of the project site, opened in 1958 and serves 7.76 square miles within Kearny Mesa/Montgomery Field and its surrounding areas and could also serve the project site (City of San Diego 2016b). The station contains a fire engine, truck, water tender, foam apparatus, and crash apparatus. In fiscal year 2016, Fire Station 28 responded to more than 3,581 incidents, including fire, rescue, emergency medical, urgent medical, non-emergency medical, and hazards.

The proposed project does not include a residential housing component; therefore, no increase in residential population would occur that may increase call volumes for fire-rescue services. Also, as discussed in Section 5.2, *Transportation and Circulation*, construction of the proposed road connection would increase circulation efficiency in the immediate project vicinity, and would improve emergency access and evacuation route options between the Serra Mesa and Mission Valley planning areas. As confirmed with the San Diego Fire-Rescue Department, additional access points (such as the proposed roadway connection) generally improve emergency access and associated response times (Trame pers. comm.). Therefore, the San Diego Fire-Rescue Department generally

supports the proposed project (Trame pers. comm.). Overall, the proposed project would be adequately served by the existing area fire-rescue department facilities, would not generate the need for a new or expanded fire station in the project site, and would generally improve emergency access and thus response times. No impact would occur.

7.7.2 Police Services

Information within this section is based on correspondence with the San Diego Police Department (SDPD) (City of San Diego 2016c) and additional correspondence with the Eastern Division (Brown pers. comm.). The project site would be served by officers from the Eastern Division, which services numerous eastern communities including Serra Mesa, Qualcomm, and Mission Valley East. SDPD has mutual aid agreements with all other law enforcement agencies in San Diego County.

Eastern Division is currently staffed with 84 sworn personnel and one civilian employee. Officers work 10-hour shifts. Staffing comprises three shifts that operate from 6:00 a.m.–4:00 p.m. (First Watch), 2:00 p.m.–midnight (Second Watch), and 9:00 p.m.–7:00 a.m. (Third Watch). Using SDPD's recommended staffing guidelines, Eastern Division currently deploys a minimum of nine patrol officers on First Watch, 11 patrol officers on Second Watch, and eight patrol officers on Third Watch. SDPD does not staff individual stations based on ratios of sworn officers per 1,000-population ratio. The goal citywide is to maintain 1.48 officers per 1,000-population ratio. SDPD is currently staffing a ratio of 1.36 sworn officers per 1,000 residents based on the 2015 estimated residential population of 1,311,882. This ratio does not include the significant population increase resulting from citizens who commute to work from outside of the City of San Diego or those visiting.

The proposed project does not include a residential housing component; therefore, no increase in residential population would occur that may increase call volumes for police services. According to coordination with SDPD's Eastern Division (Brown pers. comm.), access within the vicinity of the project site is slightly limited for police responders. As confirmed with SDPD, additional access points (such as the proposed roadway connection) generally improve emergency access and associated response times (Brown pers. comm.). The additional access route would improve emergency access in the area, potentially reducing emergency response times associated with police responders. Therefore, the proposed project would be adequately served by the existing area police facilities and would not generate the need for a new or expanded police station in the project area. No impact would occur.

7.7.3 Schools

The proposed project does not include a growth-inducing component (i.e., housing) and therefore would not generate an increase in resident population requiring educational facilities and services. There are no schools within the immediate vicinity of the project site. The project site is approximately 0.25 mile southwest of the Faith Community School, which is on the opposite side of I-805 along Murray Ridge Road. The San Diego Unified School District is also considering a school within the Quarry Falls development, which would be located approximately 0.35 mile south of the project site. As the project consists of a roadway connection to allow better access between two existing communities, it would not have an effect on existing schools. Therefore, no impact would occur.

7.7.4 Libraries

The Serra Mesa/Kearny Mesa Public Library, located 1 mile to the northeast of the project site, is the closest City library branch to the project site. The proposed project does not include any growth-inducing component such as housing and therefore would not result in an increased demand in library services from new residents. Consequently, the proposed project would not result in the need for new or modified services, and no impact would occur.

7.7.5 Parks

As discussed in further detail in Section 7.9, *Recreation*, the proposed project does not include a population-generating component that would in turn increase the use of existing neighborhood and regional parks, nor does it include recreational facilities or require the expansion of recreational facilities. Impacts would be less than significant.

7.8 Public Utilities

According to the City's CEQA Significance Determination Thresholds, the following issues provide guidance to determine potential significance of impacts on public utilities.

Issue 1: Would the proposed project result in the need for new systems or require substantial alterations to existing utilities, including those necessary for natural gas, water, sewer, communication systems, and solid waste management? If so, what physical impacts would result from the construction of these facilities?

7.8.1 Water

During construction of the roadway, water would likely be used for the purposes of dust suppression; however, this potential water use would be limited and temporary. Operational water use associated with the proposed roadway would be limited to that associated with the maintenance of the landscaping. As previously detailed in Chapter 3, *Project Description*, the landscaping of the proposed project would be drought-tolerant, native plants that would not require a significant amount of water. The proposed project would not create a water demand that would require the construction or expansion of water treatment facilities.

In terms of existing water supply, the proposed project would not exceed any of the City's Significance Determination Thresholds requiring further analysis and discussion of water demand and availability or require a Water Supply Assessment pursuant to Senate Bill 610. Water use during construction would be temporary and would not require large volumes of water, nor would the operational uses associated with the maintenance of landscaping. As such, there would be sufficient water supplies available from existing entitlements and resources to serve the proposed project, and new or expanded entitlements would not be required. Impacts on potable water supply would be less than significant.

7.8.2 Wastewater/Sewer

The proposed project would not introduce any uses or involve the construction of any structures that would generate wastewater or require the construction of new wastewater or sewage facilities. Therefore, no impacts related to wastewater would occur.

7.8.3 Solid Waste

The proposed project does not include construction of any structures or removal of any demolition debris to an existing landfill. Furthermore, as detailed in Chapter 3, *Project Description*, the proposed project does not require any soil to be removed from the project site; only fill would be required. As such, no impacts on solid waste capacity would occur from project construction. Once operational, the proposed project would not indirectly increase or generate solid waste because it would have no effect on population, and no direct impact would occur because solid waste would not be generated from the road's use. As such, the proposed project would not exceed the City's Significance Determination Thresholds or other applicable local and state regulations regarding solid waste management. No impact would occur.

7.8.4 Natural Gas

As described in Chapter 3, *Project Description*, the proposed project would construct a new portion of the gas transmission main to the preferred depth below the ground. The physical impacts related to this would occur within the project site, which is analyzed throughout this DEIR. As such, impacts on natural gas facilities would be less than significant.

7.8.5 Communication Systems

The proposed project would not require the installation of new communication systems as it entails the construction and operation of a roadway. Per standard construction practices, prior to any grading activities associated with construction, existing communication systems or lines underground would be marked and the contractor would work with the relevant companies in order to not disturb existing communication systems. No impact would occur.

7.9 Recreation

As the City of San Diego's CEQA Significance Determination Thresholds do not establish significance thresholds for recreation, the following issues from Appendix F of the State CEQA Guidelines provide guidance to determine potential significance of impacts on parks and recreational resources.

Issue 1: Would the proposed 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?

Issue 2: Does the proposed project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?

As detailed within Chapter 3, *Project Description*, the linear Phyllis Place Park has two approved General Development Plans—one if the proposed project were not approved and another if it were. Under project implementation, the linear park would be slightly bifurcated by the proposed roadway connection but would retain the same acreage. In addition, the proposed roadway would be adjacent to a planned dog park that would be located to the west of the roadway.

The proposed project would slightly increase access to and availability of parks within the immediate vicinity of the roadway connection. However, access to these parks would also be available if the project was not implemented. The parks within the vicinity are generally smaller, neighborhood-serving recreational facilities that are not expected to attract a significant amount of visitors, with or without the project. Implementation of the proposed roadway would therefore not significantly deteriorate parks or other recreational facilities.

The proposed project does not include a population-generating component that would in turn increase the use of existing neighborhood and regional parks. The proposed project would include bike lanes on either side of the roadway as well as pedestrian pathways, which could be used for recreational purposes. These facilities are within the project site evaluated throughout this DEIR. Therefore, impacts related to parks and recreational facilities would be less than significant.

Chapter 8

Mandatory Discussion Areas

This section discusses other issues for which CEQA requires analysis in addition to the specific issue areas discussed in Chapter 5, *Environmental Analysis*. These additional issues include (1) significant effects that cannot be avoided, (2) significant irreversible environmental changes that cannot be avoided if the project is implemented, and (3) growth-inducing impacts.

8.1 Significant Effects that Cannot Be Avoided

In accordance with State CEQA Guidelines Section 15126.2(b), any significant unavoidable impacts of a project, including those impacts that can be mitigated but not reduced to below a level of significance despite the applicant's willingness to implement all feasible mitigation measures, must be identified in an EIR. Based on the environmental analyses within this DEIR, the City has determined that the proposed project would result in significant and unavoidable impacts associated with the following issue area.

- Transportation and Circulation
 - Result in an increase in projected traffic that is substantial in relation to the existing traffic load and capacity of the street system
 - Result in a substantial impact on existing or planned transportation systems
 - Result in an increase in traffic hazards for motor vehicles, bicycles, or pedestrians due to a proposed, non-standard design feature

8.1.1 Transportation/Circulation

The proposed project would result in an increase in projected traffic that is substantial in relation to the existing traffic load and capacity of the street system.

As shown in Table 5.2-15, if mitigation were fully implemented, there would be less-than-significant impacts at the following roadway segments. However, this analysis assumes that the mitigation measures would not be implemented (for the reasons detailed in Section 5.2.4.3) at the following segments:

- Murray Ridge Road, from Mission Center Road to Pinecrest Avenue (**Impact TRAF-1**)
- Murray Ridge Road, from Pinecrest Avenue to Sandrock Road (**Impact TRAF-2**)

Therefore, impacts at these segments under the Near-Term scenario would be significant and unavoidable.

The proposed project would result in a substantial impact on existing or planned transportation systems.

As shown in Table 5.2-20, if mitigation were fully implemented, there would be less-than-significant impacts at the following roadway segments. However, this analysis assumes that the mitigation

measures would not be implemented (for the reasons detailed in Section 5.2.5.3) at the following segments:

- Franklin Ridge Road from Via Alta to Civita Boulevard (**Impact TRAF-8**)
- Murray Ridge Road from Mission Center Road to Pinecrest Avenue (**Impact TRAF-9**)
- Murray Ridge Road from Pinecrest Avenue to Sandrock Road (**Impact TRAF-10**)
- Rio San Diego Drive from Qualcomm Way to Rio Bonito Way (**Impact TRAF-13**)

Therefore, impacts at these segments under the Long-Term scenario would be significant and unavoidable.

As shown in Table 5.2-22, if mitigation were fully implemented, there would be less-than-significant impacts at the following intersection. However, this analysis assumes that the mitigation measure would not be implemented (for the reasons detailed in Section 5.2.5.3) at the following intersection:

- Murray Ridge Road and Sandrock Road (**Impact TRAF-14**)

Therefore, impacts at this intersection under the Long-Term scenario would be significant and unavoidable.

As shown in Table 5.2-21, mitigation would improve level of service at the following intersections; however, it would not be reduced to an acceptable level at the following intersections in the PM peak hour.

- Murray Ridge Road/I-805 NB ramps; PM peak hour (**Impact TRAF-15**)
- Murray Ridge Road/I-805 SB ramps; PM peak hour (**Impact TRAF-16**)

Therefore, impacts at these intersections in the PM peak hour under the Long-Term scenario would be significant and unavoidable.

The proposed project would result in an increase in traffic hazards for motor vehicles, bicycles, or pedestrians due to a proposed, non-standard design feature (e.g., poor sight distance or driveway onto an access-restricted roadway).

The proposed project would require a signalized intersection along Phyllis Place, which would in turn result in possibly unsafe conditions for motorists entering or exiting the City View Church parking lot, as the driveway would be approximately 150 feet east of the signalized intersection. Therefore, impacts would be potentially significant and mitigation is required. If mitigation were fully implemented, traffic hazard impacts would be reduced to less-than-significant levels. However, this analysis assumes that the mitigation measure would not be implemented. Therefore, impacts would be significant and unavoidable (**Impact TRAF-19**).

8.2 Significant Irreversible Environmental Changes

CEQA and the State CEQA Guidelines require that an EIR address significant irreversible environmental changes that would result from a project should it be implemented. Section 15126.2(c) of the State CEQA Guidelines requires an evaluation of significant irreversible environmental changes that would occur if the proposed project were to be implemented.

Irreversible environmental changes typically fall into three categories: primary impacts, such as the

use of nonrenewable resources; secondary impacts, such as highway improvements that provide access to previously inaccessible areas; and environmental accidents associated with a project.

The predominant irreversible environmental change that would occur if the project were to be implemented would be the planned commitment of land resources to develop the proposed roadway. However, a portion of the project site (immediately south of Phyllis Place) would be developed as a park, even if the proposed project were not to be implemented. As previously detailed in Chapter 3, *Project Description*, the Phyllis Place Park would have two alignments—one with the proposed roadway and one without. Therefore, a portion of the site would be developed going forward. Nevertheless, implementation of the proposed project would irreversibly alter the remaining portion of the currently vacant project site by developing a roadway. This would constitute a permanent change. Following construction, restoring the land to its original condition is highly unlikely.

In addition, implementation of the proposed project would require a permanent commitment of non-renewable natural resources, primarily from the direct consumption of fossil fuels. These fossil fuels would be consumed during construction in the form of diesel and gasoline, which would be used in construction and yard equipment, commuter vehicles, trucks, and vessels. Electricity would also be consumed during construction by power tools and electric equipment and during operation for street lighting, although not all of it would be from non-renewable sources. The portion of electricity generated from fossil fuels, such as natural gas, however, would be irretrievable and irreversible.

Although the project would use non-recoverable materials and energy during construction and operational activities, the amounts needed would be provided through existing supplies and infrastructure. Therefore, the project's potential to result in irreversible environmental changes is related primarily to the use of fossil fuels for construction. However, as discussed in Chapter 7, *Effects Found Not To Be Significant*, impacts on energy use would not be significant.

The project site is currently vacant and does not convey vehicle traffic or generate associated effects, such as noise. Permanent changes as a result of the project would include vehicle traffic and related effects within the vicinity of the project site. However, as detailed throughout Chapter 5, *Environmental Analysis*, the proposed project would not result in any significant indirect impacts related to vehicle traffic, such as a significant increase in noise in the vicinity of the project site or the exposure of sensitive receptors to substantial pollutant concentrations, including air toxics.

Although the proposed project would increase traffic within the vicinity of the project site, impacts on local roadway segments and intersections would be mitigated where feasible (see Section 5.2, *Transportation and Circulation*). As previously detailed, significant and unavoidable traffic impacts of the proposed project would occur at roadway segments, intersections, and freeway segments in both the Near-Term (Year 2017) and Long-Term (Year 2035) scenarios, which represents an irreversible condition.

Regarding secondary impacts, the project site is located within an entirely urbanized area that is accessible by multiple freeways, major local roadways (i.e., Friars Road), and smaller roadways that serve the residential areas in the vicinity of the site. The project site is also located in the vicinity of regionally significant transit facilities, including Metropolitan Transit System Trolley stations such as Rio Vista and Mission Valley. The proposed roadway would not provide access to a previously inaccessible area that could now be developed because of implementation of the roadway; rather, the proposed roadway would accommodate existing and planned near-term growth within the

vicinity of the project site. Furthermore, it would provide additional options for motorists, pedestrians, and cyclists to travel north and south between the Serra Mesa and Mission Valley communities.

Concerning environmental accidents, construction activities associated with the proposed project would use construction equipment, such as rollers and pavers. Although there is potential for an accident to happen during construction activities, construction activities would not require any regulated hazardous materials to be delivered to the project site or use any other materials that are not standard to roadway construction projects. In addition, the proposed project does not propose any uses that would regularly involve the use of hazardous materials.

8.3 Growth-Inducing Impacts

State CEQA Guidelines Section 15126.2(d) requires that an EIR discuss the ways in which a proposed project could directly or indirectly foster economic development, population growth, or additional housing and how that growth would affect the surrounding environment. Direct growth inducement would result if a project, for example, involved construction of new housing. Indirect growth might occur if a project were to establish substantial new permanent employment opportunities that would stimulate the need for additional housing, utilities, and public services.

Similarly, a project would indirectly induce growth if it were to remove an obstacle to additional development, such as removing a constraint on a required public service or utility. A project that proposes to expand water supply capabilities in an area where limited water supply has historically restrained growth would be considered growth inducing.

The City's CEQA Significance Determination Thresholds (City of San Diego 2016) state that a project would have a significant impact related to growth inducement if it would:

1. Induce substantial population growth in an area;
2. Substantially alter the planned location, distribution, density, or growth rate of the population of an area; or
3. Include extensions of roads or other infrastructure not assumed in the community plan or adopted Capital Improvement Project list when such infrastructure exceeds the needs of the project and could accommodate future development.

Per the State CEQA Guidelines, it should be noted that growth-inducing effects are not necessarily beneficial, detrimental, or of little significance to the environment. This issue is presented to provide additional information about ways in which this project could contribute to significant changes in the environment, beyond the direct consequences of implementing a project.

8.3.1 Population Growth

The project entails the construction and operation of a roadway connection and a Community Plan Amendment to the Serra Mesa Community Plan. No new residential units or other structures that would generate population would result from implementing the proposed project. Therefore, the proposed project would not directly result in population growth.

8.3.2 Substantially Alter Planned Growth

As previously detailed in Section 5.2, *Transportation and Circulation*, the proposed project would result in redistribution of area traffic patterns; however, no new traffic would be generated as a result of the project. Although the proposed roadway would provide a connection between two communities, it would not provide access to a previously inaccessible area. The Mission Valley and Serra Mesa communities are almost entirely developed and will continue to grow in accordance with the respective community plans. The proposed project would not be expected to alter the density or growth rate of the adjacent Quarry Falls development because this project has an approved specific plan that specifies the residential densities within the site. Therefore, the proposed project would not substantially alter the planned location, distribution, density, or growth rate of the population of an area.

8.3.3 Extension of Infrastructure

As previously detailed in Section 8.2, the project site is located within an entirely urbanized area that is accessible by multiple freeways, major local roadways (i.e., Friars Road), and smaller roadways that serve the residential areas in the vicinity of the site. The proposed roadway would accommodate existing and planned near-term growth within the vicinity of the project site. Furthermore, it would provide additional options for motorists, pedestrians, and cyclists to travel north and south between the Serra Mesa and Mission Valley communities.

Because the site is located within a community that is in the process of being nearly built out, all major public services and utilities currently service the project site. The proposed project would require storm drains or related stormwater management features; however, these would be sized to treat only the stormwater associated with the project itself. It would not provide surrounding development with stormwater treatment. Furthermore, no new infrastructure facilities for water supply or wastewater treatment would be required to accommodate the project. The proposed project would not result in the extension of major infrastructure facilities into areas that would induce population growth or reduce barriers to additional growth.

9.1 Overview

This chapter describes and analyzes a range of reasonable alternatives that could feasibly attain most of the basic project objectives while avoiding or substantially lessening one or more of the significant effects of the proposed project. The primary purpose of this chapter is to ensure that the comparative analysis provides sufficient detail to foster informed decision-making and public participation in the environmental process. Two alternatives to the proposed project are fully analyzed in this chapter and discussed in terms of their merits relative to the proposed project.

- Alternative 1 – No Project Alternative
- Alternative 2 – Bicycle, Pedestrian, and Emergency Access Only Alternative

Based on the analysis below, Alternative 2, Bicycle, Pedestrian, and Emergency Access Only Alternative, would be the environmentally superior alternative.

9.2 Requirements for Alternative Analysis

The State CEQA Guidelines require that an EIR present a range of reasonable alternatives to a project, or to the location of a project, that could feasibly attain a majority of the basic project objectives, but that would avoid or substantially lessen one or more significant environmental impacts of the project. The range of alternatives required in an EIR is governed by a “rule of reason” that requires an EIR to set forth only those alternatives necessary to permit a reasoned choice. An EIR need not consider every conceivable alternative to a project. Alternatives may be eliminated from detailed consideration in the EIR if they fail to meet most of the basic project objectives, are not feasible, or do not avoid or substantially lessen any significant environmental effects (State CEQA Guidelines, Section 15126.6(c)). In addition to the requirements described above, CEQA requires the evaluation of a No Project Alternative, which analyzes the environmental effects that would occur if the project were not to proceed (State CEQA Guidelines Section 15126.6(e)). Moreover, the EIR is required to identify the environmentally superior alternative. If the environmentally superior alternative is the No Project Alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives.

9.3 Selection of Alternatives

In developing alternatives that meet the requirements of CEQA, the starting point is the proposed project’s objectives. The proposed project includes the following objectives.

1. Resolve the inconsistency between the Mission Valley Community Plan and the Serra Mesa Community Plan by providing a multi-modal linkage from Friars Road in Mission Valley to Phyllis Place in Serra Mesa.
2. Improve local mobility in the Serra Mesa and Mission Valley planning areas.

3. Alleviate traffic congestion and improve navigational efficiency to and from local freeway on- and off-ramps for the surrounding areas.
4. Improve emergency access and evacuation route options between the Serra Mesa and Mission Valley planning areas.
5. Provide a safe and efficient street design for motorists, cyclists, and pedestrians that minimizes environmental and neighborhood impacts.

CEQA also requires that alternatives be potentially feasible. Feasible is defined in CEQA as “capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors” (Public Resources Code Section 21061.1). The State CEQA Guidelines elaborate that factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, other plans or regulatory limitations, and jurisdictional boundaries and whether the proponent can reasonably acquire, control, or otherwise have access to the alternative site (State CEQA Guidelines Section 15126.6). Finally, the alternatives should also avoid or substantially lessen one or more significant environmental impacts that would occur under the proposed project. Table 9-1 summarizes the proposed project’s significant impacts, which have been identified to assist with focusing the analysis of alternatives in Section 7.5.

Table 9-1. Summary of Significant Effects of the Proposed Project

Resource Impact	Significant and Unavoidable	Less than Significant with Mitigation
Section 5.2 – Transportation and Circulation		
Increase in projected traffic that is substantial in relation to the existing traffic load and capacity of the street system (direct and cumulative)	X	
Add a substantial amount of traffic to a congested freeway interchange or ramp (direct and cumulative)	X	
Result in a substantial impact upon existing or planned transportation Systems (cumulative)	X	
Result in an increase in traffic hazards for motor vehicles, bicycles, or pedestrians due to a proposed, non-standard design feature	X	
Section 5.4 – Noise		
Result in a significant increase in the existing ambient noise levels from construction (direct and cumulative)		X
Section 5.5 – Biological Resources		
Have a substantial adverse impact, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in the MSCP or other local or regional plans, policies, or regulations, or by CDFW or USFWS		X
Result in a substantial adverse impact on any Tier I, Tier II, Tier IIIA, or Tier IIIB Habitats as identified in the Biology Guidelines of the Land Development manual or other sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFW or USFWS		X
Section 5.7 – Historical and Tribal Cultural Resources		
Result in an alteration, including adverse physical or aesthetic effects,		X

Resource Impact	Significant and Unavoidable	Less than Significant with Mitigation
and/or the destruction of a prehistoric or historic building (including an architecturally significant building), structure, object, or site; or tribal cultural resource		
Section 5.9 – Visual Effects and Neighborhood Character		
Result in substantial alteration in the existing landform		X

9.4 Alternatives Considered

Four alternatives were initially considered for evaluation. Based on the criteria described in Section 9.3, *Selection of Alternatives*, in addition to evaluating the No Project Alternative scenario, one other alternative was carried forward. The other alternatives that were considered, but rejected, included an alternate location alternative and an alternative concerning the removal of the roadway connection from the Mission Valley Community Plan, as discussed below.

9.4.1 Alternatives Considered but Rejected

9.4.1.1 Alternate Location Alternative

Alternative roadway alignments and locations were considered as part of the alternatives consideration process. The key question and first step in analysis of the off-site location “is whether any of the significant effects of the project would be avoided or substantially lessened by putting the project in another location” (State CEQA Guidelines Section 15126.6(f)(2)(A)).

As the project’s primary goal is to connect the Serra Mesa Community with the Mission Valley Community, the roadway connection between Phyllis Place and Friars Road provides a natural choice because it is the area between the two communities where there is currently no public street access. The City considered two alternative alignments near the project site. Both would be slightly to the east of the proposed alignment. However, it was determined that these alignments would not meet minimum design requirements for traffic signal spacing, and would be too close to the existing Interstate (I-) 805 ramps. Therefore, these alignments would potentially be infeasible from a technical standpoint, and have been eliminated from detailed consideration.

9.4.1.2 No Build/Remove from Mission Valley Community Plan Alternative

The No Build/Remove from Mission Valley Community Plan Alternative would not include the construction and operation of the roadway connecting Phyllis Place to Franklin Ridge Road/Via Alta, and would remove language regarding the potential connection from the Mission Valley Community Plan. This alternative was rejected from further consideration because it would not meet any of the project objectives, as detailed below.

1. This alternative would resolve the inconsistency between community plans; however, it would not provide a multi-modal linkage from Friars Road in Mission Valley to Phyllis Place in Serra Mesa, as no roadway would be constructed, thereby limiting multi-modal options between these roadways. Therefore, it would not fully meet this objective.

2. This alternative would not improve local mobility in the Serra Mesa and Mission Valley planning areas, as no roadway would be constructed, thereby limiting routes between these planning areas.
3. This alternative would not help to alleviate traffic congestion and improve navigational efficiency to and from local freeway on- and off-ramps for the surrounding areas, as no roadway would be constructed, thus limiting access options for those in the areas within the vicinity of the project site.
4. This alternative would also not improve emergency access and evacuation route options between the Serra Mesa and Mission Valley planning areas, as it would not provide additional ingress/egress for emergency responders, nor would an additional emergency evacuation route be created.
5. Finally, this alternative would not provide a safe and efficient street design for motorists, cyclists, and pedestrians, as no roadway would be constructed.

Furthermore, although this alternative would remove the language associated with the roadway connection, it would not resolve the inconsistency with other land use plans that have already been adopted. For example, the City's Climate Action Plan and Bicycle Master Plan Update include the proposed roadway connection in their assumptions. Therefore, this inconsistency would require additional environmental analysis prior to removal from the Mission Valley Community Plan, and the plans that indicate the connection would potentially need to be amended.

9.4.2 Alternatives Selected for Analysis

9.4.2.1 Alternative 1 – No Project Alternative

State CEQA Guidelines Section 15126.6(e) requires that an EIR evaluate a “no project” alternative. The purpose of describing and analyzing a no project alternative is to allow a lead agency to compare the impacts of approving the project to the impacts of not approving it. The No Project Alternative assumes that the proposed roadway connection and associated Community Plan Amendment to the Serra Mesa Community Plan would not occur. As such, the inconsistency between the Mission Valley and Serra Mesa Community Plan would remain, and any future proposal for a road connection would require an amendment to the Serra Mesa Community Plan.

Section 15126.6(e)(3) of the State CEQA Guidelines states that the no project analysis shall discuss the baseline existing conditions, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services. This discussion is provided below.

The project site is located partially within the boundary of the Quarry Falls site and partially within an undeveloped, primarily disturbed hillside. The project site is also within a San Diego Gas & Electric easement, which contains an energy transmission line (four transmission poles) running east-west at the northern portion of the project site, adjacent to Phyllis Place.

The physical existing conditions of the project site were previously detailed in Chapter 2, *Environmental Setting*. The project site is primarily disturbed, although it does not contain any buildings or structures. The project site contains one vegetation community (0.21 acre of disturbed coastal sage scrub) and two land cover types (0.77 acre of disturbed habitat and 1.07 acre of developed land).

As previously detailed in Chapter 3, *Project Description*, the northernmost portion of the project site (immediately south of Phyllis Place) is likely to be developed as a park if the proposed project were not to be implemented. There are two approved general development plans for the Phyllis Place Park—one with the proposed roadway and one without. Although a subsequent action to obtain a notice to proceed or grading permit may be required, the park was approved as part of the Quarry Falls Specific Plan and has conceptual design plans, grading plans, etc. Therefore, it is reasonable to assume that a portion of the site would be developed going forward under the No Project Alternative. The remaining portion of the project site is designated as “Open Space” within the Quarry Falls Specific Plan. Therefore, it is reasonable to assume that no other development within this portion of the project site would occur under the No Project Alternative.

9.4.2.2 Alternative 2 – Bicycle, Pedestrian, and Emergency Access Only Alternative

This alternative would provide a narrower roadway design, as it would not allow vehicle traffic aside from emergency responders. It would also provide access for pedestrians and cyclists. The roadway design would include bollards, gates, or another type of control subject to the approval of the San Diego Fire and Police Departments. The final width of the roadway design and type of control would be determined in conjunction with these departments. However, for the purposes of analysis, it can reasonably be concluded that the roadway would be narrower than the proposed project (120 feet wide), as it would only be required to include a bollard/gate and an entry on either side for pedestrians and cyclists. Due to the reduced width, it is also reasonable to assume that the construction schedule would be shorter for this alternative when compared to the proposed project. This alternative would still require an amendment to the Serra Mesa Community Plan, as it currently does not provide for any roadway connection.

9.5 Analysis of Alternatives

This section discusses each of the project alternatives and determines whether each alternative would avoid or substantially reduce any of the significant impacts of the proposed project. This section also identifies any additional impacts resulting from the alternatives that would not result from the proposed project and considers the alternatives’ respective relationships to the proposed project’s basic objectives. A summary comparison of the impacts of the alternatives under consideration relative to the proposed project is included as Table 9-2.

Table 9-2. Summary Impacts of Alternatives Relative to the Proposed Project

Environmental Resource	Proposed Project Determination	No Project (Alternative 1)	Bicycle, Pedestrian, and Emergency Access Only Alternative (Alternative 2)
Land Use	Less than Significant	Greater	Greater
Transportation and Circulation	Significant and Unavoidable	Greater	Greater
Air Quality	Less than Significant	Greater	Greater
Noise	Less than Significant with Mitigation	Reduced	Slightly Reduced
Biological Resources	Less than Significant with Mitigation	Reduced	Slightly Reduced
Paleontological Resources	No Impact	Similar	Similar
Historical and Tribal Cultural Resources	Less than Significant with Mitigation	Reduced	Slightly Reduced
Hydrology and Water Quality	Less than Significant	Reduced	Slightly Reduced
Visual Effects and Neighborhood Character	Less than Significant with Mitigation	Reduced	Slightly Reduced
Greenhouse Gases	Less than Significant	Greater	Greater

9.5.1 Analysis of Alternative 1 – No-Project Alternative

9.5.1.1 Land Use

This alternative would not construct the roadway and would not amend the Serra Mesa Community Plan to include the roadway connection. Consequently, this alternative would not resolve the inconsistency between the Serra Mesa and Mission Valley Community Plans regarding a roadway connection at Phyllis Place and would not provide expanded personal travel options for those in the vicinity of the proposed connection. The alternative would also not comply with the General Plan Street and Freeway System Goal of an interconnected street system that provides multiple linkages within and between communities, and the General Plan Policy LU-C.1.c, which calls for maintaining consistency between community plans and the General Plan. In addition, this alternative would not be consistent with the Climate Action Plan (CAP), as it would not construct the roadway connection, thus not reducing regional and study area vehicle miles traveled (VMT) and associated emissions.

The No-Project Alternative would not result in any interruption in the continuity of the proposed Phyllis Place Park and would not result in any disturbance to steep slopes. However, as identified in Section 5.1, *Land Use*, the proposed project would not result in significant impacts related to these issues, so the No Project Alternative would not substantially lessen a significant effect of the project in that regard.

Therefore, while the No-Project Alternative would not interrupt the park or result in disturbance to steep slopes, it would not provide a connection between communities or resolve the inconsistency between community plans. It would also not be consistent with the City's CAP, resulting in an

increase in VMT and associated emissions. Therefore, land use impacts associated with the No Project Alternative would be significant and greater than land use impacts that would result from the proposed project.

9.5.1.2 Transportation and Circulation

Roadway Capacity

Implementation of the No-Project Alternative, unlike the proposed project, would not add a roadway connection to the existing circulation network.

It should be noted that the traffic study area used within this DEIR was selected to identify where the proposed project would cause 50 or more trips to be redistributed to a roadway segment, intersection, freeway mainline segment, or freeway ramp. This methodology is consistent with the City's Traffic Impact Study Manual (1998), which is typically applied for development projects that generate traffic (e.g., shopping center or apartment complex). However, in the case of the proposed project, it would redistribute traffic patterns within the vicinity of the project site, which also has the possibility to improve traffic operations at certain locations. These locations are not necessarily captured within the study area but can be examined through the review of the Quarry Falls PEIR, which had a larger study area due to the size of the project. The results of the traffic analysis within the Quarry Falls PEIR are not presented within this section but are available for review at the City's website¹ while a hard copy is available at the Planning Department.²

As previously detailed in Chapter 3, *Project Description*, the Quarry Falls developer is adhering to an existing Mitigation Monitoring and Reporting Program (MMRP) related to roadway capacity impacts. Therefore, if the proposed project were not to be implemented, the Quarry Falls developer would still be required to implement roadway capacity mitigation measures in conjunction with buildout of the project. Where applicable, the existing mitigation measures required by the Quarry Falls MMRP are detailed below.

In order to evaluate the potential impacts of this alternative, the analysis within Section 5.2 details the Near-Term (Year 2017) without project and Long-Term (Year 2035) without project traffic conditions, detailed below.

Year 2017

The Near-Term (Year 2017) traffic scenario compares the Year 2017 (near-term year) with project conditions to study area roadway, intersection, and freeway facility conditions without the proposed road connection.

As detailed under Issue 1 within Section 5.2, *Transportation and Circulation*, the proposed project would impact four roadway segments; however, impacts on two of those roadway segments would be less than significant with mitigation incorporated. As shown in Table 5.2-10, under the No-Project Alternative, the following three roadway segments would operate at an unacceptable level of service (LOS).

- Mission Center Road, from Aquatera Driveway to Murray Ridge Road

¹ <https://www.sandiego.gov/planning/programs/ceqa>

² 1010 Second Avenue, Suite 1200, East Tower, M.S. 413, San Diego, CA 92101

- Murray Ridge Road, from the I-805 northbound (NB) ramp to Mission Center Road
- Murray Ridge Road, from Mission Center Road to Pinecrest Avenue

Mitigation for impacts on roadway segments typically involves widening of the roadway. It is unlikely that the segment of Mission Center Road from Aquatera Driveway to Murray Ridge Road would be able to be widened as mitigation in that segment, as there are sensitive biological resources protected as Multi-Habitat Planning Area (MHPA) on both sides of this roadway. Impacts on the MHPA are generally discouraged by existing City regulations or require mitigation for impacts on sensitive vegetation communities (i.e., a 3:1 ratio for impacts).

Concerning Murray Ridge Road segments, the Quarry Falls MMRP states that the applicant shall improve these segments to a four-lane collector and contribute funds for traffic calming.

The proposed project would impact three intersections; however, impacts to these intersections would be less than significant with mitigation incorporated. As shown in Table 5.2-11, the No-Project Alternative would result in one intersection operating at an unacceptable LOS under this scenario:

- Friars Road and Northside Drive (LOS E, PM peak hour)

Mitigation for impacts on intersection delay would likely be available through reconfiguration of turn lanes, signal timing, or other related measures. Therefore, it is assumed for purposes of this analysis that these impacts would be reduced to less-than-significant levels.

The proposed project would decrease VMT within the study area and the region in future years compared to future year baselines and therefore would result in a less-than-significant impact on freeway mainline segments. The No-Project Alternative would not decrease VMT within the study area and the region and therefore would result in a significant impact on freeway mainline segments. There is no mitigation identified to reduce impacts related to VMT.

The proposed project would not impact any freeway ramps, and Table 5.2-12 shows that the No-Project Alternative would similarly not result in any impacts on freeway ramps.

Year 2035

The Long-Term (Year 2035) traffic scenario evaluates the proposed project's potential contribution to cumulative impacts on the planned transportation system and compares the Year 2035 (Serra Mesa Community Plan buildout) with project conditions to study area roadway, intersection, and freeway facility conditions without the proposed road connection.

As detailed under Issue 3 within Section 5.2, *Transportation and Circulation*, the proposed project would impact six roadway segments; however, impacts on two of those roadway segments would be less than significant with mitigation incorporated. As shown in Table 5.2-16, under the No-Project Alternative, the following six roadway segments would operate at an unacceptable LOS.

- Mission Center Road, from Aquatera Driveway to Murray Ridge Road
- Murray Ridge Road, from the I-805 NB ramp to Mission Center Road
- Murray Ridge Road, from Mission Center Road to Pinecrest Avenue
- Murray Ridge Road, from Pinecrest Avenue to Sandrock Road
- Phyllis Place, from the I-805 southbound (SB) ramp to the I-805 NB ramp

- Rio San Diego Drive, from Qualcomm Way to Rio Bonito Way

Mitigation for impacts on roadway segments typically involves widening of the roadway. As previously detailed, it is unlikely that the segment of Mission Center Road from Aquatera Driveway to Murray Ridge Road would be able to be widened as mitigation in that segment, as there is an MHPA on both sides of this roadway.

As previously detailed in Section 5.4.2.3, mitigation was identified on several segments of Murray Ridge Road; however, the City's ability to implement these measures may be limited. Due to the uncertainty of being able to implement these measures in light of countervailing considerations, this analysis does not assume it will occur. In the event it does not, the impact would remain significant and unavoidable.

Impacts along the Phyllis Place segment would be mitigated similar to the proposed project; see mitigation measure **MM-TRAF-11** within Section 5.2.5.3.

As previously detailed in Section 5.4.2.3, mitigation was identified for the segment of Rio San Diego Drive; however, the City's ability to implement this measure may be limited. Due to the uncertainty of being able to implement this measure in light of countervailing considerations, this analysis does not assume it will occur. In the event it does not, the impact would remain significant and unavoidable.

The proposed project would result in a significant long-term cumulative impact on four intersections; however, impacts on three of these intersections (depending on peak hour) would be less than significant with mitigation incorporated. As shown in Table 5.2-17, the following five intersections would operate at an unacceptable LOS under the No-Project Alternative.

- Friars Road and Northside Drive (LOS E, PM peak hour)
- Mission Center Road and Murray Ridge Road/Phyllis Place (LOS E and F, AM and PM peak hour, respectively)
- Murray Ridge Road and the I-805 SB ramp (LOS E, PM peak hour)
- Qualcomm Way and Friars Road eastbound (EB) ramp (LOS E, PM peak hour)
- Qualcomm Way and Friars Road westbound (WB) ramp (LOS F, PM peak hour)

Mitigation for impacts on intersection delay would likely be available through reconfiguration of turn lanes, signal timing, or other related measures. Therefore, it is assumed for purposes of this analysis that these impacts would be reduced to less-than-significant levels.

The proposed project would decrease VMT within the study area and the region in the Long-Term Scenario and therefore would result in a less-than-significant impact on freeway mainline segments. The No-Project Alternative would not decrease VMT within the study area and the region and therefore would result in a significant impact on freeway mainline segments. There is no mitigation identified to reduce impacts related to VMT.

Under the proposed project, one metered on-ramp is projected to operate with more than 15 minutes of delay during the PM peak hour; however, impacts on this freeway ramp would be less than significant with mitigation incorporated. As shown in Table 5.2-18, no freeway ramps under the No-Project Alternative would operate with more than 15 minutes of delay.

Traffic Hazards

The No-Project Alternative would not construct a roadway and therefore would not result in inadequate sight distance for motorists exiting from the City View Church driveway.

Alternative Transportation

The No-Project Alternative would not construct a roadway connection that could be used by pedestrians and cyclists in the vicinity of the project site. There is also a possibility that the roadway connection could be used as a new bus route (if Metropolitan Transit System decided to use the connection for a new bus route); however, the inclusion of a potential bus route is speculative.

Conclusion

In the Near-Term Scenario, it is unlikely that the No-Project Alternative could reduce roadway segment impacts on Mission Center Road from Aquatera Driveway to Murray Ridge Road; however, the proposed project would result in significant and unavoidable impacts along three roadway segments. In the Long-Term Scenario, the No-Project Alternative would result in similar significant and unavoidable impacts regarding roadway segments, and similar significant but mitigable impacts to intersections.

The No-Project Alternative would not decrease VMT within the study area or region and thus would result in a significant and unavoidable impact on freeway mainline segments. In addition, the No-Project Alternative would not provide a connection for alternative transportation users, including cyclists and pedestrians. This alternative would not, however, result in inadequate sight distance for motorists exiting the City View Church driveway. Overall, this alternative would result in greater impacts compared to the proposed project primarily due to the increase in VMT and, similarly, impacts would be significant and unavoidable.

9.5.1.3 Air Quality

The No-Project Alternative would not result in significant emissions associated with construction; however, as previously detailed within Section 5.3, *Air Quality*, the proposed project's impact related to construction emissions would be less than significant. Concerning operational emissions, the No-Project Alternative would result in greater impacts because regional VMT would increase when compared to the proposed project. The increase in regional VMT would likewise increase air pollutant emissions associated with vehicle trips. Therefore, air quality impacts associated with the No-Project Alternative would be greater than air quality impacts that would result from the proposed project and would be significant and unavoidable. There is no feasible mitigation that would reduce the impact associated with the increase of regional VMT and associated emissions.

9.5.1.4 Noise

The No-Project Alternative would entail construction activities for the park site, but it would not be expected to result in significant noise or vibration impacts associated with construction. As previously detailed within Section 5.4, *Noise*, the proposed project's impact related to construction noise and vibration would be less than significant with mitigation incorporated. Therefore, construction impacts associated with the No-Project Alternative would be less than significant and reduced when compared to the proposed project.

9.5.1.5 Biological Resources

The No-Project Alternative would not result in any impacts associated with the removal of sensitive vegetation communities. The No-Project Alternative would have the potential to result in indirect impacts on raptors or other migratory birds if the species nests in trees adjacent to the project site during construction of the Phyllis Place Park site. Overall, the No-Project Alternative would slightly reduce biological resource impacts when compared to the proposed project, as it would not remove any vegetation and impacts would be less than significant with similar project mitigation for nesting raptors.

9.5.1.6 Paleontological Resources

The No-Project Alternative would not result in any impacts on paleontological resources, because grading activities for the park site would not extend to a depth that would be expected to disturb paleontological resources. Additional grading activities required for the proposed project would not be required under the No-Project Alternative, as no roadway would be constructed. However, as previously detailed in Section 5.6, *Paleontological Resources*, the proposed project would not affect paleontological resources, as it entails the placement of fill and no extensive excavation activities are required. Therefore, this alternative would have similar impacts to the proposed project, as no impact would occur.

9.5.1.7 Historical and Tribal Cultural Resources

The No-Project Alternative is not expected to result in significant impacts during construction of the park site. Additional grading activities required for the proposed project would not be required under the No-Project Alternative, as no roadway would be constructed. Therefore, this alternative would slightly reduce impacts when compared to the proposed project, and impacts would be less than significant.

9.5.1.8 Hydrology and Water Quality

The No-Project Alternative would include the Phyllis Place Park within a portion of the project site. The design of the park site includes relevant best management practices and other stormwater quality controls that are required. In addition, the No-Project Alternative would not disturb the amount of impervious surface as the project or include a roadway that would generate pollutants. Therefore, this alternative would reduce impacts when compared to the proposed project, and impacts would be less than significant.

9.5.1.9 Visual Effects and Neighborhood Character

The No-Project Alternative would include the Phyllis Place Park within a portion of the project site, which would disturb only a portion of the project site. The remainder of the project site would remain vacant, as it is designated for open space within the Quarry Falls Specific Plan. Therefore, this alternative would reduce impacts when compared to the proposed project, and impacts would be less than significant.

9.5.1.10 Greenhouse Gases

The No-Project Alternative would not result in emissions associated with construction; however, as previously detailed within Section 5.10, *Greenhouse Gases*, the proposed project's impact related to

construction emissions would be less than significant. Concerning operational emissions, the No-Project Alternative would result in greater impacts because regional VMT would increase when compared to the proposed project. The increase in regional VMT would likewise increase air pollutant emissions associated with vehicle trips. In addition, the No-Project Alternative would not be consistent with the City's CAP because it would increase regional VMT, which would in turn increase GHG emissions. The CAP's primary purpose is to reduce GHG emissions within the City. Therefore, GHG impacts associated with the No-Project Alternative would be greater than the proposed project and would be significant and unavoidable. There is no feasible mitigation that would reduce the impact associated with the increase of regional VMT and associated emissions.

9.5.1.11 Relationship to Project Objectives

The No-Project Alternative would not meet any of the project objectives. This alternative would not provide a multi-modal linkage from Friars Road in Mission Valley to Phyllis Place in Serra Mesa because no roadway would be constructed, thereby limiting multi-modal options between these roadways. The No-Project Alternative would not improve local mobility in the Serra Mesa and Mission Valley planning areas because no roadway would be constructed, thereby limiting routes between these planning areas. It would not help to alleviate traffic congestion and improve navigational efficiency to and from local freeway on- and off-ramps for the surrounding areas because no roadway would be constructed, thus limiting access options for those in the areas within the vicinity of the project site. The No-Project Alternative would also not improve emergency access and evacuation route options between the Serra Mesa and Mission Valley planning areas because it would not provide additional ingress/egress for emergency responders, nor would an additional emergency evacuation route be created. Finally, this alternative would not provide a safe and efficient street design for motorists, cyclists, and pedestrians, as no roadway would be constructed.

9.5.2 Analysis of Alternative 2 – Bicycle, Pedestrian, and Emergency Access Only Alternative

9.5.2.1 Land Use

This alternative would construct a roadway that would not be available to motorists and would amend the Serra Mesa Community Plan. Unlike the proposed project, this alternative would not resolve the inconsistency between the Serra Mesa and Mission Valley Community Plans because the Mission Valley Community Plan stated that a roadway with "adequate capacity" would be required (referring to vehicle carrying capacity). Although this alternative would provide expanded personal travel options for pedestrians and cyclists, it would not provide an alternative route for motorists within the vicinity of the proposed connection.

The alternative would also not comply with the General Plan Street and Freeway System Goal of an interconnected street system that provides multiple linkages within and between communities, and the General Plan Policy LU-C.1.c, which calls for maintaining consistency between community plans and the General Plan. In addition, this alternative would not be consistent with the CAP, as it would not construct a roadway connection for vehicles, thus not decreasing regional VMT and associated emissions.

The Bicycle, Pedestrian, and Emergency Access Only Alternative would result in a lesser interruption in the continuity of the proposed Phyllis Place Linear Park due to the reduced width.

This alternative would also require disturbance to steep slopes. However, as identified in Section 5.1, *Land Use*, because construction of this alternative would be similar to the proposed project, it would not result in significant impacts related to these issues.

Therefore, although this alternative would provide a connection for pedestrians and cyclists between communities, it would not resolve the inconsistency between community plans. It would also not be consistent with the City's CAP, as it would not decrease VMT and associated emissions. Overall, land use impacts under this alternative would be greater when compared to the proposed project and would be significant.

9.5.2.2 Transportation and Circulation

Roadway Capacity

Implementation of the Bicycle, Pedestrian, and Emergency Access Only Alternative would result in the same impacts as those of the No-Project Alternative (see Section 9.5.1.2, above), as it would not be available for use by motorists.

Traffic Hazards

Implementation of this alternative would not result in any traffic hazards, as there would not be a need for the signalized intersection at Phyllis Place and therefore there would be adequate sight distance for motorists exiting City View Church.

Alternative Transportation

Implementation of this alternative would provide a new route for pedestrians and cyclists and would therefore be similar to the proposed project.

Conclusion

In the Near-Term Scenario, it is unlikely that this alternative could reduce roadway segment impacts on Mission Center Road from Aquatera Driveway to Murray Ridge Road; however, the proposed project would result in significant and unavoidable impacts along three roadway segments. In the Long-Term Scenario, this alternative would result in similar significant and unavoidable impacts regarding roadway segments, and similar significant but mitigable impacts to intersections.

Although the proposed project would result in more impacts under the Near-Term (Year 2017) scenario, the Bicycle, Pedestrian, and Emergency Access Only Alternative would result in slightly more significant impacts under the Long-Term (Year 2035) scenario. It would not decrease VMT within the study area or region and thus would result in a significant and unavoidable impact on freeway mainline segments. The Bicycle, Pedestrian, and Emergency Access Only Alternative would not result in any traffic hazards and would provide a connection for alternative transportation users, including cyclists and pedestrians. Overall, this alternative would result in slightly greater impacts compared to the proposed project as it would not decrease VMT and impacts would similarly be significant and unavoidable.

9.5.2.3 Air Quality

This alternative would result in similar construction emissions as the proposed project, which would be less than significant. Concerning operational emissions, the Bicycle, Pedestrian, and

Emergency Access Only Alternative would result in greater impacts because VMT would decrease, as it would under the proposed project, which would likewise increase air pollutant emissions associated with vehicle trips. Therefore, this alternative would result in greater air quality impacts than the proposed project, and impacts would be significant and unavoidable as no mitigation is available to reduce impacts associated with VMT.

9.5.2.4 Noise

This alternative would result in slightly reduced noise and vibration impacts associated with construction, as construction activities would not last as long as the proposed project due to the narrower roadway. As previously detailed within Section 5.4, *Noise*, the proposed project's impact related to construction noise and vibration would be less than significant. Therefore, impacts under this alternative would be slightly reduced when compared to the proposed project and would be less than significant.

9.5.2.5 Biological Resources

This alternative would result in slightly reduced biological resource impacts associated with construction, as this alternative would construct a narrower roadway, resulting in fewer impacts on vegetation communities and also reducing construction noise impacts due to a shorter construction schedule. Therefore, impacts under this alternative would be slightly reduced when compared to the proposed project and would be less than significant with the implementation of similar project mitigation measures.

9.5.2.6 Paleontological Resources

This alternative would not result in any impacts on paleontological resources, as site preparation activities would be similar to the proposed project. As previously detailed, it would entail the placement of fill, and no extensive excavation activities are required. Therefore, this alternative would have similar impacts to the proposed project, as no impact would occur.

9.5.2.7 Historical and Tribal Cultural Resources

This alternative would result in slightly reduced historical and Tribal Cultural Resources impacts associated with construction, as this alternative would construct a narrower roadway, thus slightly decreasing the potential to disturb historical and Tribal Cultural Resources. Therefore, impacts under this alternative would be slightly reduced when compared to the proposed project and would be less than significant with the implementation of similar project mitigation measures.

9.5.2.8 Hydrology and Water Quality

This alternative would result in slightly reduced hydrology and water quality impacts associated with construction, as this alternative would construct a narrower roadway, thus decreasing the amount of impervious surfaces disturbed. In addition, vehicles would not be regularly using the roadway (aside from occasional emergency vehicles) and the alternative therefore would generate fewer pollutants than the operation of the proposed project. Consequently, impacts under this alternative would be reduced when compared to the proposed project and would be less than significant.

9.5.2.9 Visual Effects and Neighborhood Character

This alternative would result in slightly reduced visual impacts associated with construction, as this alternative would construct a narrower roadway, thus decreasing the amount of roadway that would be visible, and would not result in vehicles using the roadway. This alternative would similarly require the disturbance of steep slopes as classified by the City's Environmentally Sensitive Lands Regulations. Therefore, impacts under this alternative would be slightly reduced when compared to the proposed project and would be less than significant with the implementation of similar project mitigation.

9.5.2.10 Greenhouse Gases

This alternative would result in slightly reduced emissions associated with construction due to the shorter construction schedule; however, as previously detailed within Section 5.10, *Greenhouse Gases*, the proposed project's impact related to construction emissions would be less than significant. Concerning operational emissions, the Bicycle, Pedestrian, and Emergency Access Only Alternative would result in greater impacts because regional VMT would increase when compared to the proposed project. The increase in regional VMT would likewise increase air pollutant emissions associated with vehicle trips. In addition, this alternative would not be consistent with the City's CAP because it would not decrease VMT, which would in turn fail to decrease GHG emissions. The CAP's primary purpose is to reduce GHG emissions within the City. Therefore, GHG impacts associated with this alternative would be greater than the proposed project and would be significant and unavoidable. There is no feasible mitigation that would reduce the impact associated with the increase of regional VMT and associated emissions.

9.5.2.11 Relationship to Project Objectives

The Bicycle, Pedestrian, and Emergency Access Only Alternative would fully meet Objective #4 while partially meeting Objectives #2 and #5. This alternative would meet Objective #4 because it would improve emergency access and evacuation route options between the Serra Mesa and Mission Valley planning areas. It would partially meet Objective #2 because it would improve local mobility in the Serra Mesa and Mission Valley planning areas for pedestrians and cyclists, but would not improve mobility for vehicles. It would partially meet Objective #5 because it would provide a safe and efficient design for cyclists and pedestrians but would not provide an efficient design for motorists, as they would be unable to use the roadway.

This alternative would not resolve the inconsistency between community plans and would not provide a multi-modal linkage from Friars Road in Mission Valley to Phyllis Place in Serra Mesa because no motorists would be allowed to use the roadway. This alternative would not help to alleviate traffic congestion and improve navigational efficiency to and from local freeway on- and off-ramps for the surrounding areas because the roadway would not be available to be used by motorists, thus limiting options for motorists in the areas within the vicinity of the project site.

9.5.3 Environmentally Superior Alternative

Pursuant to CEQA, the EIR is required to identify the environmentally superior alternative. When the environmentally superior alternative is the No-Project Alternative, CEQA requires that another alternative be identified. As indicated in the comparative analysis on the pages that preceded, the No-Project Alternative reduces impacts within several issue areas—such as biological resources,

historical and tribal cultural resources, and visual effects—and is therefore identified as the environmentally superior alternative. It should be noted, however, that these impacts would be mitigated to less-than-significant levels under the proposed project.

However, because the No-Project Alternative is identified as the environmentally superior alternative, CEQA requires that a design alternative be identified as the environmentally superior alternative. For this reason, the Bicycle, Pedestrian, and Emergency Access Only Alternative is identified as the environmentally superior alternative. This alternative would slightly reduce impacts associated with construction (i.e., biological resources, historical and tribal cultural resources) due to the narrower roadway and shorter duration of construction.

It should be noted, however, that both alternatives would result in significant and unavoidable impacts that would not result under implementation of the proposed project, as they would not decrease VMT within the study area or the region. Therefore, both alternatives would result in greater impacts associated with transportation and traffic, air quality, and GHG emissions than the proposed project.

Chapter 10

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11.1 Chapter 1, Introduction

City of San Diego. 2005. *Environmental Impact Report Guidelines*. Revised September 2002, updated May 2005. Available: http://affiliatedrecon.com/studies/CA/San_Diego_City/EIR/2005-EIR-Guidelines.pdf.

City of San Diego. 2016. *California Environmental Quality Act Significance Determination Thresholds*. July. Available: https://www.sandiego.gov/sites/default/files/july_2016_ceqa_thresholds_final_0.pdf.

11.2 Chapter 2, Environmental Setting

City of San Diego. 2008. General Plan. Adopted March 10. Available: <https://www.sandiego.gov/planning/genplan#genplan>.

City of San Diego. 2011. Serra Mesa Community Plan. April. Available: <https://www.sandiego.gov/sites/default/files/legacy//planning/community/profiles/serramesa/pdf/serramesa042611c.pdf>.

City of San Diego. 2016a. Fire Station 45 information. Available: <https://www.sandiego.gov/fire/about/firestations/sta45>. Accessed November 28, 2016.

City of San Diego. 2016b. Fire Station 28 information. <https://www.sandiego.gov/fire/about/firestations/sta28>. Accessed November 28, 2016.

City of San Diego. 2016c. Memorandum from the San Diego Police Department to the City of San Diego Planning Department. December 13.

Trame, Larry. Assistant Fire Marshal, San Diego Fire-Rescue Department. Personal communication, September 28, 2016.

11.3 Chapter 3, Project Description

City of San Diego. 2002. *Street Design Manual 2002*. Available: <https://www.sandiego.gov/planning/programs/transportation/library/stdesign>.

City of San Diego. 2016. San Diego Municipal Code, Land Development Code: Landscape Standards. Available: https://www.sandiego.gov/sites/default/files/dsdlc_landscapestandards_2016-04-05.pdf.

Rastakhiz, Mehdi. City of San Diego. Personal communication, December 28, 2016.

11.4 Section 5.1, Land Use

City of San Diego. 1997. Multiple Species Conservation Program. City of San Diego MSCP Subarea Plan. March.

City of San Diego. 2002. *Street Design Manual*. November. Available:
<http://www.sandiego.gov/publicworks/pdf/edocref/streetdesignmanual02.pdf>.

City of San Diego. 2011. Serra Mesa Community Plan. Available:
<https://www.sandiego.gov/sites/default/files/legacy//planning/community/profiles/serramesa/pdf/serramesa042611c.pdf>.

City of San Diego. 2016. California Environmental Quality Act Significance Determination Thresholds. July. Available:
https://www.sandiego.gov/sites/default/files/july_2016_ceqa_thresholds_final_0.pdf.

11.5 Section 5.2, Transportation and Circulation

California Department of Transportation (Caltrans). 2016. *Local Development – Intergovernmental Review Program Interim Guidance: Implementing Caltrans Strategic Management Plan 2015–2010, Consistent with SB 743 (Steinberg, 2013)*. September. Available:
<http://www.dot.ca.gov/hq/tpp/documents/LDIGRInterimGuidanceApproved.pdf>.

City of San Diego. 1985. Mission Valley Community Plan, Transportation Element. Adopted June 1985, amended May 2013. Available:
https://www.sandiego.gov/sites/default/files/mission_valley_cp_060613_0.pdf.

City of San Diego. 1998. *Traffic Impact Study Manual*. July. Available:
<http://www.sandiego.gov/development-services/pdf/industry/trafficimpact.pdf>.

City of San Diego. 2002. *Street Design Manual*. November. Available:
<http://www.sandiego.gov/publicworks/pdf/edocref/streetdesignmanual02.pdf>.

City of San Diego. 2006. Pedestrian Master Plan. December. Available:
<http://www.sandiego.gov/planning/programs/transportation/pdf/pmpfv.pdf>.

City of San Diego. 2011. Serra Mesa Community Plan. Available:
<https://www.sandiego.gov/sites/default/files/legacy//planning/community/profiles/serramesa/pdf/serramesa042611c.pdf>.

City of San Diego. 2013. Bicycle Master Plan. Available:
http://www.sandiego.gov/planning/programs/transportation/mobility/pdf/bicycle_master_plan_final_dec_2013.pdf.

City of San Diego. 2016. California Environmental Quality Act Significance Determination Thresholds. July. Available:
https://www.sandiego.gov/sites/default/files/july_2016_ceqa_thresholds_final_0.pdf.

San Diego Association of Governments (SANDAG). 2010. Riding to 2050, the San Diego Regional Bike Plan. Available: http://www.sandag.org/uploads/projectid/projectid_353_10862.pdf.

San Diego Association of Governments (SANDAG). 2015. San Diego Forward: The Regional Plan. Available: http://www.511sd.com/pdfs/RP_final/The%20Plan%20-%20combined.pdf.

Transportation Research Board. 2010. Highway Capacity Manual. *Highway Capacity Manual 2010*. Fifth Edition. Available: <http://hcm.trb.org/?qr=1>.

11.6 Section 5.3, Air Quality

California Air Resources Board. 2004. 2004 Revision to the California State Implementation Plan for Carbon Monoxide. Available: https://www.arb.ca.gov/planning/sip/co/final_2004_co_plan_update.pdf. Accessed: January 30, 2017.

California Air Resources Board. 2015. *Glossary of Air Pollutant Terms*. Available: <https://www.arb.ca.gov/html/gloss.htm>.

California Air Resources Board. 2016a. Ambient Air Quality Standards. Last Revised: May 4, 2016. Available: <https://www.arb.ca.gov/research/aaqs/aaqs2.pdf>. Accessed: December 5, 2016.

California Air Resources Board. 2016b. iAdam. Available: <https://www.arb.ca.gov/adam/>. Accessed: August 16, 2016.

California Air Resources Board. 2016c. Area Designations Maps / State and National. Last Revised: May 5, 2016. Available: <https://www.arb.ca.gov/desig/adm/adm.htm>. Accessed: August 16, 2016.

California Department of Transportation (Caltrans). 1997. Transportation Project-Level Carbon Monoxide Protocol. Davis, CA: Institute of Transportation Studies, University of California, Davis.

California Department of Transportation (Caltrans). 1998. California LINE Source Dispersion Model.

City of San Diego. 2016. California Environmental Quality Act Significance Determination Thresholds. July. Available: https://www.sandiego.gov/sites/default/files/july_2016_ceqa_thresholds_final_0.pdf.

National Oceanic and Atmospheric Administration. 2017. National Environmental Satellite, Data, and Information Service. <https://www.ncei.noaa.gov/orders/cdo/925354.pdf>.

Sacramento Metropolitan Air Quality Management District. 2016. Roadway Construction Emissions Model, Version 8.1.0. Available: http://www.airquality.org/LandUseTransportation/Documents/RoadConstructionEmissionsModelVer8_1_0_locked_05262016.xls.

San Diego Air Pollution Control District. 1998. Rule 20.2 New Source Review Non-Major Stationary Source. Last Revised: November 4, 1998. Available: http://www.sdapcd.org/content/dam/sdc/apcd/PDF/Rules_and_Regulations/Permits/APCD_R20-2.pdf. Accessed: January 30, 2017.

- San Diego Air Pollution Control District. 2005. *Measures to Reduce Particulate Matter in San Diego County*. Available:
<http://www.sdapcd.org/content/dam/sdc/apcd/PDF/Air%20Quality%20Planning/PM-Measures.pdf>. Accessed: January 30, 2017.
- San Diego Air Pollution Control District. 2016. California Environmental Quality Act Significance Determination Thresholds. Last Revised: July 2016. Available:
https://www.sandiego.gov/sites/default/files/july_2016_ceqa_thresholds_final_0.pdf. Accessed: January 30, 2017.
- U.S. Environmental Protection Agency. 2014. *Six Common Air Pollutants*. Available:
<https://www.epa.gov/criteria-air-pollutants>.
- U.S. Environmental Protection Agency. 2016a. Monitor Values Report. Available:
<https://www.epa.gov/outdoor-air-quality-data/monitor-values-report>. Accessed: December 5, 2016.
- U.S. Environmental Protection Agency. 2016b. Nonattainment Areas for Criteria Pollutants. Last Revised: September 22, 2016. Available: <https://www.arb.ca.gov/desig/adm/adm.htm>. Accessed: December 5, 2016.
- Western Regional Climate Center. 2017 San Diego Lindbergh Field Monthly Climate Summary for period of record 07/01/1939 to 06/09/2016. Available: <http://www.wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca7740>. Accessed: March 27.

11.7 Section 5.4, Noise

- California Department of Transportation (Caltrans). 2013a. *Technical Noise Supplement to the Traffic Noise Analysis Protocol*. Final. (CT-HWANP-RT-13-069.25.2.) Sacramento, CA. Prepared by: California Department of Transportation, Division of Environmental Analysis, Environmental Engineering, Hazardous Waste, Air, Noise, & Paleontology Office, Sacramento, CA. Available: http://www.dot.ca.gov/hq/env/noise/pub/TeNS_Sept_2013B.pdf.
- California Department of Transportation (Caltrans). 2013b. *Transportation and Construction Vibration Guidance Manual*. September. Sacramento, CA. Available:
http://www.dot.ca.gov/hq/env/noise/pub/TCVGM_Sep13_FINAL.pdf.
- City of San Diego. 2016. California Environmental Quality Act Significance Determination Thresholds. July. Available:
https://www.sandiego.gov/sites/default/files/july_2016_ceqa_thresholds_final_0.pdf.
- Federal Highway Administration (FHWA). 2004. Traffic Noise Model version 2.5.
- Federal Highway Administration (FHWA). 2006. Roadway Construction Noise Model. Version 1.0.
- Federal Highway Administration (FHWA). 2008. Roadway Construction Noise Model. Version 1.1.
- Nelson, P. M. 1987. *Transportation Noise Reference Book*. Butterworth, Cambridge.

San Diego County Airport Land Use Commission. 2010. *Montgomery Field Airport Land Use Compatibility Plan*. Adopted January 25, 2010, amended December 20, 2010. Available: http://www.san.org/DesktopModules/Bring2mind/DMX/Download.aspx?Command=Core_Download&EntryId=2985&language=en-US&PortalId=0&TabId=225.

11.8 Section 5.5, Biological Resources

California Native Plant Society (CNPS), Rare Plant Program. 2016. *Inventory of Rare and Endangered Plants* (online edition, v8-02). California Native Plant Society, Sacramento, CA. Website <http://www.rareplants.cnps.org>. Accessed September 15, 2016.

City of San Diego. 1997a. *Multiple Species Conservation Program*. City of San Diego MSCP Subarea Plan. March. Available: https://www.sandiego.gov/sites/default/files/legacy//planning/programs/mscp/pdf/subarea_fullversion.pdf.

City of San Diego. 1997b. *Implementing Agreement by and between United States Fish and Wildlife Service, California Department of Fish and Game, and City of San Diego to Establish a Multiple Species Conservation Program (MSCP) for the Conservation of Threatened, Endangered and Other Species in the Vicinity of San Diego, California*. Available: https://www.fws.gov/carlsbad/HCPs/documents/City%20of%20San%20Diego%20MSCP_IA.pdf.

City of San Diego. 1998. *Final Multiple Species Conservation Program MSCP Plan*. August. Available: <http://www.sandiegocounty.gov/content/dam/sdc/pds/mscp/docs/SCMSCP/FinalMSCPProgramPlan.pdf>.

City of San Diego. 2008a. *General Plan*. Adopted March 10, 2008. Resolution No. R-303473. Available: <https://www.sandiego.gov/planning/genplan#genplan>.

City of San Diego. 2008b. *Quarry Falls Project Final Program Environmental Impact*. July.

City of San Diego. 2012. *Land Development Code, Biology Guidelines*. Adopted September 28, 1999. Amended April 23, 2012.

City of San Diego. 2016. *California Environmental Quality Act Significance Determination Thresholds*. July. Available: https://www.sandiego.gov/sites/default/files/july_2016_ceqa_thresholds_final_0.pdf.

11.9 Section 5.6, Paleontological Resources

City of San Diego. 2016. *California Environmental Quality Act Significance Determination Thresholds*. July. Available: https://www.sandiego.gov/sites/default/files/july_2016_ceqa_thresholds_final_0.pdf.

11.10 Section 5.7, Historical and Tribal Cultural Resources

ASM Affiliates, Inc. 2006. *Cultural Resources Study for the Quarry Falls Project*. June 8.

ASM Affiliates, Inc. 2012. Site update for P-37-018407/CA-SDI-15600.

ASM Affiliates, Inc. 2014. Site record for P-37-034472.

City of San Diego. 1997. San Diego Municipal Code, Chapter 14: General Regulations, Article 3: Supplemental Development Regulations, Division 2: Historical Resources Regulations. December. Available:
<http://docs.sandiego.gov/municode/MuniCodeChapter14/Ch14Art03Division02.pdf>.

City of San Diego. 1999. San Diego Municipal Code, Land Development Code: Historical Resources Guidelines. Amended April 30, 2001. Available:
<https://www.sandiego.gov/sites/default/files/legacy/development-services/industry/pdf/ldmhistorical.pdf>.

City of San Diego. 2007. *Final Program Environmental Impact Report for the City of San Diego General Plan*. September 2007.

City of San Diego. 2008. *General Plan, Historic Preservation Element*. March.

City of San Diego. 2001. *San Diego Municipal Code, Land Development Code: Historical Resources Guidelines*. Amended April 30, 2001. Available:
<https://www.sandiego.gov/sites/default/files/legacy/development-services/industry/pdf/ldmhistorical.pdf>

City of San Diego. 2016a. *California Environmental Quality Act Significance Determination Thresholds*. July. Available:
https://www.sandiego.gov/sites/default/files/july_2016_ceqa_thresholds_final_0.pdf.

City of San Diego. 2016b. *General Plan*. Available at: <https://www.sandiego.gov/planning/genplan>. Accessed on September 14, 2016.

Parker, Patricia, and Thomas King. 1990. *Guidelines for Evaluating and Documenting Traditional Cultural Properties*. National Register Bulletin, US Department of the Interior, National Park Service. Revised 1998.

11.11 Section 5.8, Hydrology and Water Quality

City of San Diego. 1984. *Drainage Design Manual*. April. Available:
<https://www.sandiego.gov/sites/default/files/legacy/publicworks/pdf/edocref/drainagedesignmanual.pdf>.

City of San Diego. 2016. California Environmental Quality Act Significance Determination Thresholds. July. Available:
https://www.sandiego.gov/sites/default/files/july_2016_ceqa_thresholds_final_0.pdf.

- County of San Diego. 2016. *County of San Diego BMP Design Manual for Permanent Site Design, Storm Water Treatment and Hydromodification Management: Storm Water Requirements for Development Applications*. February. Available:
[http://www.sandiegocounty.gov/content/dam/sdc/dpw/WATERSHED_PROTECTION_PROGRA
M/watershedpdf/County_BMPDM.pdf](http://www.sandiegocounty.gov/content/dam/sdc/dpw/WATERSHED_PROTECTION_PROGRAM/watershedpdf/County_BMPDM.pdf).
- Federal Emergency Management Agency (FEMA). 2012. Flood Insurance Rate Map, San Diego County, California. Panel 1617 of 2375. Map Number 06073C1617G. Map Revised May 16.
- San Diego Regional Water Quality Control Board (RWQCB). 1994. *Water Quality Control Plan for the San Diego Basin*. Updated May 17, 2016. Available:
http://www.waterboards.ca.gov/sandiego/water_issues/programs/basin_plan/.
- State Water Resources Control Board (SWRCB). 2012. *National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities*. Order No. 2012-0006-DWQ. NPDES No. CAS000002. Available:
[http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2012/wqo20
12_0006_dwq.pdf](http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2012/wqo2012_0006_dwq.pdf).

11.12 Section 5.9, Visual Effects and Neighborhood Character

- City of San Diego. 2002. *Street Design Manual 2002*. Available:
<https://www.sandiego.gov/planning/programs/transportation/library/stdesign>. Accessed: September 19, 2016.
- City of San Diego. 2004. San Diego Municipal Code, Land Development Code: Steep Hillside Guidelines. August. Available:
[https://www.sandiego.gov/sites/default/files/legacy/development-
services/pdf/industry/landdevmanual/lmsteephillsides.pdf](https://www.sandiego.gov/sites/default/files/legacy/development-services/pdf/industry/landdevmanual/lmsteephillsides.pdf).

11.13 Section 5.10, Greenhouse Gases

- California Air Resources Board (CARB). 2008. Climate Change Scoping Plan. Available:
http://www.arb.ca.gov/cc/scopingplan/document/adopted_scoping_plan.pdf. December.
- California Air Resources Board (CARB). 2016. California Greenhouse Gas Emission Inventory - 2016 Edition. Available: <http://www.arb.ca.gov/cc/inventory/data/data.htm>.
- Center for Climate and Energy Solutions. 2011. The Greenhouse Effect. Available:
<http://www.c2es.org/science-impacts/basics>. Accessed: January 17, 2012.
- City of San Diego. 2016. California Environmental Quality Act Significance Determination Thresholds. July. Available:
https://www.sandiego.gov/sites/default/files/july_2016_ceqa_thresholds_final_0.pdf.

- Council on Environmental Quality. 2016. Final Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in National Environmental Policy Act Reviews. August.
- International Panel on Climate Change. 2007. Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. Solomon, S., D. Qin, M. Manning, Z. Chen, M. Marquis, K. B. Averyt, M. Tignor and H. L. Miller (eds.). Available: http://www.ipcc.ch/pdf/assessment-report/ar4/wg1/ar4_wg1_full_report.pdf.
- International Panel on Climate Change. 2014. Climate Change 2014: Synthesis Report. Available: <http://www.ipcc.ch/report/ar5/syr>.
- Sacramento Metropolitan Air Quality Management District. 2016. Roadway Construction Emissions Model, Version 8.1.0. Available: http://www.airquality.org/LandUseTransportation/Documents/RoadConstructionEmissionsModelVer8_1_0_locked_05262016.xls.
- San Diego Association of Governments (SANDAG). 2011. 2050 Regional Transportation Plan/Sustainable Communities Strategy. Available: <http://www.sandag.org/index.asp?projectid=349&fuseaction=projects.detail>.
- San Diego Association of Governments (SANDAG). 2015. 2050 San Diego Forward: The Regional Plan. Available: <http://www.sdforward.com>.
- U.S. Environmental Protection Agency. 2012. EPA and NHTSA Set Standards to Reduce Greenhouse Gases and Improve Fuel Economy for Model Years 2017--2025 Cars and Light Trucks. August.
- U.S. Environmental Protection Agency. 2013a. Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2011. Chapter 3 (Energy), Tables 3-12, 3-13, and 3-14. Washington, DC. U.S. EPA #430-R-13-001.
- U.S. Environmental Protection Agency. 2013b. Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2011. Annex 6 (Additional Information), Table A-275. Washington DC. U.S. EPA #430-R-13-001.

11.14 Chapter 6, Cumulative Impacts

- City of San Diego. 2002. *Street Design Manual 2002*. Available: <https://www.sandiego.gov/planning/programs/transportation/library/stdesign>. Accessed: September 19, 2016.
- City of San Diego. 2016. California Environmental Quality Act Significance Determination Thresholds. July. Available: https://www.sandiego.gov/sites/default/files/july_2016_ceqa_thresholds_final_0.pdf.
- County of San Diego. 2016. *County of San Diego BMP Design Manual for Permanent Site Design, Storm Water Treatment and Hydromodification Management: Storm Water Requirements for Development Applications*. February. Available: [http://www.sandiegocounty.gov/content/dam/sdc/dpw/WATERSHED_PROTECTION_PROGRA M/watershedpdf/County_BMPDM.pdf](http://www.sandiegocounty.gov/content/dam/sdc/dpw/WATERSHED_PROTECTION_PROGRAM/watershedpdf/County_BMPDM.pdf).

11.15 Chapter 7, Effects Not Found to Be Significant

Brown, Andra. Lieutenant, San Diego Police Department, Eastern Division. Personal communication, October 4, 2016.

California Air Resources Board (ARB). 2014. EMFAC Web Database. Available: <https://www.arb.ca.gov/emfac/>.

California Department of Conservation. 2013. *San Diego County Williamson Act 2013/2014*. www.conservation.ca.gov/dlrp/lca. Accessed: October 31, 2016.

California Department of Conservation. 2015. *California Important Farmland Finder*. Available: <http://maps.conservation.ca.gov/ciff/ciff.html>. Accessed: October 31, 2016.

California Department of Toxic Substances Control. 2016. EnviroStor. https://www.envirostor.dtsc.ca.gov/public/mapfull.asp?global_id=&x=-119&y=37&zl=18&ms=640,480&mt=m&findaddress=True&city=Phyllis%20Place%20San%20Diego%20CA&zip=&county=&federal_superfund=true&state_response=true&voluntary_cleanup=true&school_cleanup=true&ca_site=true&tiered_permit=true&evaluation=true&military_evaluation=true&school_investigation=true&operating=true&post_closure=true&non_operating=true. Accessed 11/11/16

City of San Diego. 2016a. Fire Station 45 information. Available: <https://www.sandiego.gov/fire/about/firestations/sta45>. Accessed November 28, 2016.

City of San Diego. 2016b. Fire Station 28 information. <https://www.sandiego.gov/fire/about/firestations/sta28>. Accessed November 28, 2016.

City of San Diego. 2016c. Memorandum from the San Diego Police Department to the City of San Diego Planning Department. December 13.

Climate Registry. 2015. Table 12.1, *U.S. Default Factors for Calculating CO₂ Emissions from Fossil Fuel and Biomass Combustion*. April.

Geocon Incorporated. 2013. *Geologic Reconnaissance. Franklin Ridge Road Extension, Serra Mesa Community, San Diego, CA*. June 5.

Oak Ridge National Laboratory. 2014. *Transportation Energy Data Book*. Edition 34, Chapter 2, Energy.

San Diego County Airport Land Use Commission. 2010. *Montgomery Field Airport Land Use Compatibility Plan*. Adopted January 25, 2010, amended December 20, 2010. Available: http://www.san.org/DesktopModules/Bring2mind/DMX/Download.aspx?Command=Core_Download&EntryId=2985&language=en-US&PortalId=0&TabId=225.

Southern California Earthquake Center. No Date. *Investigating Earthquakes through Regional Seismicity*. Available: <http://scedc.caltech.edu/Module/footnt04.html>. Accessed: April 23, 2016.

State Water Resources Control Board. 2016. <https://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=phyllis+place+san+diego+ca>. Accessed November 11, 2016.

Trame, Larry. Assistant Fire Marshal, San Diego Fire-Rescue Department. Personal communication, September 28, 2016.

U.S. Department of Energy. 2014. *Why Choose ENERGY STAR Qualified LED Lighting?* Available: https://www.energystar.gov/index.cfm?c=ssl.pr_why_es_com. Accessed: September 6, 2014.

11.16 Chapter 8, Mandatory Discussion Areas

City of San Diego. 2016. California Environmental Quality Act Significance Determination Thresholds. July. Available: https://www.sandiego.gov/sites/default/files/july_2016_ceqa_thresholds_final_0.pdf.

11.17 Chapter 9, Alternatives

City of San Diego. 1998. *Traffic Impact Study Manual*. July. Available: <http://www.sandiego.gov/development-services/pdf/industry/trafficimpact.pdf>.